RTS CASE # 02-41-307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

8/2007

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Bureau for Remediation and Redevelopment

This form is intended to provide instructions and a list of information that must be submitted for evaluation for case closure, each time a request is made. 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 close out 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.].*

In order to expedite the closure process, provide a complete and accurate closure package according to the following instructions, each time a closure decision is requested:

- Submit the Case Summary and Close Out Form and the required attachments as a stand-alone, **unbound** package. Include all information requested per section, as appropriate to the site, in the order shown. Include all attachments per section, as appropriate. Do not attach previously submitted reports. Correctly reference any reports in the case summary, as applicable.

- Include fees with this package at the time it is submitted to the department in order for the application to be considered complete.

- Specify your selected closure option.

- Include all **GIS Registry information** (in Section I) as a stand-alone document (*do not refer to materials in other attachments*). Include copies of **all off-source property and ROW notifications**.

- Place a √ (attached) or NA (not applicable) in the blank next to each attachment, in each section.

- Include a draft of the deed document with the close out application, if a **deed restriction** or **deed notice** is required as a condition of closure of the selected remedy. Include a maintenance plan, if it is required in the deed instrument.

- **Maps for the GIS Registry may not be larger than 8.5 x 14 inches,** unless maps are submitted in electronic form in portable document format (pdf) readable by the Adobe Acrobat Reader. For electronic document submittal requirements, see http://www.dnr.wi.gov/org/aw/rr/archives/pubs/RR690.pdf.

- Prepare maps according to the applicable portions of ss. NR 716.15(2)(h)1 and 726.05(3)(a)4.d. Prepare visual aids, including maps, plans, drawings, cross sections, fence diagrams, tables and photographs according to s. NR 716.15(2)(h)1. – 4.

- **Use a bold font** on information of importance on tables, maps and figures. A **bold font (for ES exceedances)** and *italics (for PALs)* are preferred when differentiation is necessary. **Please do not use shading or highlights** on any of the analytical tables (per s. NR 726.05(3) and maps as the shading obscures the information that is scanned for inclusion in the GIS Registry.

- Put multiple tables submitted for contaminated media data (eg. pre- and post-remedial data) in chronological order. Include the level of detection for results which are below the detection level (i.e. do not just list as no detect (ND)). Summaries of all data should include information collected by previous consultants. Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15(2)(g)3 in the format required in s. NR 716.15(2)(h)3.

- Document free product recovery estimates as required in s. NR 708.15, if applicable.

BRRTS CASE # 02–41–307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

Section A: Case History and Closure Pathway Selected

ATTACHMENTS:

See Letter — A brief site summary including results of all investigative activities, interim and remedial actions taken, a description of any residual soil and/or groundwater contamination and their locations, a description of any other media affected, and a description of how actual and potential impacts to receptors have been addressed.

√ — Site location map on USGS topographic base map.

√ — Site map including buildings, utilities, property lines of source property and impacted non-source properties, ground cover and supply wells. *These maps may be combined. A copy of the map(s) from Section I, #5 may be used.*

√ — Verification of the zoning for affected properties.

INFORMATION NEEDED:

1. Site Name: Hoffman's Valet Cleaners
   Street Address: 7215 West Center Street
   City/Zip Code: Wauwatosa/53213
2. BRRTS #: 02-41-307576
3. DNR FID #: 241083150 PECFA Claim#:
4. Responsible Party Name: Ralph Hoffman
   Mailing Address: 2010 West Woodbury Lane City/Zip Code: Glendale/53209
   Phone number: 414-351-6110 Contact Person: Ralph Hoffman
5. Date of Incident/Discovery: May 30, 2002 Contaminant Type(s): CVOCs
6. Quantity Released: Unknown
7. Land Use:
   Current : ____ Residential √ Commercial ____ Industrial ____ Other
   If other, specify:
   Planned Post Remediation : Residential √ Commercial ____ Industrial ____ Other
   If other, specify:
8. Is a zoning change required? ____Y √ N
   If so, has it been completed for post remedial land use? ____Y ____N
9. 0.5 Acres ready for use (The total area in acres of all adjacent tax parcels owned by the same entity on the site where the contamination originated, rounding fractions to nearest .5 acre and noting >100 acres for acreages above 100 acres. For multiple discharges that are cleaned up concurrently, count the acres once.)
10. Geographic Coordinates (meters/ WTM83/91) E 682647 N 290285
11. Method Used to Obtain Geographic Coordinates:
    ____ On-site using GPS equipment, converted or projected into WTM83/91 coordinates
    √ Used RR GIS Registry web site to get WTM83/91 coordinates
    ____ Other (specify): _____
12. *Groundwater Contamination Remaining (>ES):
    On Source Property ___Y √ N
    Off Source Property ___Y √ N
13. *Residual Soil Contamination > Generic or Site-Specific RCL:
    On Source Property √ Y ___ N
    Off Source Property ___Y √ N
14. Contamination in Right of Way: ___Y √ N
15. Closure Pathway Selected: check all that apply

CLOSURE via NR 726	
Soil	Groundwater
___< s. NR 720.09/720.11 Generic RCLs	___< s. NR 140.10 Table 1 & Table 2 Values
√ s. NR 720.19(2) Soil Performance Standards	√ s. NR 140.28(2) PAL Exemption
___s. NR 720.19(4) Groundwater Pathway	___s. NR 726.05(2)(b), ≥ ES Natural Attenuation
___s. NR 720.19(5) Direct Contact	
___s. NR 720.19(6) Other Pathways	

CLOSURE via NR 746 and NR 726	
Petroleum Storage Tank **Soil** Options for Closure:	
___s. NR 746.07 Requirements Met-Post Investigation	
___s. NR 746.08 Requirements Met-Post Remed.	
Petroleum Storage Tank **GW** Options for Closure:	Petroleum Storage Tank **GW** Options for Closure:
Within Permeable Material:	Within Low Permeability Material:
___s. NR 746.07(3) ≥PAL <ES, Post Investigation	___s. NR 746.07(2), Post Investigation
___s. NR746.07(4) >ES, Post Investigation	___s. NR 746.08(2), Post Remediation
___s. NR 746.08(3)≥ PAL, <ES, Post Remediation	
___s. NR 746.08(4) >ES, Post Remediation	

Section B: Receptor Summary

ATTACHMENTS:
NA Notification(s) regarding contamination in ROW
NA Notification(s) to off-source property owners regarding sampling results

INFORMATION