GIS REGISTRY
Cover Sheet

March, 2010
(RR 5367)

Source Property Information

CLOSURE DATE: Aug 25, 2009

BRRTS #: **03-41-002042**

FID #: 241539870

ACTIVITY NAME: MILWAUKEE CITY LINCOLN AVE DISTR

DATCP #:

PROPERTY ADDRESS: 3801 W. Lincoln Ave

COMM #: 53215233801

MUNICIPALITY: Milwaukee

PARCEL ID #: 493-9962-114-2

***WTM COORDINATES:**

X: **686140** Y: **283064**

** Coordinates are in WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

- (●) Approximate Center Of Contaminant Source
- ( ) Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

[X] Groundwater Contamination > ES *(236)*

- [ ] Contamination in ROW
- [ ] Off-Source Contamination

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

[X] Soil Contamination > *RCL or **SSRCL *(232)*

- [ ] Contamination in ROW
- [ ] Off-Source Contamination

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

Land Use Controls:

- [ ] N/A (*Not Applicable*)
- [ ] Soil: maintain industrial zoning *(220)*

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

- [ ] Structural Impediment *(224)*
- [ ] Site Specific Condition *(228)*
- [X] Cover or Barrier *(222)*

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

- [ ] Vapor Mitigation *(226)*
- [ ] Maintain Liability Exemption *(230)*

(***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*

GIS Registry Checklist

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 #: 03-41-002042 PARCEL ID #: 493-9962-114-2

ACTIVITY NAME: MILWAUKEE CITY LINCOLN AVE DISTR WTM COORDINATES: X: 686162 Y: 283095

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

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

SOURCE LEGAL DOCUMENTS

- [x] **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:**
- [x] **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

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

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

- [x] **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
  Note: *Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.*

  Figure #: 1 **Title: Site Location Map**
- [x] **Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.

  Figure #: 1 **Title: Site Plan Map**
- [x] **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 **Title: Post Remediation Soil Sample Results**

BRRTS #: 03-41-002042 ACTIVITY NAME: MILWAUKEE CITY LINCOLN AVE DISTR

MAPS (continued)

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

Figure #: **Title:**

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 #: 2 **Title: Groundwater Quality Map**

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

Figure #: 11 **Title: Groundwater Contour Map**

Figure #: **Title:**

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

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

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

Table #: 1 **Title: Soil Sample Analytical Results**

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

Table #: 3 **Title: Groundwater Quality 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 #: 2 **Title: Depth to Groundwater and Elevation Data**

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.
Note: *If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.*

☒ **Not Applicable**

☐ **Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.
Note: *If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.*

Figure #: **Title:**

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

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

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

BRRTS #: 03-41-002042 ACTIVITY NAME: MILWAUKEE CITY LINCOLN AVE DISTR

NOTIFICATIONS

Source Property

☐ **Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

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

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

Number of "Off-Source" Letters:

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.

☐ **Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies).** This does not apply to right-of-ways.
Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*

☐ **Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

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

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

Jim Doyle, Governor
Matthew J. Frank, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128
FAX 414-263-8606
Telephone 414-263-8500
TTY Access via relay - 711

August 25, 2009

Mr. Thomas Tarkowski
City of Milwaukee Dept. of Public Works
841 N. Broadway
Milwaukee, WI 53202

SUBJECT: Final Case Closure with Continuing Obligations
Milwaukee City Lincoln Ave. Distribution Center – Leaking Underground Storage Tank site (1-2,000 gallon gasoline tank and 1-10,000 gallon diesel tank) at 3801 W. Lincoln Ave., Milwaukee, WI
WDNR BRRTS Activity #: 03-41-002042 FID#241539870

Dear Mr. Tarkowski:

The Wisconsin Department of Natural Resources (the Department) recently reviewed the above referenced case for closure. The Department reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On May 20, 2009, you were notified that the Department had granted conditional closure to this case.

The Department has now received information/documentation indicating that you have complied with the requirements for final closure. Based on the correspondence and data provided, it appears that your 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, the City of Milwaukee 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 GIS Registry. The specific reasons 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

This letter and information that was submitted with your closure request application will be included on the GIS Registry. 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 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line 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 the City of Milwaukee and any subsequent property owners must adhere. You must pass on the information about these continuing obligations 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 are met.

Cover or Barrier

Pursuant to s. 292.12(2)(a), Wis. Stats., the concrete pavement, asphalt pavement and building foundation that currently exists in the locations shown on the attached map, shall be maintained in compliance with the **attached maintenance plan** in order 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, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. If soil in the specific locations described above 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, a building foundation, soil cover, engineered cap or other barrier] 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; 6) construction or placement of a building or other structure.

Residual Groundwater Contamination

Groundwater impacted by petroleum volatile organic compounds and polyaromatic hydrocarbons contamination greater than enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present on this contaminated property. For more detailed information regarding the locations where groundwater samples have been collected (i.e., monitoring well locations) and the associated contaminant concentrations, refer to the Remediation and Redevelopment Program's GIS Registry at the RR Sites Map page at http://dnr.wi.gov/org/aw/rr/gis/index.htm.

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.

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, 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

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

Additionally, since this property meets the definition of a landfill, in the event of a planned or proposed disturbance of the current cap, excavation of waste materials or building on the landfill, the City would be required to obtain an exemption to the prohibitions in ch. NR 506.085 Wis. Admin. Code.

The Department appreciates the efforts the City has 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,

Frances M. Koonce

Frances M. Koonce, Sub-Team Supervisor
Southeast Remediation & Redevelopment Program

Attachment

cc: SER site file
Stephen Meer, Sigma Environmental Services, Inc.

LINCOLN AVENUE DISTRIBUTION CENTER
3801 W. LINCOLN AVENUE, MILWAUKEE, WISCONSIN
JULY 2009

Legal Description: See attached description.

Parcel ID Number: 493-9962-114-2

BRRTS#: 02-41-544995

In accordance with Ch. NR 724.13(2), Wis. Admin. Code, this Barrier Operation and Maintenance Plan (BOMP) is designed to limit direct contact with and limit infiltration of surface precipitation to the known residual soil contamination as shown in Figure 3A. Site investigation activities at the site have shown soil at the site to contain concentrations of petroleum volatile organic compounds (PVOCs) at concentrations greater than ch. NR 720 generic Residual Contaminant Levels. The residual contamination is located at depths of between 2 and 20 feet below ground surface.

The existing concrete pavement, asphalt pavement, and building foundation, as shown in Figure 3A will function as engineered barriers to prevent direct contact and limit infiltration of surface precipitation unless disturbed.

Prohibited Activities: The following activities are prohibited on any portion of the property where pavement or a building foundation is required as shown on the attached Figure 3A, 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 placement of a building or other structure.

Disturbance Management. The site owner shall take the following steps to assure that uncontrolled disturbances of the barrier do not occur:

- A copy of this BOMP will be available on-site from the property owner to all interested parties.
- The owner must inform maintenance workers of the direct contact hazards and provide them with proper protective equipment.
- A copy of this BOMP will be provided to all private utilities seeking easements for the purpose of installing facilities on the property.
- A copy of this BOMP will be provided to all contractors and repair workers during any intrusive subsurface work on this portion of the property.

- On-site personnel employed by future property owners will be made familiar with the contents and restriction requirements of this BOMP.

Inspections of Barrier. Inspections will be required to assure that the barrier is functioning as intended:

- Annual inspections of the pavement and building foundations will be performed by authorized personnel from the site owner, and will include observations about the integrity of the constructed surfaces in the vicinity of the residual soil impacts. Inspections will be compared to the previous inspection notes to monitor the relative condition of the constructed surface.

- As necessary, the engineered barriers will be repaired to maintain integrity. Repairs may include, but are not limited to, patching or replacing the paved surface where it has degraded or otherwise broken.

- An inspection log will be maintained on-site by the property owner to record any disturbances of the barrier and the steps that have been taken to repair and maintain the integrity of the barrier. The inspection log will be made available for inspection by representatives of the Wisconsin Department of Natural Resources, its successors and/or other state or municipal agency upon request. The on-site inspection log will be maintained as long as inspection and maintenance of the barrier is required. A copy of an example log is attached hereto.

Planned Breaches of Barrier. In the event that a planned breach of the barrier is required, written approval from the WDNR must be obtained. In addition, the following precautions shall be taken:

- The site owner shall be given 48-hour notice of any planned breach.

- During breaches of the barrier, if material is excavated from beneath the barrier, the excavated material will be periodically screened for the presence of volatile organic vapors using a photo-ionization detector (PID), organic vapor monitor (OVM), or other comparable instrument. If an unexpected soil condition is observed during excavation activities (e.g. PID readings exceeding 10 ppm, obvious volatile organic compound (VOC) odor, free product in soil, or drums) the impacted soil must be sampled and disposed of at a licensed landfill facility in accordance with applicable solid and hazardous waste rules and regulations.

- Upon receiving written approval from the DNR, any material excavated from beneath the barrier that does not contain unexpected conditions as described above may be returned to the excavation prior to the restoration of the barrier. The excavation zone and any soils excavated will be secured from public access until the barrier is restored. While on-site, the excavated soil will be placed on an impervious surface (e.g., existing concrete and/or plastic) and covered with plastic.

Soil that cannot be returned to the excavation will be sampled and disposed of at a licensed landfill facility in accordance with applicable solid and hazardous waste rules and regulations. All contaminated soils that are stored, treated, excavated, removed, or transported off-site shall be managed per procedures and reporting requirements set forth in ch. NR 500, Wisconsin Administrative Code.

- The barrier will be restored to meet original conditions. This work, including the proper disposal of excess soils, should be completed within 72 hours following the completion of any on-site work, or as soon as reasonably practical.

- Details of the barrier breach, the handling of excavated soils, individuals responsible for the work, and the restoration of the barrier shall be recorded in the barrier maintenance log.

- This BOMP can be amended or withdrawn by the property owner or successors with the written approval of the Wisconsin Department of Natural Resources.

Contact Information.

For responsible party contact:

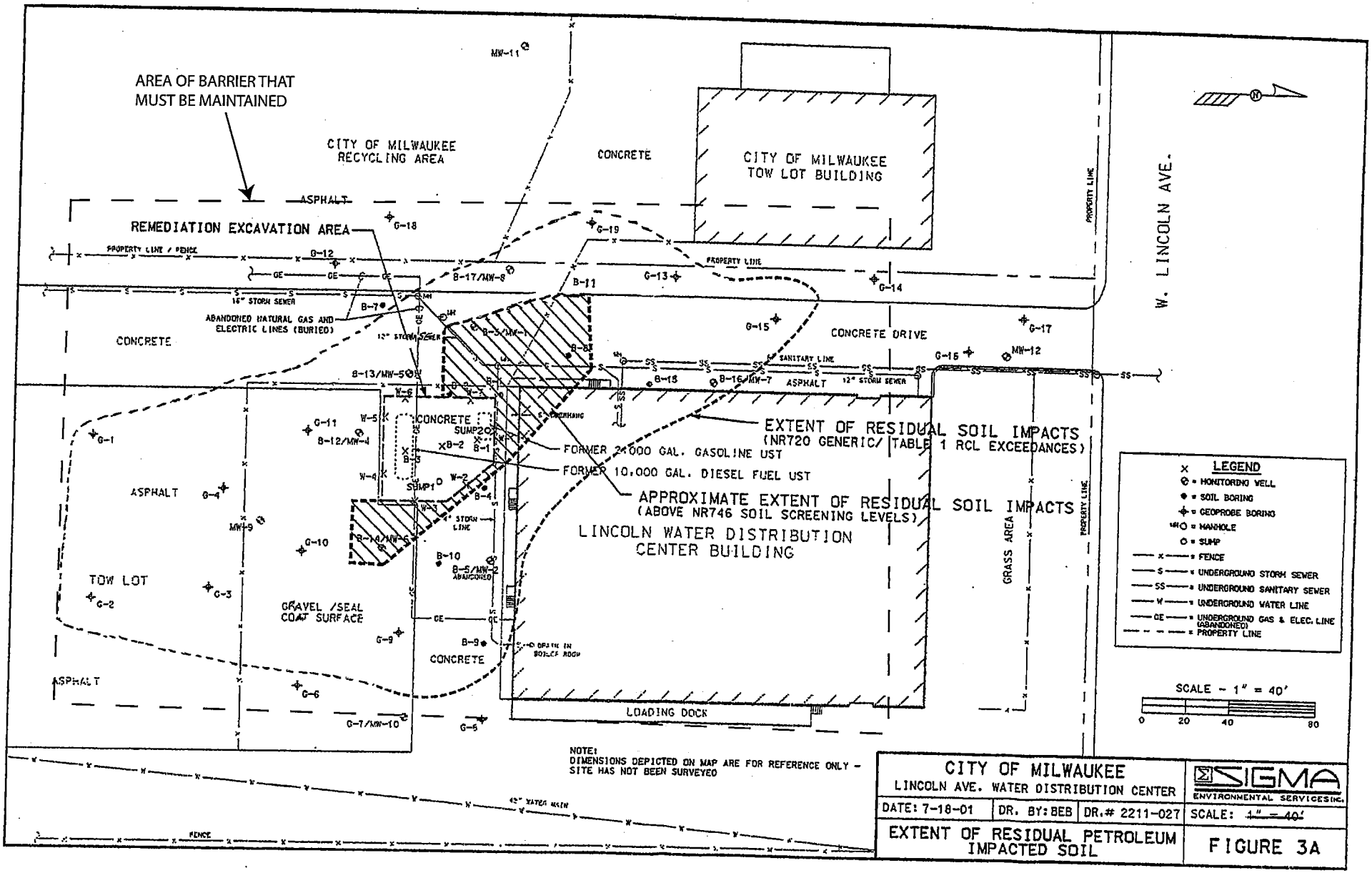
Mr. Thomas Tarkowski, P.E.
City of Milwaukee – Department of Public Works
Operations Division, Buildings and Fleet Services
841 North Broadway, Room 602
Milwaukee, WI 53202

For environmental consultant contact:

Ms. Kristin Kurzka, P.E.
Sigma Environmental Services, Inc.
1300 West Canal Street
Milwaukee, WI 53233
Telephone: (414) 643-4200
Fax: (414) 643-4210

For Wisconsin Department of Resources:

Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212



CITY OF MILWAUKEE LINCOLN AVE. WATER DISTRIBUTION CENTER			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 7-18-01	DR. BY: BEB	DR.# 2211-027	SCALE: 1" = 40'
EXTENT OF RESIDUAL PETROLEUM IMPACTED SOIL			FIGURE 3A

RECD
4-20-90

DEED 2751 PAGE 154

THIS INDENTURE, Made this 2nd day of ~~April~~ May, A.D., 1950, between The Mitchell Properties, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Milwaukee, Wisconsin, party of the first part, and City of Milwaukee, a municipal corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Milwaukee, Wisconsin, party of the second part.

W I T N E S S E T H, That the said party of the first part, for and in consideration of the sum of Two Hundred Ninety Thousand and no/100ths Dollars ($290,000.00) to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its successors and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, to-wit:

"That part of the North West One-quarter (N.W.1/4) of Section Twelve (12), Town Six (6) North, Range Twenty-one (21) East, partly in the City of Milwaukee and partly in the Town of Greenfield, bounded and described as follows:

"Commencing at a point on the North line Two Hundred Fifty-five and No One-hundredths (255.00) feet, South Eighty-eight degrees, Twenty-one minutes, Thirty seconds (88°21'30") West of the Northeast corner of said One-quarter (1/4) Section; thence South on a line parallel to the east line of said One-quarter (1/4) Section One Hundred Fifty-three and No One-hundredths (153.00) feet to a point; thence North Eighty-eight degrees, Twenty-one minutes, Thirty seconds (88°21'30") East on a line parallel to the north line of said One-quarter (1/4) Section One Hundred and No One-hundredths (100.00) feet to a point; thence South on a line parallel to the east line of said One-quarter (1/4) Section One Thousand Three Hundred Fifty-two and Twenty-two One-hundredths (1352.22) feet to a point; thence South Thirteen degrees, Twenty-five minutes (13°25') West on a line One Hundred Ninety-one and Eighty-nine One-hundredths (191.89) feet to a point which is One Hundred Eighty and No One-hundredths

(180.00) feet North Sixty-six degrees, One minute, Thirty seconds (66°01'30") West of the East line of South Thirty-fifth (35th) Street and being in the northerly line of the Mitchell Yards of Chicago & North Western Railway; thence North Sixty-six degrees, One minute, Thirty seconds (66°01'30") West along the northerly line of said Yards Two Thousand Two Hundred Fifty-four and Seventeen One-hundredths (2254.17) feet to a point in the Easterly line of the Chicago & North Western Railway and Chicago, Milwaukee, St. Paul & Pacific Railway Co. Belt line right of way; thence northerly along the easterly line of said right of way on a curved line with a radius of Six Hundred Eighty-three and Eighty One-hundredths (683.80) feet, whose center point is to the east and the chord is One Hundred Thirty-two and Sixty-one One-hundredths (132.61) feet long and bears North Four degrees, Forty-four minutes, Eleven seconds (4°44'11") West, a distance of One Hundred Thirty-two and Eighty-two One-hundredths (132.82) feet to a point; thence North No degrees, Forty-four minutes, Thirty seconds (0°44'30") East along the east line of the same right of way Five Hundred Eighty-two and Eighty One-hundredths (582.80) feet to a point in the north line of said One-quarter (1/4) Section; thence North Eighty-eight degrees, Twenty-one minutes, Thirty seconds (88°21'30") East along the north line of said One-quarter (1/4) Section Two Thousand Eight and Forty-eight One-hundredths (2008.48) feet to the place of beginning, containing Fifty-eight and Twenty-seven One-hundredths (58.27) acres of land.

"Reserving from the above parcel the North Thirty-three and No One-hundredths (33.00) feet of the last described course and distance for street purposes."

This deed is given in fulfillment of land contract dated April 22, 1948.

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said party of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises as above described with the hereditaments and appurtenances, unto the said party of the second part, and to its successors and assigns FOREVER.

AND THE SAID The Mitchell Properties, Inc., party of the first part, for itself and its successors, does covenant, grant, bargain and agree to and with the said party of the second part, its successors and assigns, that at the time of the ensealing and delivery of these presents it is well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever, and that the above bargained premises in the quiet and peaceable possession of the said party of the second part, its successors and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, it will forever WARRANT and DEFEND.

IN WITNESS WHEREOF, the said The Mitchell Properties, Inc., party of the first part, has caused these presents to be signed by Martin A. Flakes, its President, and countersigned by George F. Martin, its Secretary, at Milwaukee, Wisconsin, and its corporate seal to be hereunto affixed, this 2nd day of ~~April~~ May, A.D., 1950.

Signed and sealed in presence of:

John S. Owen

Lucille Nicoud

THE MITCHELL PROPERTIES, INC.

Martin A. Flakes — President

Countersigned:

George F. Martin — Secretary

STATE OF WISCONSIN }
MILWAUKEE COUNTY } ss.

Personally came before me, this 2nd day of ~~April~~ May, A.D., 1950, Martin A. Flakes, President, and George F. Martin, Secretary of the above named corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such President and Secretary of said corporation, and acknowledged

that they executed the foregoing instrument as such officers as the deed of said corporation, by its authority.

Wm. Hart, Jr.
Notary Public, Milwaukee County, Wis.

My commission expires: Oct 18 1953

NOTARY PUBLIC WISCONSIN

APPROVED as to Form and Execution this 2nd day of May 1950.

Assistant City Attorney

WARRANTY DEED

No. 2941233

The Mitchell Properties, Inc., a Wisconsin corporation

To

City of Milwaukee, a municipal corporation of the State of Wisconsin

Jun-7-50 1630 2941233

Register's Office
State of Wisconsin
Milwaukee County

Received for record this 7th day of JUN 1950 A.D. at 9:30 o'clock A.M. and recorded in Vol. 2751 of Deeds on page 157

Register of Deeds

Deputy

WALTER J. MATTSON
City Attorney
801 City Hall
Milwaukee 2, Wisconsin

RETURN TO
CONTROLLER'S OFFICE
City of Milwaukee

TAX COMMISSIONERS OFFICE
JUN 2 1950

Tax Commissioner

CONTROLLER'S OFFICE
No. 302

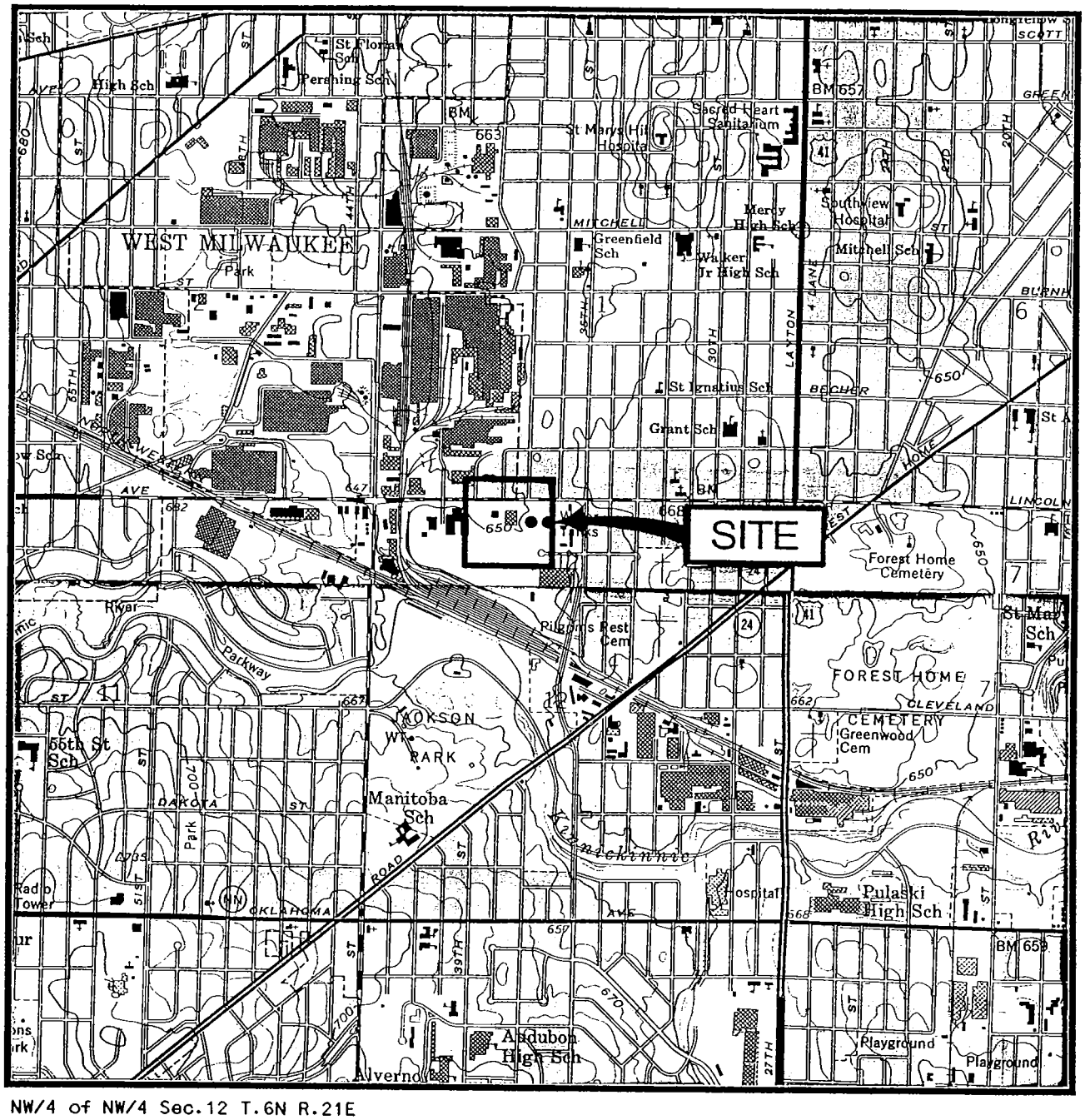
GIS Registry Packet
Milwaukee City Waterworks

STATEMENT BY RESPONSIBLE PARTY

The City of Milwaukee – Department of Public Works, the responsible party for the property located at 3801 W. Lincoln Avenue, Milwaukee, Wisconsin, states that the legal description for each property within the contaminated site boundaries for case file reference 03-41-002042 is attached.

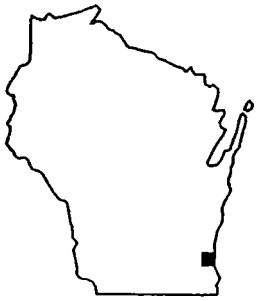
Signature of Representative for Responsible Party

Date 4/14/09



NW/4 of NW/4 Sec.12 T.6N R.21E

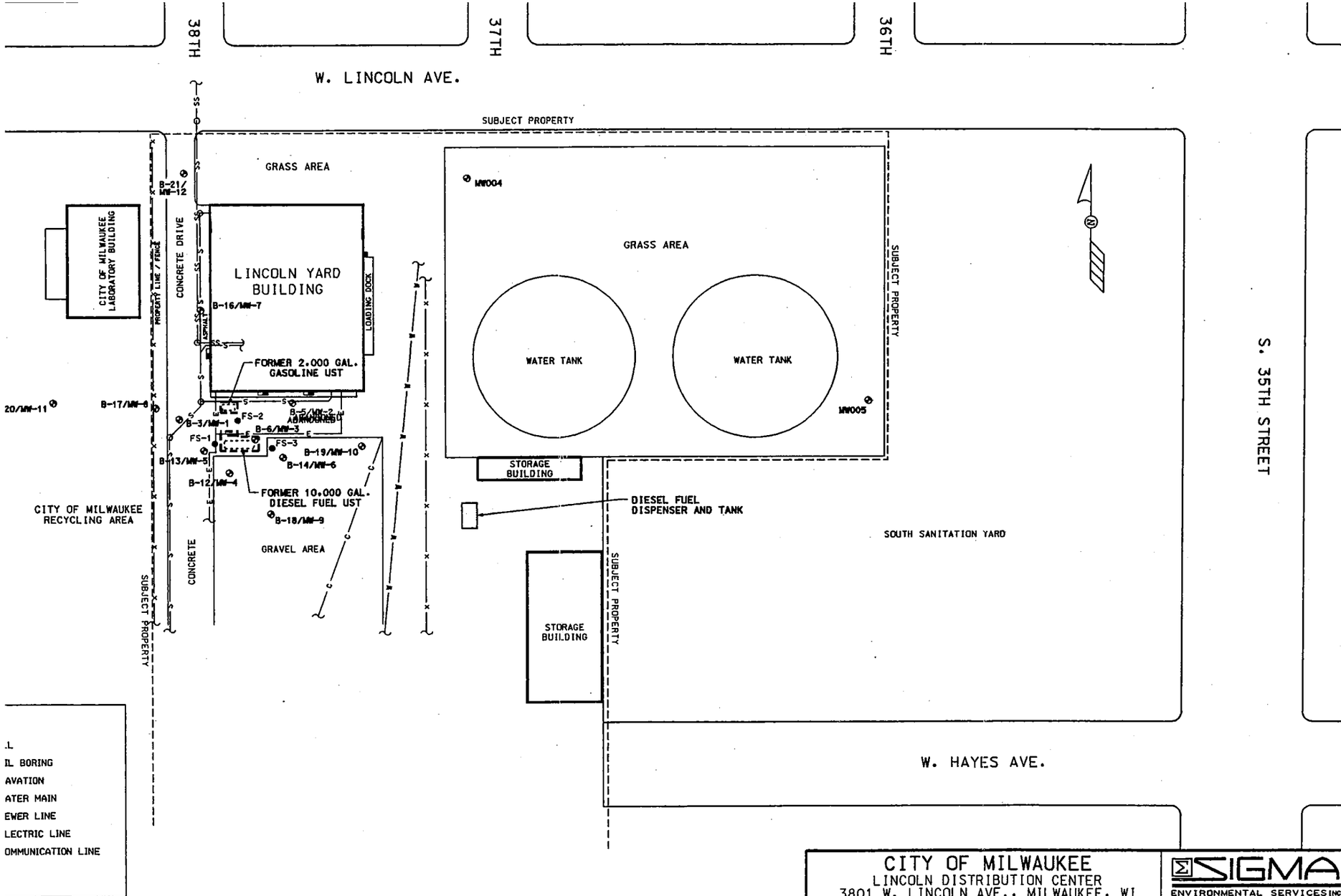
1 ½ 0 1 MILE



WISCONSIN

ADAPTED FROM U.S.G.S. 7.5 MINUTE SERIES, MILWAUKEE, WISCONSIN QUADRANGLE DATED 1958 PHOTOREVISED 1971

CITY OF MILWAUKEE - LINCOLN DIST. FACILITY 3801 WEST LINCOLN AVENUE, MILWAUKEE, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 10-5-95	DR. BY: BEB	DR.# 1853-001	SCALE: SEE ABOVE
SITE LOCATION MAP			FIGURE 1



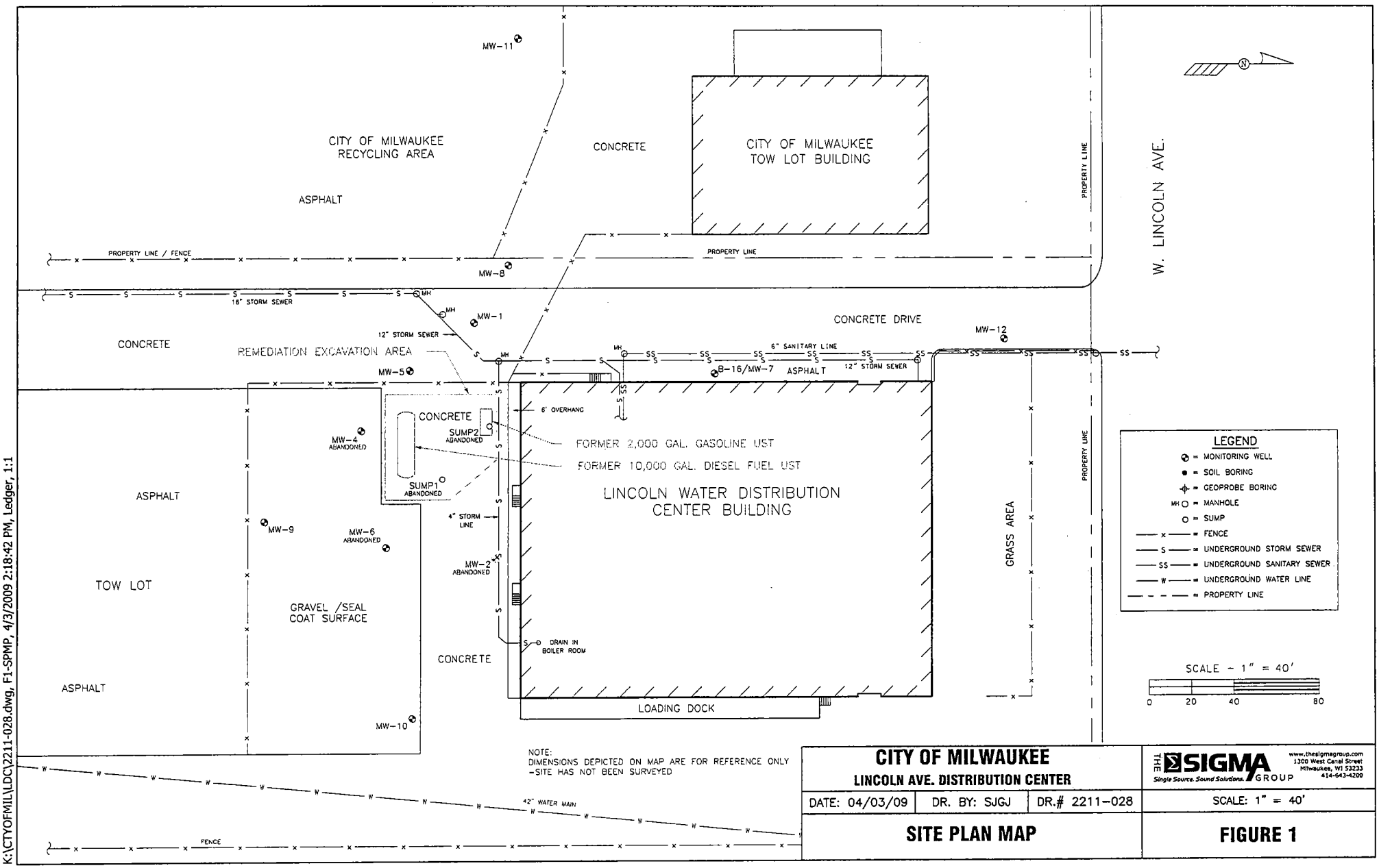
CITY OF MILWAUKEE
LINCOLN DISTRIBUTION CENTER
3801 W. LINCOLN AVE., MILWAUKEE, WI

SIGMA ENVIRONMENTAL SERVICES INC.

DATE: 7-1-98	DR. BY: BEB	DR.# 2211-004	SCALE: 1" = 50'

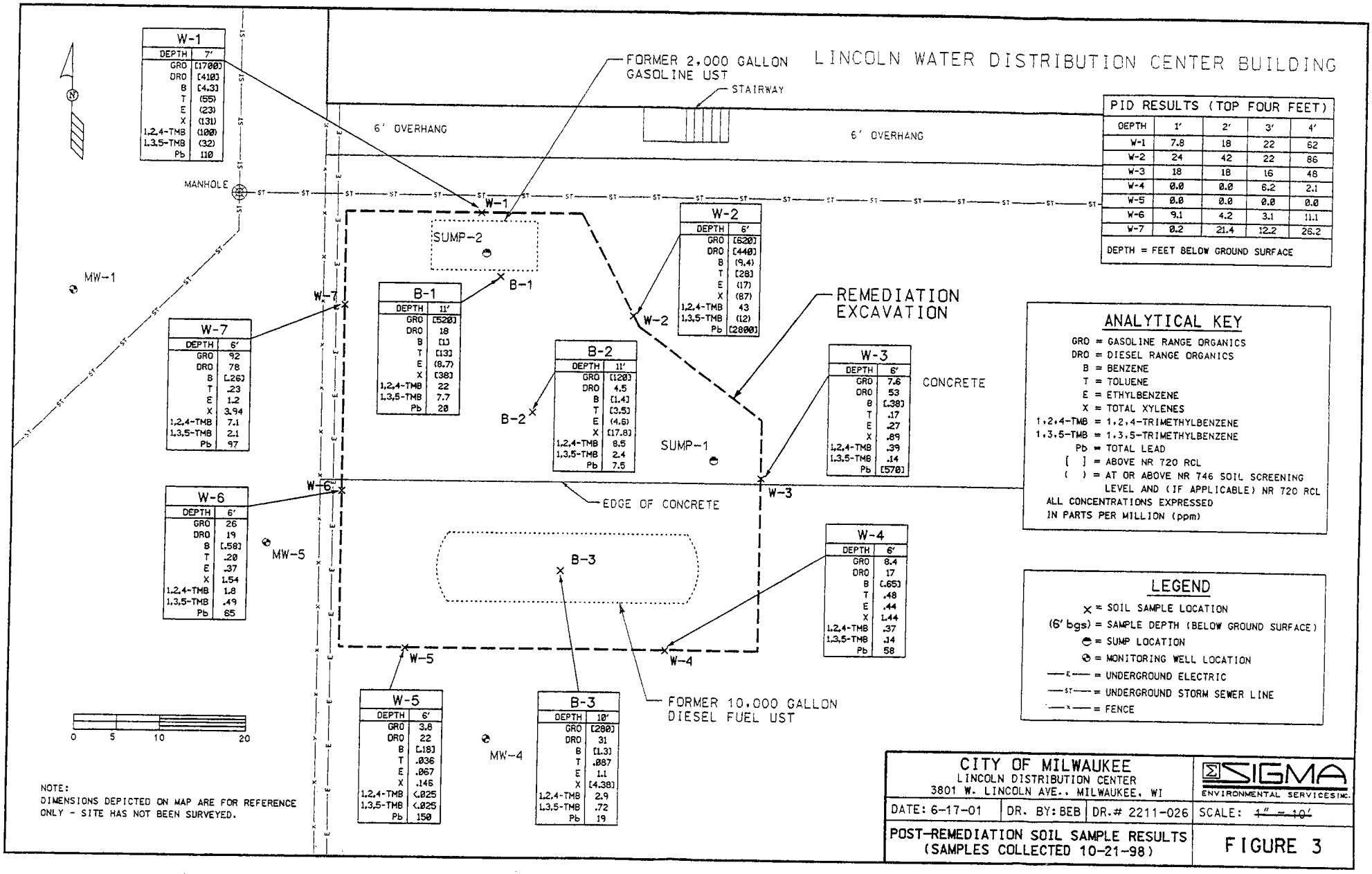
SITE PLAN MAP

FIGURE 2



CITY OF MILWAUKEE LINCOLN AVE. DISTRIBUTION CENTER			THE SIGMA GROUP Single Source. Sound Solutions. www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 414-643-4200
DATE: 04/03/09	DR. BY: SJGJ	DR.# 2211-028	SCALE: 1" = 40'
SITE PLAN MAP			FIGURE 1

K:\CTYOFMIL\LDC\2211-028.dwg, F1-SPMP, 4/3/2009 2:18:42 PM, Ledger, 1:1



W-1	
DEPTH	7'
GRO	[1700]
DRO	[410]
B	[4.3]
T	(55)
E	(23)
X	(131)
1,2,4-TMB	(100)
1,3,5-TMB	(32)
Pb	110

W-2	
DEPTH	6'
GRO	[620]
DRO	[440]
B	(9.4)
T	[28]
E	(17)
X	(87)
1,2,4-TMB	43
1,3,5-TMB	(12)
Pb	[2800]

B-1	
DEPTH	11'
GRO	[520]
DRO	18
B	[1]
T	[13]
E	(8.7)
X	[38]
1,2,4-TMB	22
1,3,5-TMB	7.7
Pb	20

W-7	
DEPTH	6'
GRO	92
DRO	78
B	[.26]
T	.23
E	1.2
X	3.94
1,2,4-TMB	7.1
1,3,5-TMB	2.1
Pb	97

B-2	
DEPTH	11'
GRO	[120]
DRO	4.5
B	[1.4]
T	[3.5]
E	(4.6)
X	[17.8]
1,2,4-TMB	8.5
1,3,5-TMB	2.4
Pb	7.5

W-3	
DEPTH	6'
GRO	7.6
DRO	53
B	[.38]
T	.17
E	.27
X	.89
1,2,4-TMB	.39
1,3,5-TMB	.14
Pb	[570]

W-6	
DEPTH	6'
GRO	26
DRO	19
B	[.58]
T	.20
E	.37
X	1.54
1,2,4-TMB	1.8
1,3,5-TMB	.49
Pb	85

W-4	
DEPTH	6'
GRO	8.4
DRO	17
B	[.65]
T	.48
E	.44
X	1.44
1,2,4-TMB	.37
1,3,5-TMB	.14
Pb	58

W-5	
DEPTH	6'
GRO	3.8
DRO	22
B	[.18]
T	.036
E	.067
X	.146
1,2,4-TMB	<.025
1,3,5-TMB	<.025
Pb	150

B-3	
DEPTH	10'
GRO	[280]
DRO	31
B	[1.3]
T	.087
E	1.1
X	[4.38]
1,2,4-TMB	2.9
1,3,5-TMB	.72
Pb	19

PID RESULTS (TOP FOUR FEET)

DEPTH	1'	2'	3'	4'
W-1	7.8	18	22	62
W-2	24	42	22	86
W-3	18	18	16	48
W-4	0.0	0.0	6.2	2.1
W-5	0.0	0.0	0.0	0.0
W-6	9.1	4.2	3.1	11.1
W-7	0.2	21.4	12.2	26.2

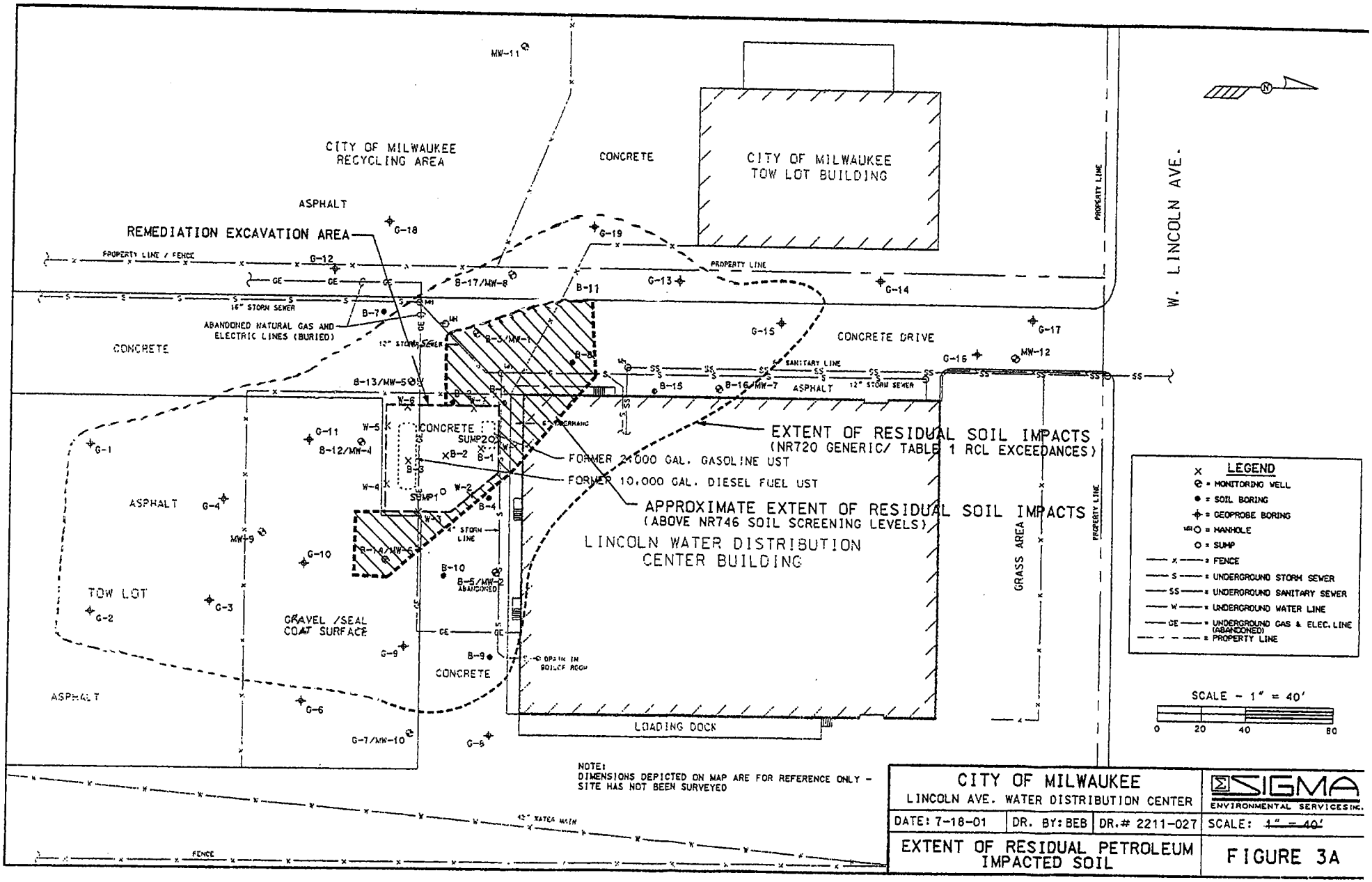
DEPTH = FEET BELOW GROUND SURFACE

ANALYTICAL KEY

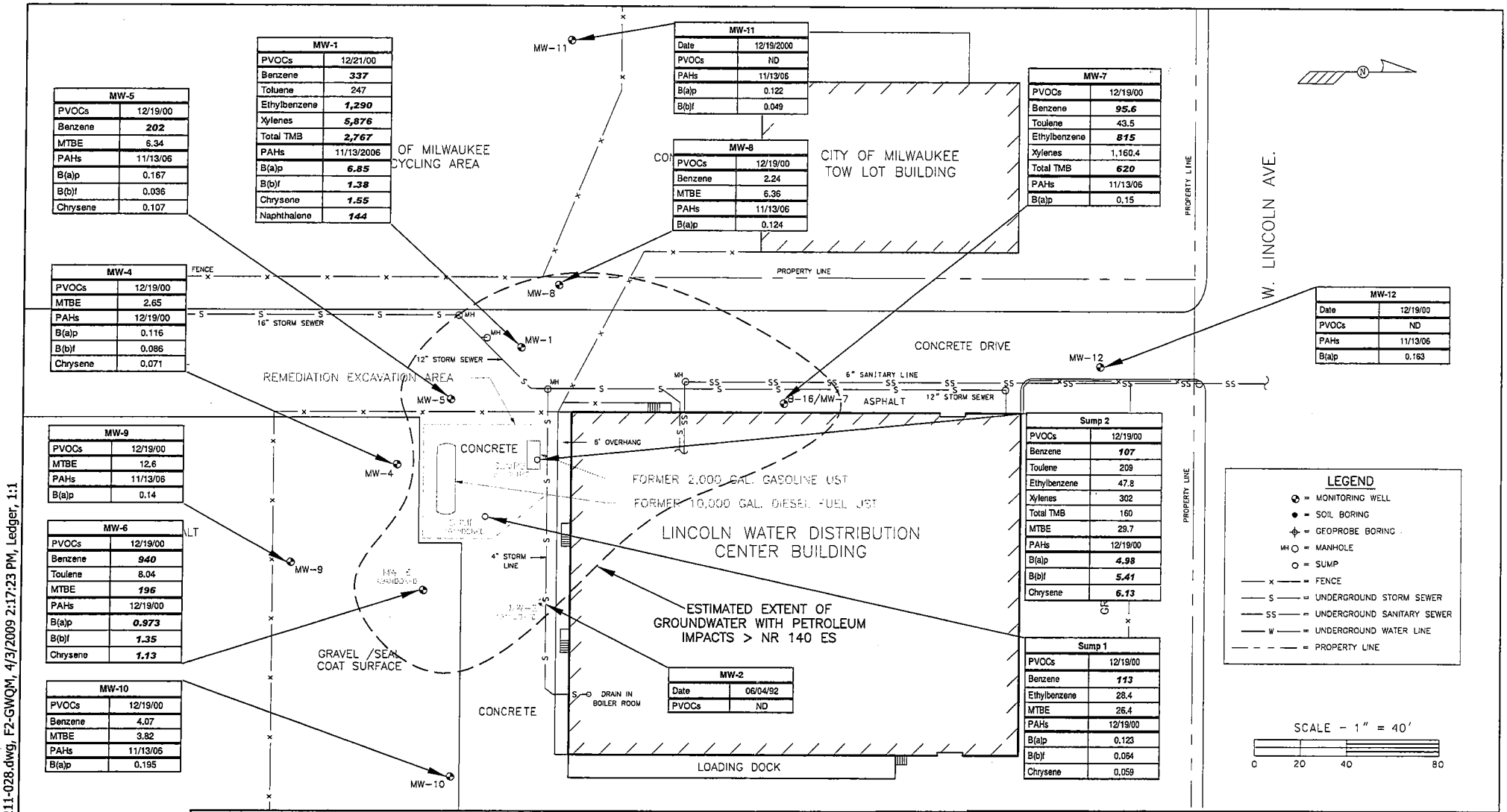
GRO = GASOLINE RANGE ORGANICS
DRO = DIESEL RANGE ORGANICS
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
1,2,4-TMB = 1,2,4-TRIMETHYLBENZENE
1,3,5-TMB = 1,3,5-TRIMETHYLBENZENE
Pb = TOTAL LEAD
[ ] = ABOVE NR 720 RCL
( ) = AT OR ABOVE NR 746 SOIL SCREENING LEVEL AND (IF APPLICABLE) NR 720 RCL
ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION (ppm)

LEGEND

X = SOIL SAMPLE LOCATION
(6' bgs) = SAMPLE DEPTH (BELOW GROUND SURFACE)
= SUMP LOCATION
= MONITORING WELL LOCATION
—E— = UNDERGROUND ELECTRIC
—ST— = UNDERGROUND STORM SEWER LINE
—X— = FENCE



CITY OF MILWAUKEE LINCOLN AVE. WATER DISTRIBUTION CENTER			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 7-18-01	DR. BY: BEB	DR.# 2211-027	SCALE: ~~1" = 40'~~
EXTENT OF RESIDUAL PETROLEUM IMPACTED SOIL			FIGURE 3A



MW-1	
PVOCs	12/21/00
Benzene	**337**
Toluene	247
Ethylbenzene	**1,290**
Xylenes	**5,876**
Total TMB	**2,767**
PAHs	11/13/2006
B(a)p	**6.85**
B(b)f	**1.38**
Chrysene	**1.55**
Naphthalene	**144**

MW-5	
PVOCs	12/19/00
Benzene	**202**
MTBE	6.34
PAHs	11/13/06
B(a)p	0.167
B(b)f	0.036
Chrysene	0.107

MW-11	
Date	12/19/2000
PVOCs	ND
PAHs	11/13/06
B(a)p	0.122
B(b)f	0.049

MW-8	
PVOCs	12/19/00
Benzene	2.24
MTBE	6.36
PAHs	11/13/06
B(a)p	0.124

MW-7	
PVOCs	12/19/00
Benzene	**95.6**
Toulene	43.5
Ethylbenzene	**815**
Xylenes	1,160.4
Total TMB	**620**
PAHs	11/13/06
B(a)p	0.15

MW-4	
PVOCs	12/19/00
MTBE	2.65
PAHs	12/19/00
B(a)p	0.116
B(b)f	0.086
Chrysene	0.071

MW-12	
Date	12/19/00
PVOCs	ND
PAHs	11/13/06
B(a)p	0.163

MW-9	
PVOCs	12/19/00
MTBE	12.6
PAHs	11/13/06
B(a)p	0.14

MW-6	
PVOCs	12/19/00
Benzene	**940**
Toulene	8.04
MTBE	**196**
PAHs	12/19/00
B(a)p	**0.973**
B(b)f	**1.35**
Chrysene	**1.13**

MW-10	
PVOCs	12/19/00
Benzene	4.07
MTBE	3.82
PAHs	11/13/06
B(a)p	0.195

Sump 2	
PVOCs	12/19/00
Benzene	**107**
Toulene	209
Ethylbenzene	47.8
Xylenes	302
Total TMB	160
MTBE	29.7
PAHs	12/19/00
B(a)p	**4.98**
B(b)f	**5.41**
Chrysene	**6.13**

Sump 1	
PVOCs	12/19/00
Benzene	**113**
Ethylbenzene	28.4
MTBE	26.4
PAHs	12/19/00
B(a)p	0.123
B(b)f	0.064
Chrysene	0.059

MW-2	
Date	06/04/92
PVOCs	ND

Analytical Key

Detected PVOCs and PAHs that exceed NR 140 Preventive Action Limits are included on this Figure.
Concentrations expressed in micrograms per liter (µg/L)

Bold = Exceeds NR 140 Enforcement Standard
VOCs = Volatile Organic Compounds
PVOCs = Petroleum Volatile Organic Compounds
PAHs = Polycyclic Aromatic Hydrocarbons

ND = Not detected
NT = Not Tested
B(a)p = Benzo(a)pyrene
B(b)f = Benzo(b)fluoranthene
Total TMB = Total Trimethylbenzenes
MTBE = Methyl-tertiary-butyl-ether

CITY OF MILWAUKEE
LINCOLN AVE. DISTRIBUTION CENTER

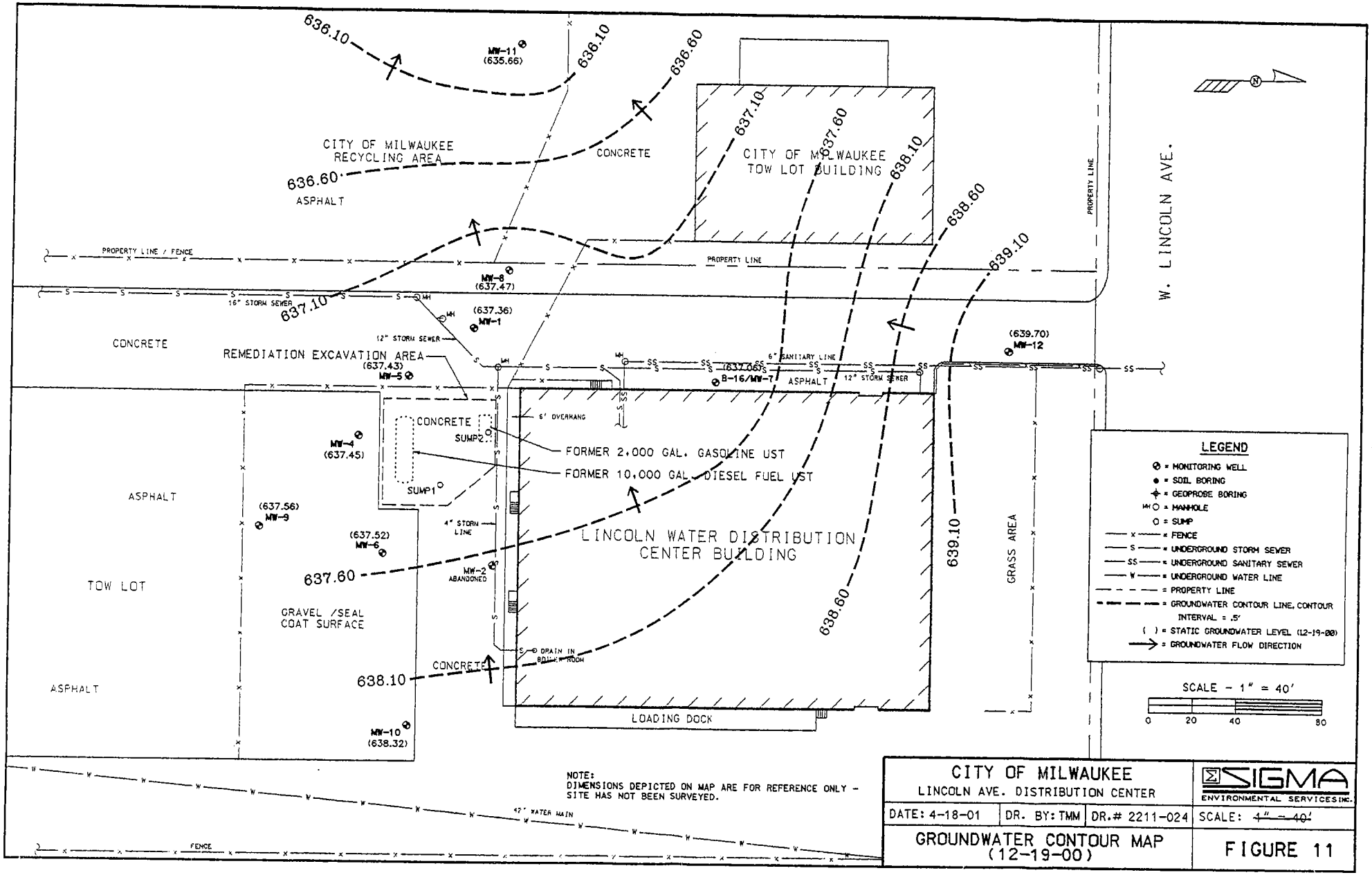
DATE: 04/03/09 | DR. BY: SJGJ | DR.# 2211-028 | SCALE: 1" = 40'

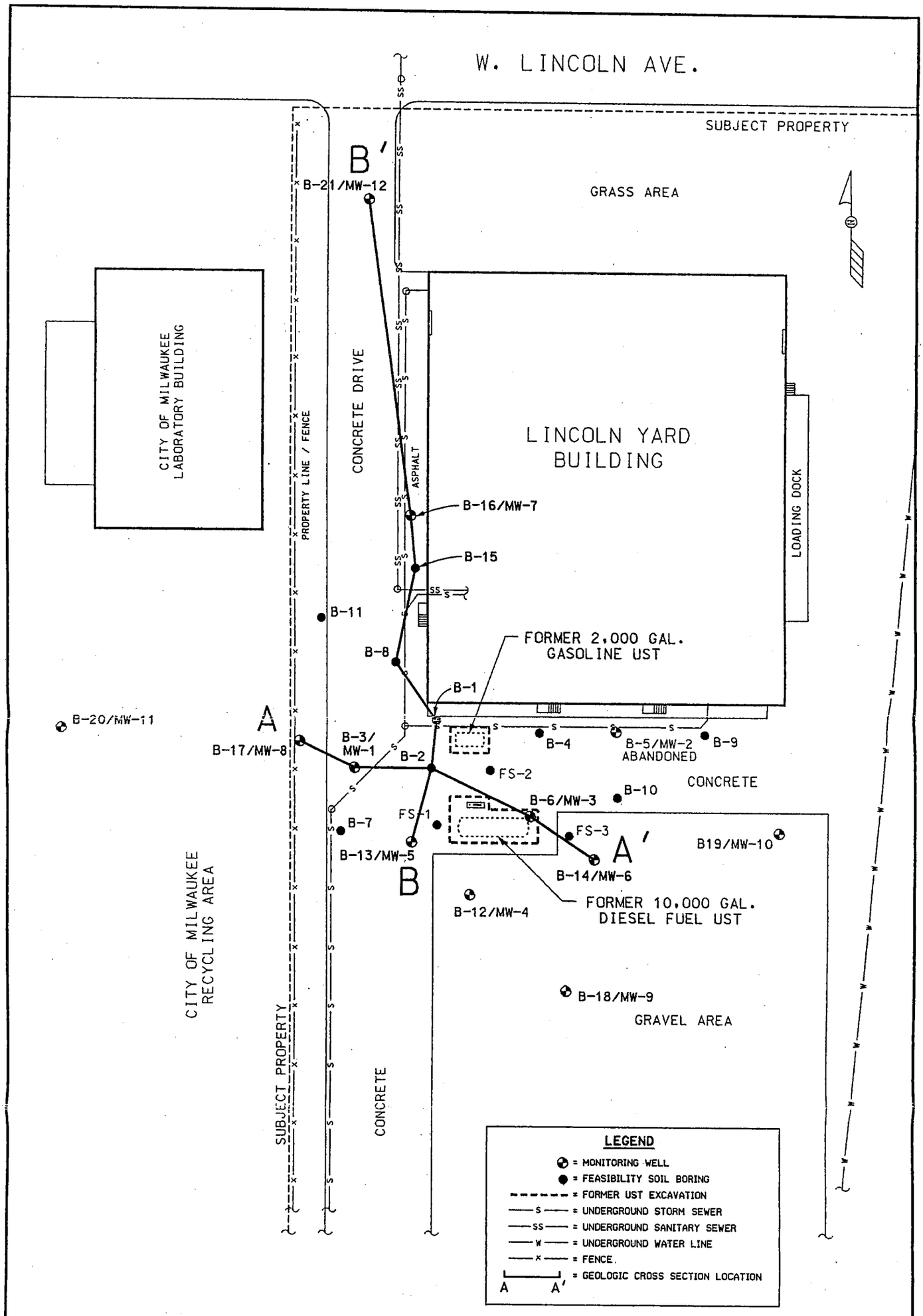
GROUNDWATER QUALITY MAP (MOST RECENT RESULTS)

FIGURE 2

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
414-643-4200

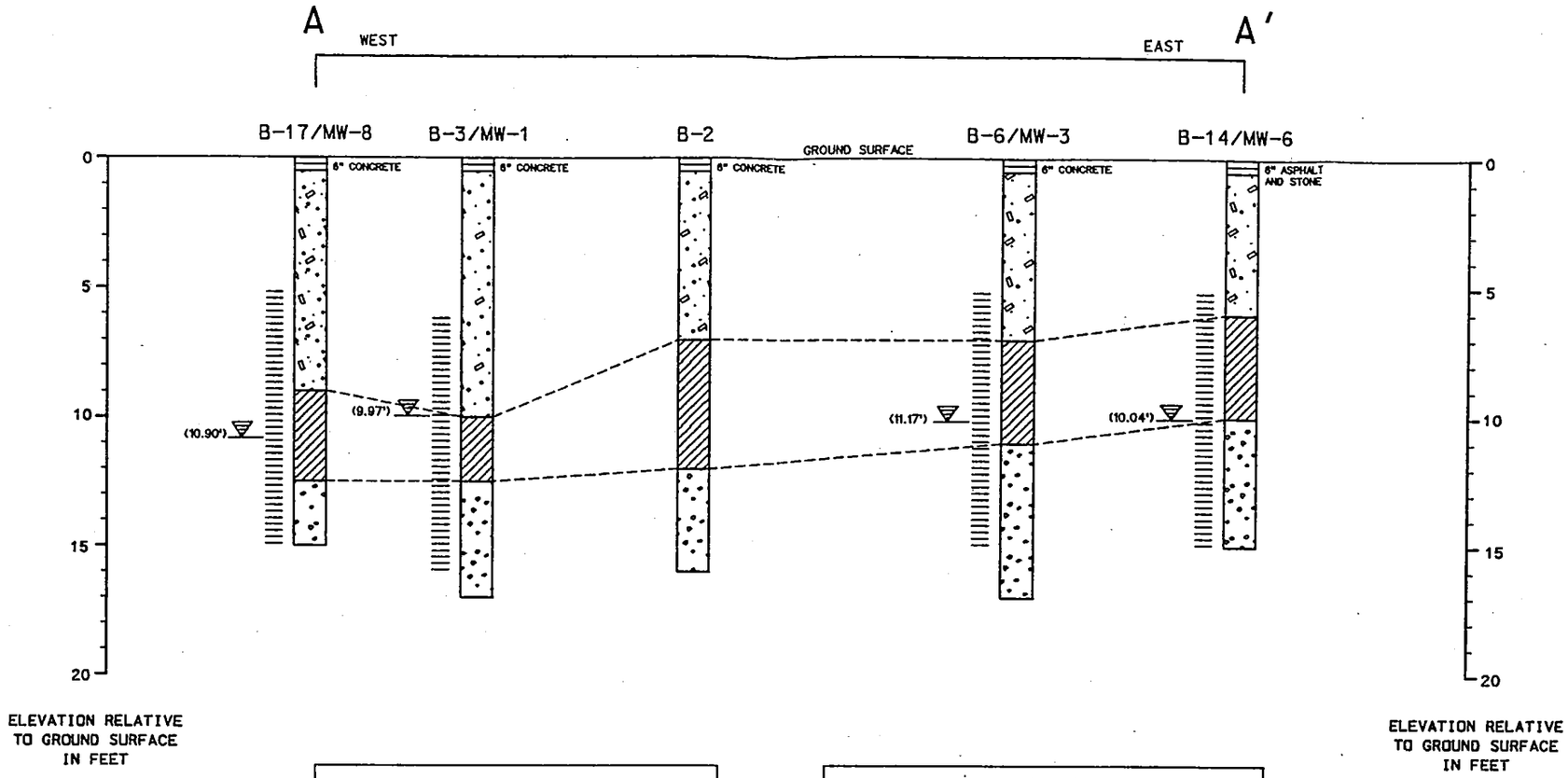
K:\CTYOFMIL\LDC\2211-028.dwg, F2-GWQM, 4/3/2009 2:17:23 PM, Ledger, 1:1


636.10
636.10
636.60
636.60
637.10
637.60
638.10
638.60
639.10
MW-11
(635.66)
CITY OF MILWAUKEE
RECYCLING AREA
CONCRETE
ASPHALT
CITY OF MILWAUKEE
TOW LOT BUILDING
PROPERTY LINE
W. LINCOLN AVE.
PROPERTY LINE / FENCE
PROPERTY LINE
MW-8
(637.47)
16" STORM SEWER
(637.36)
MW-1
12" STORM SEWER
CONCRETE
REMEDIATION EXCAVATION AREA
(637.43)
MW-5
6" SANITARY LINE
(637.06)
B-16/MW-7
ASPHALT
12" STORM SEWER
(639.70)
MW-12
6' OVERHANG
CONCRETE
SUMP2
SUMP1
MW-4
(637.45)
FORMER 2,000 GAL. GASOLINE UST
FORMER 10,000 GAL. DIESEL FUEL UST
ASPHALT
(637.56)
MW-9
(637.52)
MW-6
4" STORM LINE
MW-2
ABANDONED
LINCOLN WATER DISTRIBUTION
CENTER BUILDING
GRASS AREA
TOW LOT
GRAVEL /SEAL
COAT SURFACE
CONCRETE
DRAIN IN BOILER ROOM
ASPHALT
MW-10
(638.32)
LOADING DOCK
42" WATER MAIN
FENCE
NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY -
SITE HAS NOT BEEN SURVEYED.
LEGEND
= MONITORING WELL
= SOIL BORING
= GEOPROBE BORING
= MANHOLE
= SUMP
= FENCE
= UNDERGROUND STORM SEWER
= UNDERGROUND SANITARY SEWER
= UNDERGROUND WATER LINE
= PROPERTY LINE
= GROUNDWATER CONTOUR LINE, CONTOUR INTERVAL = .5'
( ) = STATIC GROUNDWATER LEVEL (12-19-00)
= GROUNDWATER FLOW DIRECTION
SCALE - 1" = 40'
0
20
40
80
CITY OF MILWAUKEE
LINCOLN AVE. DISTRIBUTION CENTER
SIGMA
ENVIRONMENTAL SERVICES INC.
DATE: 4-18-01
DR. BY: TMM
DR.# 2211-024
SCALE: 1" = 40'
GROUNDWATER CONTOUR MAP
(12-19-00)
FIGURE 11



NOTE: DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.

CITY OF MILWAUKEE LINCLON DISTRIBUTION CENTER 3801 W. LINCLON AVE., MILWAUKEE, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 7-1-98	DR. BY: BEB	DR.# 2211-007	SCALE: 1" = ~~20'~~ 40'
GEOLOGIC CROSS SECTION LOCATION MAP			FIGURE 3



USCS SYMBOLS

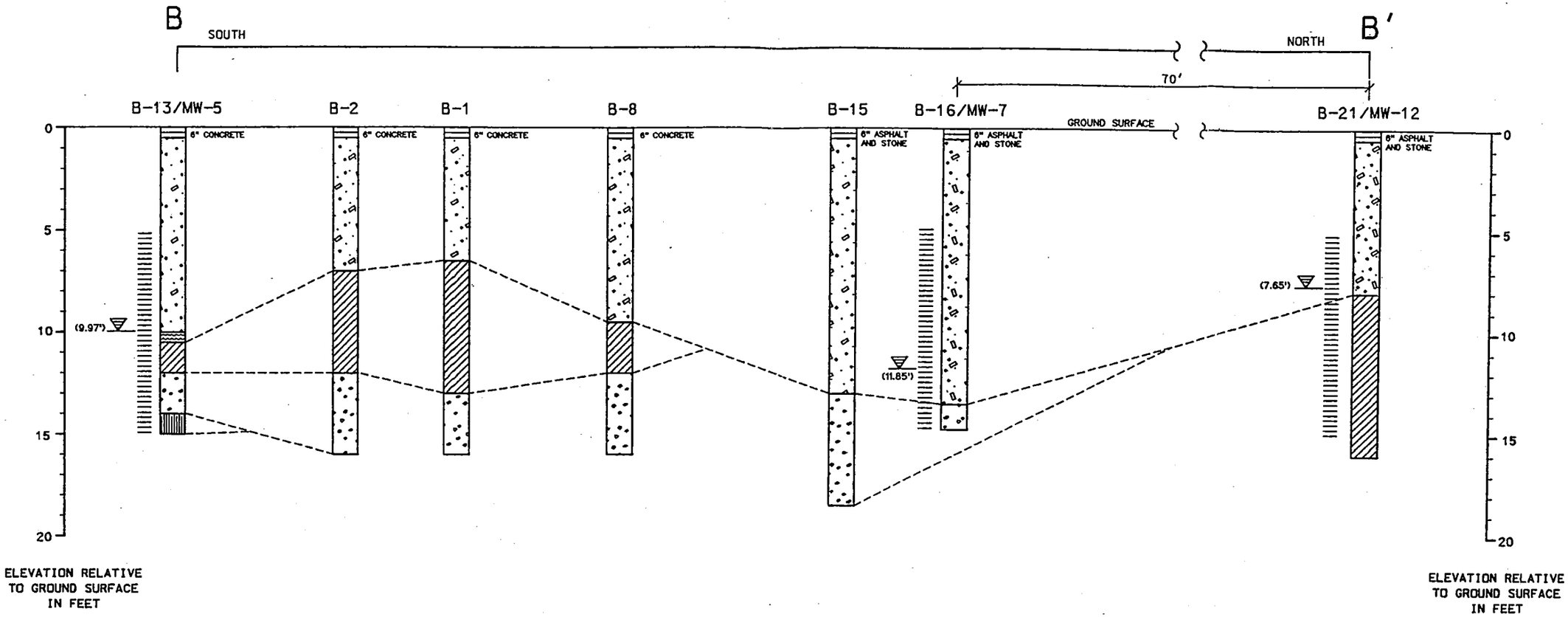
- CL - CLAYEY SILT WITH SOME FINE GRAVEL
- SW - FINE TO COARSE SAND AND GRAVEL

LEGEND

- = WELL SCREEN INTERVAL
- = STATIC WATER LEVEL MEASURED 4-3-98
- = FILL MATERIAL (REWORKED GRAVEL, CLAYEY SILT AND SAND, CONCRETE, GLASS, BRICK, SLAG, FLY ASH AND GENERAL REFUSE

NOTES:
HORIZONTAL SCALE 1" = 40'
VERTICAL SCALE 1" = 5'

CITY OF MILWAUKEE LINCLON DISTRIBUTION CENTER 3801 W. LINCOLN AVE., MILWAUKEE, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 7-1-98	DR. BY: BEB	DR.# 2211-010	SCALE: SEE NOTES
GEOLOGIC CROSS SECTION A - A'			FIGURE 4



USCS SYMBOLS

- CL - CLAYEY SILT WITH SOME FINE GRAVEL
- SW - FINE TO COARSE SAND AND GRAVEL
- PT - PEAT
- OL - SILTY CLAY

LEGEND

- = WELL SCREEN INTERVAL
- = STATIC WATER LEVEL MEASURED 4-3-98
- = FILL MATERIAL (REWORKED GRAVEL, CLAYEY SILT AND SAND, CONCRETE, GLASS, BRICK, SLAG FLY ASH, AND GENERAL REFUSE

NOTES:
HORIZONTAL SCALE 1" = 40'
VERTICAL SCALE 1" = 5'

CITY OF MILWAUKEE LINCLON DISTRIBUTION CENTER 3801 W. LINCOLN AVE., MILWAUKEE, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 7-1-98	DR. BY: BEB	DR.# 2211-011	SCALE: SEE NOTES
GEOLOGIC CROSS SECTION B - B'			FIGURE 5

TABLE 1
Soil Sample Analytical Results - Post Remedial Excavation
City of Milwaukee - Lincoln Water Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

Sample ID		Base 1	Base 2	Base 3	Wall 1	Wall 2	Wall 3	Wall 4	Wall 5	Wall 6	Wall 7	Transport 1	Transport 2	Transport 3	NR 720 RCL	NR746 Table 1 Values	NR746 Table 2 Values
Sample Depth (feet bgs)		11'	11'	10'	7'	6'	6'	6'	6'	6'	6'						
PID Value		1,132	38	139	888	238	116	84	66	27	48	1,421	921	1,121			
Gasoline Range Organics	mg/kg	**520**	**120**	**280**	**1,700**	**620**	7.6	8.4	3.8	26	92	**800**	**760**	**740**	100/250	NS	NS
Diesel Range Organics	mg/kg	18	4.5	31	**410**	**440**	53	17	22	19	78	**430**	**260**	**270**	100/250	NS	NS
Total Lead	mg/kg	20	7.5	19	110	**2,800**	**570**	58	150	65	97	NT	NT	NT	50/500	NS	NS
Benzene	µg/kg	**1,000**	**1,400**	**1,300**	**4,300**	***9,400***	**380**	**650**	**180**	**580**	**260**	**1,200**	**3,100**	**2,700**	5.5	8,500	1,100
Toluene	µg/kg	**13,000**	**3,500**	87	***55,000***	**28,000**	170	480	36	200	230	NT	NT	NT	1,500	38,000	NS
Ethylbenzene	µg/kg	***8,700***	***4,600***	1,100	***23,000***	***17,000***	270	440	67	370	1,200	NT	NT	NT	2,900	4,600	NS
Xylenes, Total	µg/kg	***38,000***	***17,800***	***4,380***	***131,000***	***87,000***	890	1,440	146	1,540	3,940	NT	NT	NT	4,100	42,000	NS
Methyl-tert-butyl-ether	µg/kg	680	260	63	2,000	950	<25	<25	<25	<25	<25	NT	NT	NT	NS	NS	NS
1,2,4-Trimethylbenzene	µg/kg	22,000	8,500	2,900	***100,000***	***43,000***	390	370	<25	1,800	7,100	NT	NT	NT	NS	83,000	NS
1,3,5-Trimethylbenzene	µg/kg	7,700	2,400	720	***32,000***	***12,000***	140	140	<25	490	2,100	NT	NT	NT	NS	11,000	NS

Notes:
Samples collected October 21, 1998
bgs = below ground surface
mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb)
NS = No Standard
= Not
NT Tested
50/500 = non-industrial and industrial RCLs, respecti
RCL = NR 720 Generic Residual Contaminant Level
BOLD = Exceeds NR 746.06 Table 1 Values Indicative of Petroleum Product in Soil Pores
BOLD = Exceeds NR 720 Generic Residual Contaminant Level
BOLD = Soil sample from within 4 feet of ground surface which exceeds NR 746.06 Table 2 Values for Protection of Human Health from Direct Contact with Contaminated Soil

TABLE 2
SOIL LABORATORY ANALYTICAL RESULTS
City of Milwaukee
Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	B-1		B-2		B-3		B-4		B-5		B-6		B-7		B-8		NR 720 RCL	NR 746 Table 1 Values	NR 746 Table 2 Values
Depth	feet bgs	9.5-11	14.5-16	7-8.5	12-13.5	9.5-11	12-13.5	7-8.5	14.5-16	9.5-11	12-13.5	12-13.5	14.4-16	4.5-6	12-13.5	9.5-11	14.5-16			
Date of Sample Collection		05/20/92	05/20/92	05/20/92	05/20/92	05/20/92	05/20/92	05/20/92	05/20/92	05/22/92	05/22/92	05/22/92	05/22/92	05/22/92	05/22/92	05/22/92	05/22/92			
Analyte																				
Benzene	µg/kg	**30,000**	**36**	**390**	**140**	**5,500**	1.1	**59**	2.2	**210**	**37**	**720**	2.3	<2.3	<1.1	**8,500**	**23**	5.5	8,500	1,100
Toluene	µg/kg	***350,000***	310	**6,900**	190	**36,000**	5.6	230	14	46	6.9	**18,000**	9.2	4.7	2.3	***41,000***	180	1,500	38,000	NS
Ethylbenzene	µg/kg	***87,000***	66	1,200	680	***41,000***	6.7	300	6.7	8.3	2.3	***13,000***	3.4	<2.3	<1.1	***24,000***	130	2,900	4,600	NS
Xylenes (total)	µg/kg	***1,700,000***	**9,800**	***160,000***	**23,000**	***610,000***	78	3,400	100	100	15	***58,000***	40	12	8	***110,000***	1,600	4,100	42,000	NS
Methyl-tert-Butl-Ether	µg/kg	<580	48	170	72	1,000	3.3	94	1.1	65	3.4	<220	2.3	<2.3	<1.1	<470	79	NS	NS	NS
1,2,4-Trimethylbenzene	µg/kg	***300,000***	250	6,000	1,800	***140,000***	16	510	23	72	11	35,000	6.9	<2.3	1.1	56,000	490	NS	83,000	NS
1,3,5-Trimethylbenzene	µg/kg	***62,000***	74	***14,000***	230	***25,000***	4.4	110	6.7	18	3.4	1,000	2.3	<2.3	<1.1	***15,000***	110	NS	11,000	NS
Total Petrol. Hydrocarbons	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NS	NS	NS
Gasoline Range Organics	mg/kg	**1,900**	15	**2,200**	9.8	**2,700**	12	**220**	<5.7	**470**	<5.9	63	<5.7	13	<5.7	**1,400**	9.5	100	NS	NS
Diesel Range Organics	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	NS	NS
Lead	mg/kg	52	2.1	34	3.5	12	2.6	5.8	2.8	390	2.2	1.6	<1.1	7.4	3.9	23	2.3	50/500*	NS	NS

KEY:

bgs = below ground surface
NS = no standard established
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
--- = not analyzed

RCL = NR 720 Generic Residual Contaminant Level
50/500* = non-industrial and industrial RCLs, respectively
BOLD = Exceeds NR 746.06 Table 1 Values Indicative of Petroleum Product in Soil Pores
BOLD = Exceeds NR 720 Soil Generic Residual Cleanup Level
BOLD = Soil sample from within 4 feet of ground surface which exceeds NR 746.06 Table 2 Values for Protection of Human Health from Direct Contact with Contaminated Soil

TABLE 2
SOIL LABORATORY ANALYTICAL RESULTS
City of Milwaukee
Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	B-9		B-10		B-11		B-12		B-13		B-14		B-15		B-16		NR 720 RCL	NR 746 Table 1 Values	NR 746 Table 2 Values
Depth	feet bgs	4-6	13.5-15	6-8	13.5-15	11-12.5	13.5-15	6-8	11-12.5	6-8	13.5-15	6-8	13.5-15	13.5-15	16-18	6-8	13.5-15			
Date of Sample Collection		08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92	08/06/92			
Analyte																				
Benzene	µg/kg	**2,100**	---	**800**	---	**5,200**	---	**4,300**	---	**800**	---	***9,500***	---	**2,100**	---	**2,200**	---	5.5	8,500	1,100
Toluene	µg/kg	200	---	<100	---	**16,000**	---	400	---	100	---	<100	---	**2,400**	---	200	---	1,500	38,000	NS
Ethylbenzene	µg/kg	200	---	300	---	***18,000***	---	100	---	100	---	2,600	---	***20,000***	---	100	---	2,900	4,600	NS
Xylenes (total)	µg/kg	800	---	400	---	***61,000***	---	200	---	1,100	---	**5,400**	---	***72,000***	---	1,600	---	4,100	42,000	NS
Methyl-tert-Butl-Ether	µg/kg	<100	---	200	---	<1,000	---	<100	---	100	---	<100	---	7,000	---	300	---	NS	NS	NS
1,2,4-Trimethylbenzene	µg/kg	1,600	---	100	---	38,000	---	<100	---	300	---	2,000	---	46,000	---	200	---	NS	83,000	NS
1,3,5-Trimethylbenzene	µg/kg	3,600	---	<100	---	***12,000***	---	<100	---	100	---	1,400	---	***15,000***	---	300	---	NS	11,000	NS
Total Petrol. Hydrocarbons	mg/kg	34,100	---	24	---	566	---	---	---	---	---	9,000	---	---	---	---	---	NS	NS	NS
Gasoline Range Organics	mg/kg	**290**	<5.0	15	<5.0	**560**	**310**	27	<5.0	15	<5.0	**350**	7.4	**880**	**880**	33	**440**	100	NS	NS
Diesel Range Organics	mg/kg	---	---	**2,600**	---	---	---	29	---	**1,200**	---	**450**	---	---	---	---	---	100	NS	NS
Lead	mg/kg	**740**	---	240	---	8.0	---	89	---	22	---	**1,360**	---	8.0	---	35	---	50/500*	NS	NS

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bgs = below ground surface
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TABLE 2
SOIL LABORATORY ANALYTICAL RESULTS
City of Milwaukee
Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	B-17		G-1		G-2		G-3		G-4		G-6		G-7		G-8		NR 720 RCL	NR 746 Table 1 Values	NR 746 Table 2 Values
Depth	feet bgs	4-6	13.5	5-7	10-12	5-7	10-12	5-7	10-12	5-7	10-12	5-7	10-12	5-7	10-12	5-7	10-12			
Date of Sample Collection		08/10/92	08/10/92	01/20/93	01/20/93	01/20/93	01/20/93	01/20/93	01/20/93	01/20/93	01/20/93	01/20/93	01/20/93	01/22/93	01/22/93	01/22/93	01/22/93			
Analyte																				
Benzene	µg/kg	**4,500**	---	**130**	<60	**120**	**81**	<68	<140	<66	**110**	---	---	<53	---	<71	---	5.5	8,500	1,100
Toluene	µg/kg	600	---	87	<60	87	<81	<68	140	68	<68	---	---	<53	---	<71	---	1,500	38,000	NS
Ethylbenzene	µg/kg	300	---	89	<60	<72	<81	<68	<140	<66	<68	---	---	<53	---	<71	---	2,900	4,600	NS
Xylenes (total)	µg/kg	3,400	---	960	<60	170	<81	120	300	130	<68	---	---	<53	---	170	---	4,100	42,000	NS
Methyl-tert-Butl-Ether	µg/kg	800	---	<60	<60	<72	<81	<68	<140	<66	<68	---	---	<53	---	<71	---	NS	NS	NS
1,2,4-Trimethylbenzene	µg/kg	900	---	1,100	<60	330	<81	220	2,200	<66	<68	---	---	<53	---	170	---	NS	83,000	NS
1,3,5-Trimethylbenzene	µg/kg	300	---	94	<60	170	98	110	270	<66	<68	---	---	<53	---	<71	---	NS	11,000	NS
Total Petrol. Hydrocarbons	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NS	600	540
Gasoline Range Organics	mg/kg	98	<5.0	37	<6.0	13	14	8.9	**120**	<6.6	<6.8	30	<6.3	6.7	<6.0	63	<5.7	100	NS	NS
Diesel Range Organics	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	100	NS	NS
Lead	mg/kg	**1,350**	---	230	4.2	**1,200**	240	340	15	**830**	9.9	---	---	8.5	---	3.3	---	50/500*	NS	NS

KEY:
bgs = below ground surface
NS = no standard established
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
--- = not analyzed

RCL = NR 720 Generic Residual Contaminant Level
50/500* = non-industrial and industrial RCLs, respectively
BOLD = Exceeds NR 746.06 Table 1 Values Indicative of Petroleum Product in Soil Pores
BOLD = Exceeds NR 720 Soil Generic Residual Cleanup Level
BOLD = Soil sample from within 4 feet of ground surface which exceeds NR 746.06 Table 2 Values for Protection of Human Health from Direct Contact with Contaminated Soil

TABLE 2
SOIL LABORATORY ANALYTICAL RESULTS
City of Milwaukee
Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	G-9		G-10		G-11		G-12		G-13	G-14		G-15		G-16		G-17		NR 720 RCL	NR 746 Table 1 Values	NR 746 Table 2 Values
Depth	feet bgs	5-7	10-12	5-7	10-12	5-7	10-12	5-7	10-12	10-12	5-7	10-12	5-7	10-12	5-7	10-12	5-7	10-12			
Date of Sample Collection		01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93	01/22/93			
Analyte																					
Benzene	µg/kg	**3,200**	---	**4,700**	---	**1,200**	---	<60	---	<59	---	**320**	---	**1,600**	---	<59	---	---	5.5	8,500	1,100
Toluene	µg/kg	220	---	620	---	210	---	<60	---	<59	---	440	---	**6,800**	---	<59	---	---	1,500	38,000	NS
Ethylbenzene	µg/kg	260	---	160	---	180	---	170	---	<59	---	740	---	2,100	---	<59	---	---	2,900	4,600	NS
Xylenes (total)	µg/kg	460	---	620	---	1,000	---	<60	---	93	---	1,700	---	**9,900**	---	<59	---	---	4,100	42,000	NS
Methyl-tert-Butl-Ether	µg/kg	<61	---	<66	---	<56	---	<60	---	93	---	<65	---	<59	---	<59	---	---	NS	NS	NS
1,2,4-Trimethylbenzene	µg/kg	610	---	490	---	560	---	<60	---	<59	---	4,500	---	3,900	---	<59	---	---	NS	83,000	NS
1,3,5-Trimethylbenzene	µg/kg	170	---	110	---	260	---	<60	---	<59	---	490	---	1,400	---	<59	---	---	NS	11,000	NS
Total Petrol. Hydrocarbons	mg/kg	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NS	600	540
Gasoline Range Organics	mg/kg	**260**	<5.7	**110**	6.1	19	<5.6	<6.0	16	<5.9	<5.7	69	**100**	**730**	<5.2	<5.9	<5.9	<5.7	100	NS	NS
Diesel Range Organics	mg/kg	**4,400**	---	---	---	4.4	---	---	---	---	---	---	---	---	---	---	---	---	100	NS	NS
Lead	mg/kg	**520**	---	50	---	59	---	---	---	16	---	<1.3	---	3.9	---	4.9	---	---	50/500*	NS	NS

KEY:
bgs = below ground surface
NS = no standard established
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
--- = not analyzed

RCL = NR 720 Generic Residual Contaminant Level
50/500* = non-industrial and industrial RCLs, respectively
BOLD = Exceeds NR 746.06 Table 1 Values Indicative of Petroleum Product in Soil Pores
BOLD = Exceeds NR 720 Soil Generic Residual Cleanup Level
BOLD = Soil sample from within 4 feet of ground surface which exceeds NR 746.06 Table 2 Values for Protection of Human Health from Direct Contact with Contaminated Soil

TABLE 2
SOIL LABORATORY ANALYTICAL RESULTS
City of Milwaukee
Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	G-18		G-19		NR 720 RCL	NR 746 Table 1 Values	NR 746 Table 2 Values
Depth	feet bgs	5-7	10-12	5-6	10-11			
Date of Sample Collection		01/22/93	01/22/93	01/22/93	01/22/93			
Analyte								
Benzene	µg/kg	---	<70	---	**460**	5.5	8,500	1,100
Toluene	µg/kg	---	200	---	210	1,500	38,000	NS
Ethylbenzene	µg/kg	---	<70	---	860	2,900	4,600	NS
Xylenes (total)	µg/kg	---	<70	---	2,000	4,100	42,000	NS
Methyl-tert-Butl-Ether	µg/kg	---	<70	---	<57	NS	NS	NS
1,2,4-Trimethylbenzene	µg/kg	---	72	---	5,500	NS	83,000	NS
1,3,5-Trimethylbenzene	µg/kg	---	<70	---	1,100	NS	11,000	NS
Total Petrol. Hydrocarbons	mg/kg	---	---	---	---	NS	600	540
Gasoline Range Organics	mg/kg	<6.8	<7.0	<6.2	79	100	NS	NS
Diesel Range Organics	mg/kg	---	---	---	---	100	NS	NS
Lead	mg/kg	---	---	---	---	50/500*	NS	NS

KEY:

bgs = below ground surface	RCL	= NR 720 Generic Residual Contaminant Level
NS = no standard established	50/500*	= non-industrial and industrial RCLs, respectively
mg/kg = milligrams per kilogram	***BOLD***	= Exceeds NR 746.06 Table 1 Values Indicative of Petroleum Product in Soil Pores
µg/kg = micrograms per kilogram	**BOLD**	= Exceeds NR 720 Soil Generic Residual Cleanup Level
--- = not analyzed	***BOLD***	= Soil sample from within 4 feet of ground surface which exceeds NR 746.06 Table 2 Values for Protection of Human Health from Direct Contact with Contaminated Soil

TABLE 3
SOIL QUALITY DATA
City of Milwaukee Lincoln Distribution Center
Milwaukee, Wisconsin

Sigma Sample ID Depth Sample Collected (ft) Date of Sample Collection		MW-9/B-18 4 to 6 03/20/98	MW-10/B-19 4 to 6 03/20/98	MW-11/B-20 8 to 10 03/23/98	MW-12/B-21 8 to 10 03/23/98	Residual Contaminant Level
Parameter	Units					
Lead, Total	mg/kg	140	35	54	29	500 [1]
GRO	mg/kg	17	58	3.8	<0.6	100
DRO	mg/kg	30	1,290	14	2.9	100
PID	i.u.	21.4	20.2	12.7	14.1	- - -
PAHs						
Acenaphthene	µg/kg	<7,410	<7,600	1,040	96	38000 [2]
Acenaphthylene	µg/kg	<6,420	<6,590	<605	<62	700 [2]
Anthracene	µg/kg	<1,210	<1,240	636	19	3000000 [2]
Benzo (a) Anthracene	µg/kg	334	<152	221	21	17000 [2]
Benzo (a) Pyrene	µg/kg	1,330	<342	<314	54	48000 [2]
Benzo (b) Fluoranthene	µg/kg	1,240	480	<221	32	360000 [2]
Benzo (k) Fluoranthene	µg/kg	543	70	89	15	870000 [2]
Benzo (ghi) Perylene	µg/kg	<321	<330	367	73	6800000 [2]
Chrysene	µg/kg	<728	<748	<687	65	37000 [2]
Dibenzo (a,h) Anthracene	µg/kg	1,000	188	<105	23	38000 [2]
Fluoranthene	µg/kg	<2,960	<3,040	2,940	125	500000 [2]
Fluorene	µg/kg	<802	<824	619	20	100000 [2]
Indeno (1,2,3-cd) Pyrene	µg/kg	<963	<989	301	44	680000 [2]
1-Methyl Naphthalene	µg/kg	<5,800	<5,960	<547	<56	23000 [2]
2-Methyl Naphthalene	µg/kg	<5,430	<5,580	539	<52	20000 [2]
Naphthalene	µg/kg	<10,100	<10,400	1,160	<98	400 [2]
Phenanthrene	µg/kg	<691	<710	815	31	1800 [2]
Pyrene	µg/kg	<1,040	<1,060	1,190	169	8700000 [2]
PVOCs						
Benzene	µg/kg	<25	<25	<25	<25	5.5*
Toluene	µg/kg	<25	<25	<25	<25	1500*
Ethylbenzene	µg/kg	<25	<25	<25	<25	2900*
Xylenes	µg/kg	<25	<25	<25	<25	4100*
1,2,4-Trimethylbenzene	µg/kg	<26	<26	<26	<26	- - -
1,3,5-Trimethylbenzene	µg/kg	<25	<25	<25	<25	- - -
Methyl-Tert-Butyl-Ether	µg/kg	<25	<25	<25	<25	- - -

Key

GRO = Gasoline Range Organics
DRO = Diesel Range Organics
PAHs = Polycyclic Aromatic Hydrocarbons
PVOCs = Petroleum Volatile Organic Compounds
PID = Photoionization Detector (insturment units as isobutylene)
NA = Not Analyzed
mg/kg = Milligrams per Kilogram
µg/kg = Micrograms per Kilogram

* = NR 720 Table 1 residual contaminant level
[1] = NR 720 Table 2 residual contaminant level based on industrial site use
[2] = Suggested generic residual contaminant level based on groundwater protection.

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-1												NR 140	NR 140
Date		06/04/92	08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/21/00	03/31/00	12/21/00	11/13/06	ES	PAL
VOCs															
Benzene	µg/L	**150**	**2,000**	FP	**3,700**	**3,000**	NT	FP	FP	FP	FP	**337**	NT	5	0.5
Toluene	µg/L	**1,200**	**660**	FP	390	130	NT	FP	FP	FP	FP	**247**	NT	1,000	200
Ethylbenzene	µg/L	**940**	**2,100**	FP	**1,300**	**770**	NT	FP	FP	FP	FP	**1,290**	NT	700	140
Xylenes	µg/L	**1,070**	**8,100**	FP	1,600	**1,900**	NT	FP	FP	FP	FP	**5,876**	NT	10,000	1,000
1,2;4-TMB	µg/L	58	**2,000**	FP	**850**	**800**	NT	FP	FP	FP	FP	**2,120**	NT	480	96
1,3,5-TMB	µg/L	<10	**240**	FP	220	**210**	NT	FP	FP	FP	FP	**647**	NT	480	96
Total Trimethylbenzenes	µg/L	58	**2,240**	FP	**1,070**	**1,010**	NT	FP	FP	FP	FP	**2,767**	NT	480	96
MTBE	µg/L	**61**	**130**	FP	<15	<16	NT	FP	FP	FP	FP	<60	NT	60	12
Methylene Chloride	µg/L	**110**	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	**150**	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	100	20
Tetracloroethylene	µg/L	<10	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	5	0.5
Styrene	µg/L	<10	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	100	10
Di-Isopropyl ether	µg/L	NT	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	NS	NS
Isopropylbenzene	µg/L	70	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	NS	NS
Bromobenzene	µg/L	88	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	NS	NS
tert-Butylbenzene	µg/L	880	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	NS	NS
Chloromethane	µg/L	<50	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L	<10	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	NS	NS
n-Butylbenzene	µg/L	190	NT	FP	NT	NT	NT	FP	FP	FP	FP	NT	NT	NS	NS
PAHs															
Acenapthene	µg/L	NT	NT	FP	0.83	NT	FP	FP	FP	FP	FP	41.5	25.8	NS	NS
Acenapthylene	µg/L	NT	NT	FP	<0.56	NT	FP	FP	FP	FP	FP	<1.50	<3.0	NS	NS
Anthracene	µg/L	NT	NT	FP	0.47	NT	FP	FP	FP	FP	FP	11.1	<4.5	3,000	600
Benz(a)anthracene	µg/L	NT	NT	FP	0.39	NT	FP	FP	FP	FP	FP	4.56	<5.0	NS	NS
Benzo(a)pyrene	µg/L	NT	NT	FP	0.35	NT	FP	FP	FP	FP	FP	**4.24**	**6.85**	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	NT	FP	0.18	NT	FP	FP	FP	FP	FP	**5.23**	**1.38**	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	NT	FP	0.34	NT	FP	FP	FP	FP	FP	2.19	<3.5	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	NT	FP	0.42	NT	FP	FP	FP	FP	FP	3.86	<3.0	NS	NS
Chrysene	µg/L	NT	NT	FP	0.34	NT	FP	FP	FP	FP	FP	**3.31**	**1.55**	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	NT	FP	<0.16	NT	FP	FP	FP	FP	FP	4.4	<5.5	NS	NS
Fluoranthene	µg/L	NT	NT	FP	1.3	NT	FP	FP	FP	FP	FP	14.4	7.32	400	80
Fluorene	µg/L	NT	NT	FP	4.5	NT	FP	FP	FP	FP	FP	8.54	<6.0	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	NT	FP	0.22	NT	FP	FP	FP	FP	FP	3.1	<6.0	NS	NS
1-Methylnaphthalene	µg/L	NT	NT	FP	48	NT	FP	FP	FP	FP	FP	193	18	NS	NS
2-Methylnaphthalene	µg/L	NT	NT	FP	110	NT	FP	FP	FP	FP	FP	568	87.5	NS	NS
Naphthalene	µg/L	NT	NT	FP	270	NT	FP	FP	FP	FP	FP	**349**	**144**	100	10
Phenanthrene	µg/L	NT	NT	FP	2.1	NT	FP	FP	FP	FP	FP	20.8	6.98	NS	NS
Pyrene	µg/L	NT	NT	FP	0.66	NT	FP	FP	FP	FP	FP	12.8	5.65	250	50
Gasoline Range Organics	mg/l	53	25	FP	NT	NT	FP	FP	FP	FP	FP	NT	NT	NS	NS
Diesel Range Organics	mg/l	NT	NT	FP	NT	NT	FP	FP	FP	FP	FP	NT	NT	NS	NS
Soluble Lead	µg/L	**270**	<4.0	FP	NT	NT	FP	FP	FP	FP	FP	NT	NT	15	1.5

Key:
- VOCs = Volatile Organic Compounds
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- FP = Free Product
- TMB = Trimethylbenzene
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- ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
- PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit
- NS = No established standard
- NT = Not tested
- µg/L = micrograms per liter
- **BOLD** = Concentration exceeds NR 140 Enforcement Standard
- **BOLD** = Concentration exceeds NR 140 Preventive Action Limit

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-2		MW-3						NR 140	NR 140
Date		06/04/92	08/17/92	06/04/92	08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	ES	PAL
VOCs											
Benzene	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	5	0.5
Toluene	µg/L	<2.0	WA	**2,800**	FP	FP	FP	FP	WA	1,000	200
Ethylbenzene	µg/L	<2.0	WA	**1,900**	FP	FP	FP	FP	WA	700	140
Xylenes	µg/L	<4.0	WA	**2,320**	FP	FP	FP	FP	WA	10,000	1,000
1,2,4-TMB	µg/L	<2.0	WA	**1,000**	FP	FP	FP	FP	WA	480	96
1,3,5-TMB	µg/L	<2.0	WA	**600**	FP	FP	FP	FP	WA	480	96
Total Trimethylbenzenes	µg/L	<2.0	WA	**1,600**	FP	FP	FP	FP	WA	480	96
MTBE	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	60	12
Methylene Chloride	µg/L	**9.4**	WA	**84**	FP	FP	FP	FP	WA	5	0.5
1,2-Transdichloroethylene	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	100	20
Tetracloroethylene	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	5	0.5
Styrene	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	100	10
Di-isopropyl ether	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Isopropylbenzene	µg/L	<2.0	WA	72	FP	FP	FP	FP	WA	NS	NS
Bromobenzene	µg/L	<2.0	WA	86	FP	FP	FP	FP	WA	NS	NS
tert-Butylbenzene	µg/L	<2.0	WA	1,500	FP	FP	FP	FP	WA	NS	NS
Chloromethane	µg/L	<10	WA	<100	FP	FP	FP	FP	WA	3.0	0.3
sec-Butylbenzene	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	NS	NS
n-Butylbenzene	µg/L	<2.0	WA	<20	FP	FP	FP	FP	WA	NS	NS
PAHs											
Acenapthene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Acenapthylene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Anthracene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	3,000	600
Benz(a)anthracene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Benzo(a)pyrene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Chrysene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Fluoranthene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	400	80
Fluorene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	400	80
Indeno(1,2,3-cd)Pyrene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
1-Methylnaphthalene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
2-Methylnaphthalene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Naphthalene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	100	10
Phenanthrene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Pyrene	µg/L	NT	WA	NT	FP	FP	FP	FP	WA	250	50
Gasoline Range Organics	mg/l	1.5	WA	66	FP	FP	FP	FP	WA	NS	NS
Diesel Range Organics	mg/l	NT	WA	NT	FP	FP	FP	FP	WA	NS	NS
Soluble Lead	µg/L	**83**	WA	**1,800**	FP	FP	FP	FP	WA	15	1.5

Key:
- VOCs = Volatile Organic Compounds
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- NT = Not tested
- µg/L = micrograms per liter
- BOLD = Concentration exceeds NR 140 Enforcement Standard
- **BOLD** = Concentration exceeds NR 140 Preventive Action Limit
- WA = Well abandoned (MW-2 lost during utility work in 1992, MW-3 removed during remedial excavation in 1998)

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-4													NR 140	NR 140
Date		08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/12/06	ES	PAL
VOCs																
Benzene	µg/L	<1.0	<1.0	<0.13	0.88	<0.27	<0.27	<0.26	<0.27	< 0.15	< 0.15	<0.15	<0.15	WA	5	0.5
Toluene	µg/L	<1.0	<1.0	<0.20	<0.20	<0.27	<0.27	<0.21	<0.27	< 0.4	< 0.4	<0.4	<0.4	WA	1,000	200
Ethylbenzene	µg/L	<1.0	<1.0	<0.22	<0.22	<0.32	<0.32	<0.24	<0.32	< 0.5	< 0.5	<0.5	<0.5	WA	700	140
Xylenes	µg/L	<1.0	<1.0	<0.23	<0.23	<0.43	<0.43	<1.34	<0.67	< 0.55	< 0.55	<0.55	<0.55	WA	10,000	1,000
1,2,4-TMB	µg/L	<1.0	<1.0	<0.22	<0.22	<0.22	<0.22	<0.86	<0.22	< 0.4	< 0.4	<0.4	<0.4	WA	480	96
1,3,5-TMB	µg/L	<1.0	<1.0	<0.29	<0.29	<0.27	<0.27	<0.54	<0.27	< 0.15	< 0.15	<0.15	<0.15	WA	480	96
Total Trimethylbenzenes	µg/L	<2.0	<1.0	<0.51	<0.51	<0.49	<0.49	<1.40	<0.49	<0.55	<0.55	<0.55	<0.55	WA	480	96
MTBE	µg/L	**15**	<1.0	<0.16	<4.0	1.3	1.2	1.9	1.3	< 0.3	1.22	2.01	2.65	WA	60	12
Methylene Chloride	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
1,2-Transdichloroethylene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	20
Tetracloroethylene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
Styrene	µg/L	1.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	10
Di-Isopropyl ether	µg/L	3.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Isopropylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Bromobenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
tert-Butylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Chloromethane	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	3.0	0.3
sec-Butylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
n-Butylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
PAHs																
Acenapthene	µg/L	NT	NT	<0.23	NT	<0.47	<0.47	<0.47	<0.47	< 0.1	< 0.1	<0.1	<0.1	WA	NS	NS
Acenapthylene	µg/L	NT	NT	<0.57	NT	<0.41	<0.41	<0.41	<0.41	< 0.15	< 0.15	<0.15	<0.15	WA	NS	NS
Anthracene	µg/L	NT	NT	0.047	NT	<0.021	<0.021	<0.021	<0.021	0.09	0.105	<0.09	<0.09	WA	3,000	600
Benz(a)anthracene	µg/L	NT	NT	0.16	NT	<0.014	<0.014	<0.014	<0.014	0.16	0.128	<0.03	0.09	WA	NS	NS
Benzo(a)pyrene	µg/L	NT	NT	0.17	NT	0.018	0.019	0.017	0.017	**0.282**	**0.147**	<0.02	**0.116**	WA	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	NT	0.090	NT	0.015	<0.015	<0.015	<0.015	**0.257**	**0.162**	<0.02	**0.086**	WA	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	NT	0.054	NT	<0.0090	<0.0090	<0.0090	<0.0090	0.091	0.081	<0.03	0.055	WA	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	NT	0.20	NT	<0.021	<0.021	<0.021	<0.021	0.229	0.098	<0.09	0.126	WA	NS	NS
Chrysene	µg/L	NT	NT	0.12	NT	<0.016	<0.016	<0.016	<0.016	**0.127**	**0.099**	<0.02	**0.071**	WA	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	NT	<0.16	NT	<0.020	<0.020	<0.020	0.021	0.101	< 0.06	<0.06	<0.06	WA	NS	NS
Fluoranthene	µg/L	NT	NT	0.31	NT	0.03	0.029	0.033	0.027	0.437	0.314	<0.03	0.173	WA	400	80
Fluorene	µg/L	NT	NT	<0.030	NT	<0.058	<0.058	<0.058	<0.058	< 0.11	< 0.1	<0.11	<0.11	WA	400	80
Indeno(1,2,3-cd)Pyrene	µg/L	NT	NT	0.085	NT	0.034	0.031	0.028	0.043	0.146	0.083	<0.06	<0.06	WA	NS	NS
1-Methylnaphthalene	µg/L	NT	NT	<0.41	NT	<0.36	<0.36	<0.36	<0.36	< 0.13	< 0.13	<0.13	<0.13	WA	NS	NS
2-Methylnaphthalene	µg/L	NT	NT	<0.62	NT	<0.36	<0.36	<0.36	<0.36	< 0.12	< 0.12	<0.12	<0.12	WA	NS	NS
Naphthalene	µg/L	NT	NT	<0.23	NT	<0.42	<0.42	<0.42	<0.42	< 0.06	< 0.06	<0.06	<0.06	WA	100	10
Phenanthrene	µg/L	NT	NT	0.095	NT	<0.046	<0.046	<0.046	<0.046	0.188	0.187	<0.11	<0.11	WA	NS	NS
Pyrene	µg/L	NT	NT	0.20	NT	0.026	0.022	0.028	0.021	0.154	0.137	<0.1	0.155	WA	250	50
Gasoline Range Organics	mg/l	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Soluble Lead	µg/L	<4.0	NT	NT	NT	NT	<2.8	<2.8	<0.92	1.47	< 1.00	<1.00	<1.00	WA	15	1.5

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- WA = Well previously abandoned

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-5													NR 140	NR 140
Date		08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs																
Benzene	µg/L	**1,100**	**2,500**	530	**1,500**	**780**	**1,100**	**260**	**540**	**398**	**207**	**174**	**202**	NT	5	0.5
Toluene	µg/L	180	68	3.3	6.1	3.3	3.6	2.2	2.3	< 8.00	< 2.00	<2.00	<2.0	NT	1,000	200
Ethylbenzene	µg/L	15	<50	1.4	<4.4	11	30	4.7	2	< 10.0	15.1	<2.50	<2.50	NT	700	140
Xylenes	µg/L	59	170	20	26	16	23.5	13.9	<3.96	< 11.00	<2.75	<2.75	<2.75	NT	10,000	1,000
1,2,4-TMB	µg/L	<5.0	<50	<1.1	<4.4	7.3	2.7	<2.1	0.96	< 8.00	< 2.00	<2.00	<2.0	NT	480	96
1,3,5-TMB	µg/L	<5.0	<50	<1.5	<5.8	<2.7	<2.7	<1.4	<1.1	< 3.00	< 0.75	<0.75	<0.75	NT	480	96
Total Trimethylbenzenes	µg/L	<10	<100	<2.6	<10.2	7.3	2.7	<3.5	0.96	<11.0	<2.75	<2.75	<2.75	NT	480	96
MTBE	µg/L	**200**	**180**	<0.80	**120**	<3.2	**68**	11	**29**	**84.7**	**14.6**	4.57	6.34	NT	60	12
Methylene Chloride	µg/L	**23**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	**9.5**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs																
Acenapthene	µg/L	NT	NT	<0.23	NT	<2.4	1.4	2.7	<3.3	< 0.1	5.22	5.72	4.32	2.57	NS	NS
Acenapthylene	µg/L	NT	NT	<0.57	NT	<2.0	<0.41	<0.41	<2.9	< 0.15	< 0.15	<0.15	<0.15	<0.06	NS	NS
Anthracene	µg/L	NT	NT	0.12	NT	0.24	0.3	0.97	0.42	1.03	1.26	1.73	<0.09	<0.09	3,000	600
Benz(a)anthracene	µg/L	NT	NT	0.15	NT	<0.070	0.027	0.15	<0.098	0.398	0.352	0.214	0.192	<0.1	NS	NS
Benzo(a)pyrene	µg/L	NT	NT	0.057	NT	<0.075	**0.02**	**0.14**	<0.10	**0.432**	**0.276**	**0.258**	**0.14**	**0.167**	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	NT	<0.044	NT	<0.075	0.015	**0.12**	<0.10	**0.414**	**0.312**	**0.144**	**0.129**	**0.036**	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	NT	<0.030	NT	<0.045	0.0099	0.048	<0.063	0.142	0.129	0.057	0.068	<0.07	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	NT	<0.10	NT	<0.10	<0.021	0.075	<0.15	0.31	0.153	0.146	0.144	0.077	NS	NS
Chrysene	µg/L	NT	NT	0.082	NT	<0.080	**0.02**	**0.11**	<0.11	**0.296**	**0.251**	**0.137**	**0.147**	**0.107**	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	NT	<0.16	NT	<0.100	0.023	0.03	<0.14	0.22	0.149	<0.06	<0.06	<0.11	NS	NS
Fluoranthene	µg/L	NT	NT	0.48	NT	0.37	0.39	1.3	0.32	3.22	3.02	3.3	1.87	1.75	400	80
Fluorene	µg/L	NT	NT	0.67	NT	1.6	1.9	2.7	2.2	2.25	1.25	4.1	0.956	0.658	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	NT	<0.085	NT	<0.12	0.035	<0.25	<0.17	0.205	0.143	0.069	0.063	<0.12	NS	NS
1-Methylnaphthalene	µg/L	NT	NT	1.6	NT	2.1	3	1.7	<2.5	3.95	3.02	1.71	2.75	0.08	NS	NS
2-Methylnaphthalene	µg/L	NT	NT	0.55	NT	<1.8	<0.36	0.6	<2.5	0.583	0.382	1.25	0.346	0.127	NS	NS
Naphthalene	µg/L	NT	NT	0.70	NT	<2.1	<0.42	<0.42	<2.9	0.252	< 0.06	<0.06	<0.06	<0.11	100	10
Phenanthrene	µg/L	NT	NT	0.39	NT	0.37	0.097	0.49	<0.32	0.253	0.155	0.117	<0.11	<0.11	NS	NS
Pyrene	µg/L	NT	NT	0.31	NT	0.22	0.22	0.97	0.17	1.58	1.12	1.53	0.681	0.76	250	50
Gasoline Range Organics	mg/l	5,500	6,700	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	<4.0	NT	NT	NT	NT	<2.8	**3.9**	<0.92	**4.70**	< 1.00	<1.00	<1.0	NT	15	1.5

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TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-6													NR 140	NR 140
Date		08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/12/06	ES	PAL
VOCs																
Benzene	µg/L	**940**	**2,200**	**860**	**660**	**71**	**1,300**	**980**	**150**	**93.1**	**902**	**1,040**	**940**	WA	5	0.5
Toluene	µg/L	18	<50	7.4	6.5	<0.27	10	6.4	2.8	< 2.00	7.79	<8.00	8.04	WA	1,000	200
Ethylbenzene	µg/L	4.6	<50	<2.2	<2.2	<0.32	<3.2	<2.4	<0.32	< 2.50	1.08	<10.0	<10.0	WA	700	140
Xylenes	µg/L	59	170	29	25	0.6	31.5	<13.4	<1.7	< 2.75	24.44	24.45	<13.6	WA	10,000	1,000
1,2,4-TMB	µg/L	15	<50	4.6	2.2	<0.22	4.7	<8.6	<0.22	< 2.00	3.00	<8.00	<8.0	WA	480	96
1,3,5-TMB	µg/L	<2.0	<50	<2.9	<2.9	<0.27	<2.7	<5.4	<0.27	< 0.75	1.16	<3.00	<3.0	WA	480	96
Total Trimethylbenzenes	µg/L	15	<100	4.6	2.2	<0.49	4.7	<14	<0.49	<2.75	4.16	<11.0	<11.0	WA	480	96
MTBE	µg/L	**100**	**260**	<1.6	<35	**29**	**84**	**150**	**49**	**53.5**	**95.5**	**86.8**	**196**	WA	60	12
Methylene Chloride	µg/L	**5.2**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
1,2-Transdichloroethylene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	20
Tetracloroethylene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
Styrene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	10
Di-isopropyl ether	µg/L	26	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Isopropylbenzene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Bromobenzene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
tert-Butylbenzene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Chloromethane	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	3.0	0.3
sec-Butylbenzene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
n-Butylbenzene	µg/L	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
PAHs																
Acenapthene	µg/L	NT	NT	0.89	NT	<0.94	0.63	0.53	<1.1	0.816	1.00	1.44	0.75	WA	NS	NS
Acenapthylene	µg/L	NT	NT	<0.55	NT	<0.82	<0.41	<0.41	<0.94	< 0.15	< 0.15	<0.15	<0.15	WA	NS	NS
Anthracene	µg/L	NT	NT	0.23	NT	0.12	0.14	0.22	0.17	1.02	0.752	0.677	1.67	WA	3,000	600
Benz(a)anthracene	µg/L	NT	NT	0.80	NT	0.095	0.071	0.14	0.15	1.14	0.802	0.797	1.2	WA	NS	NS
Benzo(a)pyrene	µg/L	NT	NT	0.21	NT	**0.16**	**0.13**	**0.24**	**0.2**	**1.22**	**0.873**	**1.02**	**0.973**	WA	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	NT	0.13	NT	**0.17**	**0.12**	**0.23**	**0.19**	**1.38**	**1.00**	**0.95**	**1.35**	WA	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	NT	0.21	NT	0.08	0.051	0.088	0.072	0.548	0.417	0.416	0.55	WA	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	NT	0.24	NT	0.085	0.12	0.22	0.13	0.939	0.77	0.719	0.876	WA	NS	NS
Chrysene	µg/L	NT	NT	0.19	NT	**0.18**	**0.11**	**0.16**	**0.25**	**1.10**	**0.701**	**0.737**	**1.13**	WA	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	NT	<0.16	NT	0.14	0.12	0.2	<0.046	0.466	0.507	<0.06	1.01	WA	NS	NS
Fluoranthene	µg/L	NT	NT	0.67	NT	0.32	0.25	0.49	0.39	4.46	1.60	1.77	2.98	WA	400	80
Fluorene	µg/L	NT	NT	0.40	NT	0.18	0.48	0.63	0.39	1.03	1.11	1.37	1.84	WA	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	NT	0.11	NT	0.34	0.26	0.52	0.44	0.942	0.578	0.517	0.732	WA	NS	NS
1-Methylnaphthalene	µg/L	NT	NT	2.9	NT	<0.72	1.1	<0.36	<0.83	0.167	1.42	2.72	0.967	WA	NS	NS
2-Methylnaphthalene	µg/L	NT	NT	3.7	NT	<0.72	<0.36	<0.36	<0.83	0.176	0.462	1.15	0.472	WA	NS	NS
Naphthalene	µg/L	NT	NT	<0.22	NT	<0.84	<0.42	<0.42	<0.97	< 0.06	0.09	0.248	0.15	WA	100	10
Phenanthrene	µg/L	NT	NT	1.0	NT	0.15	0.54	0.19	0.25	1.19	0.854	1.26	2.04	WA	NS	NS
Pyrene	µg/L	NT	NT	0.18	NT	0.33	0.25	0.44	0.34	1.02	1.13	0.571	1.76	WA	250	50
Gasoline Range Organics	mg/l	2.8	5.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Soluble Lead	µg/L	<4.0	NT	NT	NT	NT	<2.8	**3.5**	<0.92	**45.5**	< 1.00	<1.00	**1.74**	WA	15	1.5

Key:
- VOCs = Volatile Organic Compounds
- PAHs = Polynuclear Aromatic Hydrocarbons
- FP = Free Product
- TMB = Trimethylbenzene
- MTBE = Methyl-tertiary-butyl-ether
- ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
- PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit
- NS = No established standard
- NT = Not tested
- µg/L = micrograms per liter
- **BOLD** = Concentration exceeds NR 140 Enforcement Standard
- **BOLD** = Concentration exceeds NR 140 Preventive Action Limit
- WA = Well previously abandoned

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-7													NR 140	NR 140
Date		08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs																
Benzene	µg/L	**470**	**220**	**45**	**48**	**31**	**47**	**46**	**28**	**35.6**	**78.3**	**41.5**	**95.6**	NT	5	0.5
Toluene	µg/L	**1,100**	**210**	14	21	19	24	26	18	26.5	32.0	22.8	43.5	NT	1,000	200
Ethylbenzene	µg/L	**1,400**	**550**	180	**370**	**460**	**460**	**400**	**510**	**505**	**699**	**465**	**815**	NT	700	140
Xylenes	µg/L	**4,100**	**1,900**	280	540	672	598	378	600	642.5	829.9	536.2	**1,160.4**	NT	10,000	1,000
1,2,4-TMB	µg/L	**1,300**	470	82	**160**	**290**	**210**	**140**	**330**	**313**	**402**	**266**	**503**	NT	480	96
1,3,5-TMB	µg/L	430	150	14	22	54	32	25	38	42.2	47	43.1	**117**	NT	480	96
Total Trimethylbenzenes	µg/L	**1,730**	620	96	**188**	**344**	**242**	**165**	**368**	**355.2**	**449**	**309.1**	**620**	NT	480	96
MTBE	µg/L	**220**	**140**	<9.0	<45	<1.3	<0.64	**100**	**43**	< 3.00	< 3.00	<3.00	<3.0	NT	60	12
Methylene Chloride	µg/L	62	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	480	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	140	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane	µg/L	<50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L	24	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	490	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs																
Acenapthene	µg/L	NT	NT	<0.22	NT	1.1	1.6	<2.8	<4.7	8.28	4.18	<0.1	4.25	1.02	NS	NS
Acenapthylene	µg/L	NT	NT	<0.55	NT	<8.2	2.2	<2.5	<4.1	< 0.15	< 0.15	<0.15	<0.15	<0.06	NS	NS
Anthracene	µg/L	NT	NT	0.10	NT	0.12	0.074	<0.13	<0.21	< 0.09	< 0.09	0.239	<0.09	<0.09	3,000	600
Benz(a)anthracene	µg/L	NT	NT	0.092	NT	0.019	<0.014	<0.084	<0.14	0.084	0.061	0.125	<0.03	<0.1	NS	NS
Benzo(a)pyrene	µg/L	NT	NT	0.055	NT	0.019	0.015	<0.090	<0.15	**0.204**	< 0.02	**0.207**	**0.099**	**0.15**	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	NT	<0.043	NT	0.017	<0.015	<0.090	<0.15	**0.122**	**0.048**	**0.098**	**0.094**	<0.02	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	NT	<0.029	NT	<0.0090	<0.0090	<0.054	<0.090	< 0.03	< 0.03	0.039	0.127	<0.07	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	NT	<0.10	NT	<0.021	<0.021	<0.13	<0.21	0.222	< 0.09	0.091	0.134	<0.06	NS	NS
Chrysene	µg/L	NT	NT	0.025	NT	0.019	<0.016	<0.096	<0.16	**0.059**	**0.043**	**0.076**	**0.151**	<0.02	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	NT	<0.16	NT	<0.020	0.021	<0.12	<0.20	< 0.06	< 0.06	<0.06	<0.06	<0.11	NS	NS
Fluoranthene	µg/L	NT	NT	0.29	NT	0.11	0.068	0.12	0.18	0.476	0.177	0.473	0.514	<0.12	400	80
Fluorene	µg/L	NT	NT	1.3	NT	1.6	1.2	0.69	1.2	0.534	0.401	0.476	1.1	0.142	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	NT	<0.083	NT	<0.025	0.03	<0.15	<0.25	0.111	< 0.06	<0.06	0.086	<0.12	NS	NS
1-Methylnaphthalene	µg/L	NT	NT	11	NT	24	14	9.4	16	25.6	16.2	4.2	32.9	1.81	NS	NS
2-Methylnaphthalene	µg/L	NT	NT	**24**	NT	**45**	29	19	28	65.4	28.9	6.21	59.9	2.75	NS	NS
Naphthalene	µg/L	NT	NT	42	NT	**66**	**42**	**24**	**43**	**74.6**	**45.4**	3.38	**78.3**	4.93	100	10
Phenanthrene	µg/L	NT	NT	0.50	NT	2.2	1.4	1.1	2	0.677	0.377	0.702	0.4	<0.11	NS	NS
Pyrene	µg/L	NT	NT	0.12	NT	0.088	0.048	0.12	<0.17	< 0.1	< 0.1	1.28	0.515	<0.1	250	50
Gasoline Range Organics	mg/l	27	11	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	**1,000**	NT	NT	NT	NT	<2.8	**4.5**	<0.92	**2.08**	**1.63**	1.20	**1.86**	NT	15	1.5

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- NS = No established standard
- NT = Not tested
- µg/L = micrograms per liter
- BOLD = Concentration exceeds NR 140 Enforcement Standard
- **BOLD** = Concentration exceeds NR 140 Preventive Action Limit

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-8													NR 140	NR 140
Date		08/17/92	09/07/93	04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs																
Benzene	µg/L	**140**	**2,100**	**550**	**100**	**570**	**610**	**8.8**	**2.3**	**193**	**561**	**389**	**2.24**	NT	5	0.5
Toluene	µg/L	25	<50	7.4	0.53	2.5	3.4	0.32	<0.27	2.25	2.85	<4.00	<0.4	NT	1,000	200
Ethylbenzene	µg/L	3.4	**390**	400	33	18	3.9	0.37	<0.32	6.33	9.73	<5.00	<0.5	NT	700	140
Xylenes	µg/L	9.9	840	800	2.6	63	8.1	<1.34	<0.67	<3.76	< 13.05	<5.50	<0.55	NT	10,000	1,000
1,2,4-TMB	µg/L	1.8	**490**	**840**	7.2	45	2	<0.86	<0.22	< 2.00	< 2.00	<4.00	<0.4	NT	480	96
1,3,5-TMB	µg/L	<1.0	<50	37	<0.58	1.8	<1.4	<0.54	<0.27	< 0.75	< 0.75	<1.50	<0.15	NT	480	96
Total Trimethylbenzenes	µg/L	1.8	**490**	**877**	7.2	46.8	2	<1.40	<0.49	<2.75	<2.75	<5.5	<4.15	NT	480	96
MTBE	µg/L	**16**	**63**	<1.6	<5.0	<1.6	11	10	7.3	< 1.50	< 0.75	<3.00	6.36	NT	60	12
Methylene Chloride	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	5.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	1.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane		<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	<1.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs																
Acenapthene	µg/L	NT	NT	<0.22	NT	<1.9	0.57	<0.47	<0.47	< 0.1	2.25	3.94	0.164	1.9	NS	NS
Acenapthylene	µg/L	NT	NT	<0.55	NT	<1.6	<0.41	<0.41	<0.41	< 0.15	< 0.15	<0.15	<0.15	<0.06	NS	NS
Anthracene	µg/L	NT	NT	0.25	NT	0.12	0.14	0.11	<0.021	< 0.09	0.44	0.405	0.207	<0.09	3,000	600
Benz(a)anthracene	µg/L	NT	NT	0.88	NT	<0.056	<0.014	0.022	0.027	0.096	0.145	0.164	0.244	<0.1	NS	NS
Benzo(a)pyrene	µg/L	NT	NT	0.047	NT	<0.060	<0.015	**0.022**	**0.031**	**0.162**	**0.1**	**0.261**	**0.254**	**0.124**	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	NT	<0.043	NT	<0.060	<0.015	0.018	**0.025**	**0.08**	**0.115**	**0.139**	**0.36**	<0.02	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	NT	<0.029	NT	<0.036	<0.0090	<0.0090	0.011	< 0.03	0.068	0.067	0.163	<0.07	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	NT	<0.10	NT	<0.084	<0.021	<0.021	0.022	0.1	< 0.09	0.155	0.339	<0.06	NS	NS
Chrysene	µg/L	NT	NT	0.028	NT	<0.064	<0.016	**0.02**	**0.029**	**0.06**	**0.094**	**0.108**	**0.209**	<0.02	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	NT	<0.16	NT	<0.080	<0.020	<0.020	0.04	0.093	< 0.06	<0.06	0.177	<0.11	NS	NS
Fluoranthene	µg/L	NT	NT	0.45	NT	0.11	0.13	0.13	0.21	1.08	1.16	1.22	0.735	<0.12	400	80
Fluorene	µg/L	NT	NT	3.0	NT	0.61	0.3	<0.058	0.058	0.151	0.417	0.242	<0.11	0.286	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	NT	<0.083	NT	<0.100	<0.025	0.035	0.069	< 0.06	< 0.06	0.068	0.248	<0.12	NS	NS
1-Methylnaphthalene	µg/L	NT	NT	33	NT	4.5	1.2	<0.36	<0.36	1.86	2.37	0.217	0.188	2.32	NS	NS
2-Methylnaphthalene	µg/L	NT	NT	40	NT	<1.4	<0.36	<0.36	<0.42	< 0.12	0.519	<0.12	<0.12	0.458	NS	NS
Naphthalene	µg/L	NT	NT	**300**	NT	9.7	<0.42	<0.42	<0.42	1.57	0.23	<0.06	<0.06	4.21	100	10
Phenanthrene	µg/L	NT	NT	0.95	NT	0.32	0.049	<0.046	0.046	< 0.11	0.161	<0.11	0.299	0.131	NS	NS
Pyrene	µg/L	NT	NT	0.24	NT	0.087	0.07	0.15	0.15	0.427	0.407	0.611	0.497	<0.1	250	50
Gasoline Range Organics	mg/l	0.35	9.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	<4.0	NT	NT	NT	NT	<2.8	**6.5**	<2.8	1.04	**2.41**	<1.00	**1.58**	NT	15	1.5

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TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-9											NR 140	NR 140
Date		04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs														
Benzene	µg/L	**6.4**	**1.3**	<0.27	<0.27	**0.82**	<0.27	< 0.15	< 0.15	0.262	<0.15	NT	5	0.5
Toluene	µg/L	0.16	<0.20	<0.27	<0.27	0.21	<0.27	0.437	< 0.4	<0.4	<0.4	NT	1,000	200
Ethylbenzene	µg/L	<0.25	<0.22	<0.32	<0.32	<0.24	<0.32	< 0.5	< 0.5	<0.5	<0.5	NT	700	140
Xylenes	µg/L	<0.25	0.25	<0.43	<0.43	<1.34	<0.67	< 0.55	< 0.55	0.251	<0.55	NT	10,000	1,000
1,2,4-TMB	µg/L	<0.10	<0.22	<0.22	<0.22	<0.86	<0.22	< 0.4	< 0.4	<0.4	<0.4	NT	480	96
1,3,5-TMB	µg/L	<0.10	<0.29	<0.27	<0.27	<0.54	<0.27	< 0.15	< 0.15	<0.15	<0.15	NT	480	96
Total Trimethylbenzenes	µg/L	<0.20	<0.49	<0.49	<0.49	<1.4	<0.49	<4.15	<4.15	<4.15	<4.15	NT	480	96
MTBE	µg/L	7.6	<5.0	**15**	**12**	**20**	**15**	< 0.3	**13.4**	9.93	**12.6**	NT	60	12
Methylene Chloride	µg/L	0.63	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane	µg/L	0.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs														
Acenapthene	µg/L	<0.24	NT	<0.47	<0.47	<0.47	<0.47	< 0.1	< 0.1	<0.1	<0.1	<0.061	NS	NS
Acenapthylene	µg/L	<0.60	NT	<0.41	<0.41	<0.41	<0.41	< 0.15	< 0.15	<0.15	<0.15	<0.061	NS	NS
Anthracene	µg/L	<0.020	NT	<0.021	<0.021	<0.021	<0.021	< 0.09	< 0.09	<0.09	<0.09	<0.092	3,000	600
Benz(a)anthracene	µg/L	<0.019	NT	<0.014	<0.014	<0.014	<0.014	< 0.03	< 0.03	<0.03	<0.03	<0.102	NS	NS
Benzo(a)pyrene	µg/L	<0.029	NT	<0.015	<0.015	<0.015	<0.015	< 0.02	< 0.02	**0.125**	**0.076**	**0.14**	0.2	0.02
Benzo(b)fluoranthene	µg/L	<0.047	NT	<0.015	<0.015	<0.015	<0.015	< 0.02	< 0.02	**0.152**	**0.025**	<0.02	0.2	0.02
Benzo(k)fluoranthene	µg/L	<0.032	NT	<0.0090	<0.0090	<0.0090	<0.0090	< 0.03	< 0.03	<0.03	<0.03	<0.071	NS	NS
Benzo(g,h,i)perylene	µg/L	<0.11	NT	<0.021	<0.021	<0.021	<0.021	< 0.09	< 0.09	<0.09	<0.09	<0.061	NS	NS
Chrysene	µg/L	<0.014	NT	<0.016	<0.016	<0.016	<0.016	< 0.02	< 0.02	<0.02	**0.029**	<0.02	0.2	0.02
Dibenz(a,h)anthracene	µg/L	<0.17	NT	<0.020	<0.020	<0.020	<0.020	< 0.06	< 0.06	<0.06	<0.06	<0.112	NS	NS
Fluoranthene	µg/L	<0.11	NT	<0.015	<0.015	<0.015	<0.015	< 0.03	< 0.03	0.85	<0.03	<0.122	400	80
Fluorene	µg/L	<0.032	NT	<0.058	<0.058	<0.058	<0.058	< 0.11	< 0.11	<0.11	<0.11	<0.122	400	80
Indeno(1,2,3-cd)pyrene	µg/L	<0.090	NT	<0.025	<0.025	<0.025	<0.025	< 0.06	< 0.06	<0.06	<0.06	<0.122	NS	NS
1-Methylnaphthalene	µg/L	<0.44	NT	<0.36	<0.36	<0.36	<0.36	< 0.13	< 0.13	<0.13	0.134	<0.082	NS	NS
2-Methylnaphthalene	µg/L	<0.24	NT	<0.36	<0.36	<0.36	<0.36	< 0.12	< 0.12	<0.12	<0.12	<0.112	NS	NS
Naphthalene	µg/L	<0.24	NT	0.61	<0.42	<0.42	<0.42	< 0.06	< 0.06	<0.06	<0.06	<0.112	100	10
Phenanthrene	µg/L	<0.015	NT	<0.046	<0.046	<0.046	<0.046	< 0.11	< 0.11	0.39	<0.11	<0.112	NS	NS
Pyrene	µg/L	<0.051	NT	<0.017	<0.017	<0.017	<0.017	< 0.1	< 0.1	5.94	<0.1	<0.102	250	50
Gasoline Range Organics	mg/l	0.079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	0.49	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	<0.0089	NT	NT	<2.8	**3.6**	<0.92	< 1.00	< 1.00	<1.00	<1.00	NT	15	1.5

Key:
VOCs = Volatile Organic Compounds
PAHs = Polynuclear Aromatic Hydrocarbons
FP = Free Product
TMB = Trimethylbenzene
MTBE = Methyl-tertiary-butyl-ether
ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit
NS = No established standard
NT = Not tested
µg/L = micrograms per liter
BOLD = Concentration exceeds NR 140 Enforcement Standard
BOLD = Concentration exceeds NR 140 Preventive Action Limit

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-10											NR 140	NR 140
Date		04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs														
Benzene	µg/L	**1.0**	**4.4**	**6.7**	**10**	**8.4**	**5.7**	**3.33**	**7.07**	**4.68**	**4.07**	NT	5	0.5
Toluene	µg/L	<0.10	0.28	0.36	0.55	0.3	<0.27	< 0.4	< 0.4	<0.4	<0.4	NT	1,000	200
Ethylbenzene	µg/L	<0.25	<0.22	<0.32	<0.32	<0.24	<0.32	< 0.5	< 0.5	<0.5	<0.5	NT	700	140
Xylenes	µg/L	<0.25	0.42	<0.43	<0.43	<1.34	<0.67	< 0.55	< 0.55	<0.55	<0.55	NT	10,000	1,000
1,2,4-TMB	µg/L	0.20	0.54	0.32	0.36	<0.86	<0.22	< 0.4	< 0.4	<0.4	<0.4	NT	480	96
1,3,5-TMB	µg/L	0.12	<0.29	<0.27	<0.27	<0.54	<0.27	< 0.15	< 0.15	<0.15	<0.15	NT	480	96
Total Trimethylbenzenes	µg/L	0.32	0.54	0.32	0.36	<1.4	<0.49	<0.55	<0.55	<0.55	<0.55	NT	480	96
MTBE	µg/L	0.7	<2.0	<0.32	1.5	3.3	1.3	< 0.3	< 0.3	<3.00	3.82	NT	60	12
Methylene Chloride	µg/L	0.69	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs														
Acenapthene	µg/L	<0.26	NT	<0.47	<0.47	<0.47	<0.50	< 0.15	< 0.1	<0.1	<0.1	<0.71	NS	NS
Acenapthylene	µg/L	<0.66	NT	<0.41	<0.41	<0.41	<0.44	< 0.15	< 0.15	<0.15	<0.15	<0.71	NS	NS
Anthracene	µg/L	0.076	NT	0.061	<0.021	0.035	0.079	0.337	< 0.09	<0.09	0.126	<0.106	3,000	600
Benz(a)anthracene	µg/L	0.094	NT	<0.014	<0.014	<0.014	0.015	0.186	0.077	<0.03	0.105	<0.118	NS	NS
Benzo(a)pyrene	µg/L	0.079	NT	<0.015	<0.015	<0.015	<0.016	**0.191**	< 0.02	<0.02	**0.113**	**0.195**	0.2	0.02
Benzo(b)fluoranthene	µg/L	<0.052	NT	<0.015	<0.015	<0.015	0.017	**0.192**	**0.063**	<0.02	**0.1**	<0.024	0.2	0.02
Benzo(k)fluoranthene	µg/L	<0.035	NT	<0.0090	<0.0090	<0.0090	<0.0096	0.102	0.048	<0.03	0.065	<0.082	NS	NS
Benzo(g,h,i)perylene	µg/L	<0.12	NT	<0.021	<0.021	<0.021	<0.022	< 0.09	< 0.09	<0.09	0.12	<0.071	NS	NS
Chrysene	µg/L	0.060	NT	<0.016	<0.016	<0.016	**0.027**	**0.113**	**0.048**	<0.02	**0.073**	<0.024	0.2	0.02
Dibenz(a,h)anthracene	µg/L	<0.19	NT	<0.020	<0.020	<0.020	<0.021	0.426	< 0.06	<0.06	<0.06	<0.129	NS	NS
Fluoranthene	µg/L	0.45	NT	0.087	0.042	0.11	0.13	1.35	0.168	0.104	0.218	<0.141	400	80
Fluorene	µg/L	<0.035	NT	0.061	<0.058	<0.058	0.069	< 0.11	< 0.11	<0.11	<0.11	<0.141	400	80
Indeno(1,2,3-cd)pyrene	µg/L	<0.10	NT	<0.025	<0.025	<0.025	<0.027	< 0.06	< 0.06	<0.06	<0.06	<0.141	NS	NS
1-Methylnaphthalene	µg/L	<0.48	NT	0.57	0.44	0.48	<0.38	0.177	0.145	<0.13	0.284	<0.094	NS	NS
2-Methylnaphthalene	µg/L	<0.72	NT	<0.36	<0.36	<0.36	<0.38	< 0.12	< 0.12	<0.12	0.213	<0.129	NS	NS
Naphthalene	µg/L	<0.26	NT	<0.42	<0.42	<0.42	<0.45	0.064	< 0.06	<0.06	0.081	<0.129	100	10
Phenanthrene	µg/L	0.1	NT	0.31	0.19	0.11	0.18	0.271	0.119	<0.11	0.15	<0.129	NS	NS
Pyrene	µg/L	0.13	NT	0.078	0.034	0.037	0.11	0.186	0.105	<0.1	0.1	<0.118	250	50
Gasoline Range Organics	mg/l	0.053	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	2.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	<0.0089	NT	NT	<2.8	**3.7**	**2.7**	< 1.00	< 1.00	**3.76**	1.36	NT	15	1.5

Key:
- VOCs = Volatile Organic Compounds
- PAHs = Polynuclear Aromatic Hydrocarbons
- FP = Free Product
- TMB = Trimethylbenzene
- MTBE = Methyl-tertiary-butyl-ether
- ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
- PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit
- NS = No established standard
- NT = Not tested
- µg/L = micrograms per liter
- **BOLD** = Concentration exceeds NR 140 Enforcement Standard
- **BOLD** = Concentration exceeds NR 140 Preventive Action Limit

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-11											NR 140	NR 140
Date		04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs														
Benzene	µg/L	<0.10	0.27	<0.27	<0.27	<0.26	<0.27	< 0.15	< 0.15	<0.15	<0.15	NT	5	0.5
Toluene	µg/L	<0.10	<0.20	<0.27	<0.27	<0.21	<0.27	< 0.4	< 0.4	<0.4	<0.4	NT	1,000	200
Ethylbenzene	µg/L	<0.25	<0.22	<0.32	<0.32	<0.24	<0.32	< 0.5	< 0.5	<0.5	<0.5	NT	700	140
Xylenes	µg/L	<0.25	<0.23	<0.43	<0.43	<1.34	<0.67	< 0.55	< 0.55	<0.55	<0.55	NT	10,000	1,000
1,2,4-TMB	µg/L	<0.10	<0.22	<0.22	<0.22	<0.86	<0.22	< 0.4	< 0.4	<0.4	<0.4	NT	480	96
1,3,5-TMB	µg/L	<0.10	<0.29	<0.27	<0.27	<0.54	<0.27	< 0.15	< 0.15	<0.15	<0.15	NT	480	96
Total Trimethylbenzenes	µg/L	<0.20	<0.49	<0.49	<0.49	<1.4	<0.49	<0.55	<0.55	<0.55	<0.55	NT	480	96
MTBE	µg/L	3.5	2.6	2.1	2.2	2.2	1.7	< 0.3	1.75	1.58	<0.3	NT	60	12
Methylene Chloride	µg/L	0.63	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs														
Acenapthene	µg/L	0.75	NT	<0.47	<0.47	<0.47	<0.47	< 0.15	< 0.1	<0.1	<1.00	<0.06	NS	NS
Acenapthylene	µg/L	<0.57	NT	<0.41	<0.41	<0.41	<0.41	< 0.15	< 0.15	<0.15	<1.50	<0.06	NS	NS
Anthracene	µg/L	0.91	NT	0.034	0.024	0.029	0.055	1.05	0.445	0.511	2.67	<0.09	3,000	600
Benz(a)anthracene	µg/L	1.3	NT	0.029	0.018	0.029	0.054	1.96	0.603	0.796	2.23	<0.1	NS	NS
Benzo(a)pyrene	µg/L	1.1	NT	**0.039**	**0.024**	**0.032**	**0.079**	**1.47**	**1.11**	**0.61**	**1.53**	**0.122**	0.2	0.02
Benzo(b)fluoranthene	µg/L	0.55	NT	**0.027**	0.016	**0.022**	**0.056**	**4.81**	**1.26**	**1.7**	**3.31**	**0.049**	0.2	0.02
Benzo(k)fluoranthene	µg/L	0.72	NT	0.014	0.011	0.011	0.027	2.08	0.551	0.758	1.86	<0.07	NS	NS
Benzo(g,h,i)perylene	µg/L	1.2	NT	0.021	<0.021	<0.021	0.049	2.88	0.907	1.32	2.52	<0.06	NS	NS
Chrysene	µg/L	1.1	NT	**0.028**	**0.02**	**0.034**	**0.067**	**3.08**	**0.811**	**0.926**	**2.89**	0.168	0.2	0.02
Dibenz(a,h)anthracene	µg/L	<0.17	NT	0.03	<0.020	<0.020	0.082	2.82	0.586	0.145	0.725	<0.110	NS	NS
Fluoranthene	µg/L	3.5	NT	0.083	0.078	0.11	0.15	13.0	2.40	6.19	11.4	0.541	400	80
Fluorene	µg/L	0.44	NT	<0.058	<0.058	<0.058	<0.058	0.19	0.186	0.229	1.3	0.15	400	80
Indeno(1,2,3-cd)pyrene	µg/L	0.67	NT	0.049	0.041	0.045	0.15	< 0.06	0.801	1.16	1.44	<0.12	NS	NS
1-Methylnaphthalene	µg/L	<0.40	NT	<0.36	<0.36	<0.36	<0.36	0.4	< 0.13	<0.13	<1.30	<0.08	NS	NS
2-Methylnaphthalene	µg/L	2.2	NT	<0.36	<0.36	<0.36	<0.36	0.406	0.152	0.154	<1.20	<0.11	NS	NS
Naphthalene	µg/L	<0.23	NT	<0.42	<0.42	<0.42	<0.42	< 0.06	0.078	0.099	0.577	<0.110	100	10
Phenanthrene	µg/L	2.3	NT	<0.046	<0.046	0.086	0.067	4.46	1.01	1.43	7.1	0.356	NS	NS
Pyrene	µg/L	3.0	NT	0.072	0.058	0.08	0.12	2.54	0.871	0.37	7.81	0.348	250	50
Gasoline Range Organics	mg/l	<0.050	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	0.44	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	1.4	NT	NT	<2.8	**4.6**	<0.92	< 1.00	< 1.00	<1.00	**26.4**	NT	15	1.5

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TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	MW-12											NR 140	NR 140
Date		04/03/98	07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/13/06	ES	PAL
VOCs														
Benzene	µg/L	<0.10	<0.13	<0.27	<0.27	<0.26	<0.27	< 0.15	< 0.15	< 0.15	<0.15	NT	5	0.5
Toluene	µg/L	<0.10	<0.20	<0.27	<0.27	<0.21	<0.27	< 0.4	< 0.4	< 0.4	<0.4	NT	1,000	200
Ethylbenzene	µg/L	<0.25	<0.22	<0.32	<0.32	<0.24	<0.32	< 0.5	< 0.5	< 0.5	<0.5	NT	700	140
Xylenes	µg/L	<0.25	<0.23	<0.43	<0.43	<1.34	<0.67	< 0.55	< 0.55	< 0.55	<0.55	NT	10,000	1,000
1,2,4-TMB	µg/L	<0.10	<0.22	<0.22	<0.22	<0.86	<0.22	< 0.4	< 0.4	< 0.4	<0.4	NT	480	96
1,3,5-TMB	µg/L	<0.10	<0.29	<0.27	<0.27	<0.54	<0.27	< 0.15	< 0.15	< 0.15	<0.15	NT	480	96
Total Trimethylbenzenes	µg/L	<0.20	<0.49	<0.49	<0.49	<1.4	<0.49	<0.55	<0.55	<0.55	<0.55	NT	480	96
MTBE	µg/L	<0.25	<0.16	<0.32	<0.32	<0.22	<0.32	< 0.3	< 0.3	< 0.3	<0.3	NT	60	12
Methylene Chloride	µg/L	0.62	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
1,2-Transdichloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	20
Tetracloroethylene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	5	0.5
Styrene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	100	10
Di-isopropyl ether	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Isopropylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Bromobenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
tert-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Chloromethane	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.0	0.3
sec-Butylbenzene	µg/L		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
n-Butylbenzene	µg/L	<0.25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
PAHs														
Acenapthene	µg/L	<0.25	NT	<0.94	<0.47	<0.47	<0.47	< 0.1	< 0.1	<0.1	<0.1	<0.06	NS	NS
Acenapthylene	µg/L	<0.62	NT	<0.82	<0.41	<0.41	<0.41	< 0.15	< 0.15	<0.15	<0.15	<0.06	NS	NS
Anthracene	µg/L	0.26	NT	0.044	<0.021	<0.021	<0.021	< 0.09	0.122	0.126	0.19	<0.09	3,000	600
Benz(a)anthracene	µg/L	0.63	NT	0.071	0.015	0.015	0.046	0.274	0.346	0.52	0.641	<0.1	NS	NS
Benzo(a)pyrene	µg/L	0.92	NT	**0.18**	**0.027**	**0.059**	**0.12**	**0.576**	**0.556**	**1.14**	**0.961**	**0.163**	0.2	0.02
Benzo(b)fluoranthene	µg/L	0.52	NT	**0.12**	**0.027**	**0.037**	**0.088**	**0.599**	**0.68**	**1.1**	**1.16**	<0.02	0.2	0.02
Benzo(k)fluoranthene	µg/L	0.70	NT	0.061	0.014	0.016	0.043	0.165	0.228	0.349	0.365	<0.07	NS	NS
Benzo(g,h,i)perylene	µg/L	1.1	NT	0.13	0.035	0.034	0.088	0.522	0.556	0.993	1.1	<0.06	NS	NS
Chrysene	µg/L	0.6	NT	**0.085**	0.017	**0.02**	**0.073**	**0.194**	**0.26**	**0.378**	**0.479**	0.049	0.2	0.02
Dibenz(a,h)anthracene	µg/L	<0.18	NT	0.15	0.029	<0.020	0.19	0.724	0.556	1.15	1	<0.11	NS	NS
Fluoranthene	µg/L	1.6	NT	0.12	0.03	0.045	0.095	0.805	0.655	1.61	1.82	0.213	400	80
Fluorene	µg/L	0.045	NT	<0.12	<0.058	<0.058	<0.058	< 0.11	< 0.11	<0.11	<0.11	<0.12	400	80
Indeno(1,2,3-cd)pyrene	µg/L	0.64	NT	0.32	0.084	0.085	0.27	< 0.06	0.445	0.82	0.944	<0.12	NS	NS
1-Methylnaphthalene	µg/L	<0.45	NT	<0.72	<0.36	<0.36	<0.36	< 0.13	< 0.13	<0.13	<0.13	<0.08	NS	NS
2-Methylnaphthalene	µg/L	<0.67	NT	<0.72	<0.36	<0.36	<0.36	< 0.12	< 0.12	<0.12	<0.12	<0.11	NS	NS
Naphthalene	µg/L	<0.25	NT	<0.84	<0.42	<0.42	<0.42	< 0.06	< 0.06	<0.06	<0.06	<0.11	100	10
Phenanthrene	µg/L	0.39	NT	<0.092	<0.046	<0.046	<0.046	0.118	0.209	0.24	0.11	<0.11	NS	NS
Pyrene	µg/L	1.5	NT	0.11	0.026	0.02	0.085	0.477	0.489	1.03	0.1	<0.1	250	50
Gasoline Range Organics	mg/l	<0.050	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Diesel Range Organics	mg/l	0.20	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS
Soluble Lead	µg/L	<0.89	NT	NT	<2.8	<2.8	<2.8	< 1.00	**2.43**	**11.8**	**3.82**	NT	15	1.5

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- ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard
- PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit
- NS = No established standard
- NT = Not tested
- µg/L = micrograms per liter
- **BOLD** = Concentration exceeds NR 140 Enforcement Standard
- **BOLD** = Concentration exceeds NR 140 Preventive Action Limit

TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	Sump 1										NR 140	NR 140
Date		07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/12/06	ES	PAL
VOCs													
Benzene	µg/L	NT	**610**	**590**	**1,800**	**880**	**389**	**208**	**273**	**113**	WA	5	0.5
Toluene	µg/L	NT	30	**260**	**640**	7	7.20	40.2	48.5	<2.00	WA	1,000	200
Ethylbenzene	µg/L	NT	**410**	**440**	**880**	**610**	**204**	68.2	113	28.4	WA	700	140
Xylenes	µg/L	NT	**1,520**	840	**3,320**	71	12.78	23.03	143.3	<2.75	WA	10,000	1,000
1,2,4-TMB	µg/L	NT	**1,100**	**590**	**1,600**	**740**	**126**	47.4	94	<2.00	WA	480	96
1,3,5-TMB	µg/L	NT	**350**	53	**200**	4.2	< 0.75	4.12	14.8	<0.75	WA	480	96
Total Trimethylbenzenes	µg/L	NT	**1,450**	**643**	**1,800**	**744.2**	**126**	51.52	**108.8**	<2.75	WA	480	96
MTBE	µg/L	NT	<1.6	**39**	**320**	**130**	**49.9**	**62.4**	**97.8**	**26.4**	WA	60	12
Methylene Chloride	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
1,2-Transdichloroethylene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	20
Tetracloroethylene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
Styrene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	10
Di-isopropyl ether	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Isopropylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Bromobenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
tert-Butylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Chloromethane	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	3.0	0.3
sec-Butylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
n-Butylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
PAHs													
Acenapthene	µg/L	NT	<9.4	<9.4	<9.4	<9.4	7.56	2.58	<0.1	<0.1	WA	NS	NS
Acenapthylene	µg/L	NT	<8.2	<8.2	<8.2	<8.2	< 0.15	< 0.15	<0.15	<0.15	WA	NS	NS
Anthracene	µg/L	NT	0.46	<0.42	0.64	0.54	< 0.09	< 0.09	0.206	0.349	WA	3,000	600
Benz(a)anthracene	µg/L	NT	<0.28	<0.28	0.32	<0.28	2.79	0.207	0.146	0.078	WA	NS	NS
Benzo(a)pyrene	µg/L	NT	<0.30	<0.30	**0.36**	<0.30	**3.25**	**0.207**	**0.321**	**0.123**	WA	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	<0.30	<0.30	<0.30	<0.30	**4.11**	**0.25**	**0.198**	**0.064**	WA	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	<0.18	<0.18	<0.18	<0.18	1.30	0.118	0.075	0.044	WA	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	<0.42	<0.42	<0.42	<0.42	3.20	0.202	0.2	0.139	WA	NS	NS
Chrysene	µg/L	NT	<0.32	<0.32	**0.39**	<0.32	**2.35**	**0.162**	**0.102**	**0.059**	WA	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	<0.40	<0.40	<0.40	<0.40	4.76	0.093	0.081	<0.06	WA	NS	NS
Fluoranthene	µg/L	NT	0.49	0.48	1.2	0.66	9.78	0.671	0.891	0.228	WA	400	80
Fluorene	µg/L	NT	1.5	1.6	2.3	2.9	8.18	< 0.11	0.368	<0.11	WA	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	<0.50	<0.50	0.75	<0.50	3.15	0.165	0.13	<0.06	WA	NS	NS
1-Methylnaphthalene	µg/L	NT	17	21	29	28	9.59	4.59	5.76	0.6	WA	NS	NS
2-Methylnaphthalene	µg/L	NT	38	48	56	<7.2	< 0.12	2.07	0.256	<0.12	WA	NS	NS
Naphthalene	µg/L	NT	**47**	**69**	**94**	**96**	6.37	2.43	1.56	<0.06	WA	100	10
Phenanthrene	µg/L	NT	2.4	3.3	4.5	3.5	7.40	0.323	0.153	<0.11	WA	NS	NS
Pyrene	µg/L	NT	0.36	<0.34	1.1	0.49	3.15	0.304	<0.1	0.17	WA	250	50
Gasoline Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Soluble Lead	µg/L	NT	NT	<2.8	<2.8	<0.92	< 1.00	**1.88**	**6.49**	**3.31**	WA	15	1.5

Key:
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- NT = Not tested
- µg/L = micrograms per liter
- **BOLD** = Concentration exceeds NR 140 Enforcement Standard
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TABLE 3
Groundwater Quality Results
Lincoln Water Distribution Center
3801 W. Lincoln Avenue
Milwaukee, Wisconsin
Project # 2211

	Units	Sump 2										NR 140	NR 140
Date		07/09/98	03/23/99	06/25/99	09/30/99	12/22/99	03/31/00	06/22/00	09/21/00	12/19/00	11/12/06	ES	PAL
VOCs													
Benzene	µg/L	NT	**330**	**2,200**	**360**	**350**	**127**	**180**	**88.4**	**107**	WA	5	0.5
Toluene	µg/L	NT	**810**	**4,500**	**610**	**850**	**453**	**300**	184	**209**	WA	1,000	200
Ethylbenzene	µg/L	NT	**150**	**180**	100	**140**	105	33.1	18.8	47.8	WA	700	140
Xylenes	µg/L	NT	960	**3,500**	650	920	577	249.3	162.9	302	WA	10,000	1,000
1,2,4-TMB	µg/L	NT	**220**	**490**	**180**	**240**	**143**	60.7	31.9	**116**	WA	480	96
1,3,5-TMB	µg/L	NT	**92**	**180**	87	78	51.6	31.1	26.9	**44**	WA	480	96
Total Trimethylbenzenes	µg/L	NT	**312**	**670**	**267**	**318**	**194.6**	91.8	58.8	**160**	WA	480	96
MTBE	µg/L	NT	**85**	**250**	**140**	**110**	< 15.0	< 3.00	<1.50	**29.7**	WA	60	12
Methylene Chloride	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
1,2-Transdichloroethylene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	20
Tetracloroethylene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	5	0.5
Styrene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	100	10
Di-isopropyl ether	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Isopropylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Bromobenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
tert-Butylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Chloromethane	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	3.0	0.3
sec-Butylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
n-Butylbenzene	µg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
PAHs													
Acenapthene	µg/L	NT	<28	<9.4	<9.4	NT	6.38	8.56	5.59	10.1	WA	NS	NS
Acenapthylene	µg/L	NT	<25	<8.2	<8.2	NT	< 0.15	< 0.15	<0.15	<0.15	WA	NS	NS
Anthracene	µg/L	NT	5.8	3.2	3.1	NT	2.43	4.48	1.76	7.36	WA	3,000	600
Benz(a)anthracene	µg/L	NT	2.9	1.6	0.72	NT	1.04	2.61	0.567	4.55	WA	NS	NS
Benzo(a)pyrene	µg/L	NT	**4.1**	**1.9**	**0.8**	NT	**1.40**	**3.01**	**0.731**	**4.98**	WA	0.2	0.02
Benzo(b)fluoranthene	µg/L	NT	**3**	**1.2**	**0.62**	NT	**1.33**	**3.19**	**0.589**	**5.41**	WA	0.2	0.02
Benzo(k)fluoranthene	µg/L	NT	1.6	0.66	0.26	NT	0.447	1.20	0.24	1.93	WA	NS	NS
Benzo(g,h,i)perylene	µg/L	NT	2	1.2	0.51	NT	0.981	2.46	0.475	4.09	WA	NS	NS
Chrysene	µg/L	NT	**3.2**	**1.6**	**0.66**	NT	**1.30**	**2.18**	**0.608**	**6.13**	WA	0.2	0.02
Dibenz(a,h)anthracene	µg/L	NT	3	1.3	<0.40	NT	1.45	1.67	0.241	4.25	WA	NS	NS
Fluoranthene	µg/L	NT	8.6	4.8	3.9	NT	4.86	9.19	3.77	15.4	WA	400	80
Fluorene	µg/L	NT	3.7	3.1	4	NT	4.15	5.20	3.24	7.77	WA	400	80
Indeno(1,2,3-cd)pyrene	µg/L	NT	6.2	3.4	1.4	NT	0.94	2.00	0.39	3.75	WA	NS	NS
1-Methylnaphthalene	µg/L	NT	<22	8.3	13	NT	10.2	11.4	8.12	16	WA	NS	NS
2-Methylnaphthalene	µg/L	NT	<22	16	22	NT	16.8	19.7	14.4	35.8	WA	NS	NS
Naphthalene	µg/L	NT	**31**	**22**	**36**	NT	**22.5**	**21.8**	**13.1**	**36.8**	WA	100	10
Phenanthrene	µg/L	NT	12	7.9	9	NT	9.46	13.8	6.59	23.7	WA	NS	NS
Pyrene	µg/L	NT	6.9	3.5	3	NT	1.20	2.56	0.476	4.26	WA	250	50
Gasoline Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Diesel Range Organics	mg/l	NT	NT	NT	NT	NT	NT	NT	NT	NT	WA	NS	NS
Soluble Lead	µg/L	NT	NT	NT	NT	NT	**5.39**	**5.80**	**11.30**	**13.10**	WA	15	1.5

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TABLE 2
Depth to Groundwater and Elevation Data
City of Milwaukee - Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin

Well ID	Date Measured	Top of Casing Elevation (ft)	Surface Elevation (ft)	Depth to Water from Top of Well Casing (ft)	Groundwater Elevation (ft)
MW-1	06/04/92	99.78	100.11	9.86	89.92
	08/17/92	98.85	99.2	10.14	88.71
	03/16/93	98.85	99.2	10.25	88.60
	05/02/93	98.85	99.2	8.61 [8.6]	FP
	09/07/93	98.86	99.2	9.97 [9.91]	FP
	04/03/98	648.36	648.7	9.97	638.39
	07/09/98	648.36	648.7	10.25	638.11
	03/23/99	648.36	648.7	10.80 [10.17]	FP
	06/25/99	648.36	648.7	10.29 [9.54]	FP
	09/30/99	648.36	648.7	10.69 [10.50]	FP
	12/21/99	648.36	648.7	FP	FP
	03/31/00	648.36	648.7	FP	FP
	06/22/00	648.36	648.7	9.87 [9.82]	FP
	09/21/00	648.36	648.7	9.86	638.50
	12/19/00	648.36	648.7	11.00	637.36
	05/03/01	648.36	648.7	10.23	638.13
	11/13/06	648.36	648.7	10.19	638.17
**MW-2	06/04/92	100.79	101.68	10.73	90.06
MW-3	06/04/92	99.58	100.95	10.87	88.71
	08/17/92	99.58	100.95	FP	FP
	03/16/93	99.58	100.95	12.11	87.47
	05/02/93	99.58	100.95	10.90 [8.87]	FP
	09/07/93	99.66	99.98	11.57 [10.33]	FP
	03/28/98	649.17	649.5	11.17 [10.15]	FP
	04/03/98	649.17	649.5	10.47 [10.22]	FP
	07/09/98	649.17	649.5	11.90 [11.2]	FP
MW-4	08/17/92	99.51	99.92	10.60	88.91
	03/16/93	Not Measured	Not Measured	Not Measured	Not Measured
	05/02/93	99.51	99.92	9.17	90.34
	09/07/93	99.52	99.88	10.47	89.05
	04/03/98	648.98	649.34	10.14	638.84
	07/09/98	648.98	649.34	10.72	638.26
	03/23/99	648.98	649.34	10.80	638.18
	06/25/99	648.98	649.34	10.18	638.80
	09/30/99	648.98	649.34	11.04	637.94
	12/21/99	648.98	649.34	11.95	637.03
	03/31/00	648.98	649.34	11.54	637.44
	06/22/00	648.98	649.34	10.30	638.68
	09/21/00	648.98	649.34	10.28	638.70
	12/19/00	648.98	649.34	11.53	637.45
MW-5	08/17/92	99.19	99.64	10.35	88.84
	03/16/93	99.19	99.64	10.48	88.71
	05/02/93	99.19	99.64	8.85	90.34
	09/07/93	99.2	99.62	10.09	89.10
	04/03/98	648.7	649.12	9.97	89.22
	07/09/98	648.7	649.12	10.49	88.71
	03/23/99	648.7	649.12	10.55	638.15
	06/25/99	648.7	649.12	9.96	638.74
	09/30/99	648.7	649.12	10.79	637.91
	12/21/99	648.7	649.12	11.70	637.00
	03/31/00	648.7	649.12	11.26	637.44
	06/22/00	648.7	649.12	10.10	638.60
	09/21/00	648.7	649.12	10.02	638.68
	12/19/00	648.7	649.12	11.27	637.43
	11/13/06	648.7	649.12	10.55	638.15
MW-6	08/17/92	100.17	100.45	10.93	89.24
	03/16/93	100.17	100.45	10.72	89.45
	05/02/93	100.17	100.45	9.39	90.78
	09/07/93	100.18	100.44	10.09	90.08
	04/03/98	649.6	649.86	10.04	639.56
	07/09/98	649.6	649.86	10.28	639.32
	03/23/99	649.6	649.86	11.37	638.23
	06/25/99	649.6	649.86	10.61	638.99
	09/30/99	649.6	649.86	11.62	637.98
	12/21/99	649.6	649.86	12.51	637.09
	03/31/00	649.6	649.86	12.10	637.50
	06/22/00	649.6	649.86	10.93	638.67
	09/21/00	649.6	649.86	10.78	638.82
	12/19/00	649.6	649.86	12.08	637.52

Notes:

[ ] Depth to product.

FP = Free Product

* Site Benchmark (100.00) for 1992 and 1993 measurements was the manhole cover (marked BM-1) near MW-1.

** MW-2 damaged during utility work - well abandoned after 6/4/92.

1998 elevations are surveyed to a USGS benchmark datum elevation of 650.47 feet mean sea level.

Benchmark is City Benchmark #58-23 located on north side of City Garage at 4000 West Lincoln Avenue.

TABLE 2
Depth to Groundwater and Elevation Data
City of Milwaukee - Lincoln Distribution Center
3801 West Lincoln Avenue
Milwaukee, Wisconsin

Well ID	Date Measured	Top of Casing Elevation (ft)	Surface Elevation (ft)	Depth to Water from Top of Well Casing (ft)	Groundwater Elevation (ft)
MW-7	08/17/92	100.72	101.11	12.38	88.34
	03/16/93	100.72	101.11	12.46	88.26
	05/02/93	100.72	101.11	10.68	90.04
	09/07/93	100.74	100.1	12.17	88.57
	04/03/98	650.17	650.43	11.85	638.32
	07/09/98	650.17	650.43	12.93	637.24
	03/23/99	650.17	650.43	12.41	637.76
	06/25/99	650.17	650.43	11.82	638.35
	09/30/99	650.17	650.43	12.65	637.52
	12/21/99	650.17	650.43	13.52	636.65
	03/31/00	650.17	650.43	13.08	637.09
	06/22/00	650.17	650.43	11.93	638.24
	09/21/00	650.17	650.43	11.90	638.27
	12/19/00	650.17	650.43	13.11	637.06
	11/13/06	650.17	650.43	12.14	638.03
MW-8	08/17/92	99.14	99.74	10.45	88.69
	03/16/93	99.14	99.74	10.59	88.55
	05/02/93	99.14	99.74	8.84	90.30
	09/07/93	99.14	99.74	10.27	88.87
	04/03/98	648.62	649.22	10.90	637.72
	07/09/98	648.62	649.22	10.54	638.08
	03/23/99	648.62	649.22	10.44	638.18
	06/25/99	648.62	649.22	9.87	638.75
	09/30/99	648.62	649.22	10.71	637.91
	12/21/99	648.62	649.22	11.59	637.03
	03/31/00	648.62	649.22	11.13	637.49
	06/22/00	648.62	649.22	10.00	638.62
	09/21/00	648.62	649.22	9.97	638.65
	12/19/00	648.62	649.62	11.15	637.47
	11/13/06	648.62	649.62	10.36	638.26
MW-9	04/03/98	649.49	649.74	10.01	639.48
	07/09/98	649.49	649.74	10.39	639.10
	03/23/99	649.49	649.74	11.20	638.29
	06/25/99	649.49	649.74	10.49	639.00
	09/30/99	649.49	649.74	11.44	638.05
	12/21/99	649.49	649.74	12.38	637.11
	03/31/00	649.49	649.74	11.97	637.52
	06/22/00	649.49	649.74	10.65	638.84
	09/21/00	649.49	649.74	10.63	638.86
	12/19/00	649.49	649.74	11.93	637.56
	11/13/06	649.49	649.74	11.31	638.18
MW-10	04/03/98	650.54	650.77	10.68	639.86
	07/09/98	650.54	650.77	11.33	639.21
	03/23/99	650.54	650.77	11.48	639.06
	06/25/99	650.54	650.77	10.72	639.82
	09/30/99	650.54	650.77	11.83	638.71
	12/21/99	650.54	650.77	12.70	637.84
	03/31/00	650.54	650.77	12.26	638.28
	06/22/00	650.54	650.77	10.92	639.62
	09/21/00	650.54	650.77	10.90	639.64
	12/19/00	650.54	650.77	12.22	638.32
	11/13/06	650.54	650.77	11.95	638.59
MW-11	04/03/98	649.21	649.45	12.55	636.66
	07/09/98	649.21	649.45	13.31	635.90
	03/23/99	649.21	649.45	13.21	636.00
	06/25/99	649.21	649.45	12.52	636.69
	09/30/99	649.21	649.45	13.31	635.90
	12/21/99	649.21	649.45	13.83	635.38
	03/31/00	649.21	649.45	13.55	635.66
	06/22/00	649.21	649.45	12.50	636.71
	09/21/00	649.21	649.45	12.47	636.74
	12/19/00	649.21	649.45	13.55	635.66
	11/13/06	649.21	649.45	12.80	636.41
MW-12	04/03/98	647.25	647.49	7.65	639.60
	07/09/98	647.25	647.49	8.65	638.60
	03/23/99	647.25	647.49	7.81	639.44
	06/25/99	647.25	647.49	7.92	639.33
	09/30/99	647.25	647.49	8.73	638.52
	12/21/99	647.25	647.49	10.24	637.01
	03/31/00	647.25	647.49	8.20	639.05
	06/22/00	647.25	647.49	7.89	639.36
	09/21/00	647.25	647.49	7.69	639.56
	12/19/00	647.25	647.49	7.55	639.70
	11/13/06	647.25	647.49	8.10	639.15

Notes:

[ ] Depth to product.

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Benchmark is City Benchmark #58-23 located on north side of City Garage at 4000 West Lincoln Avenue.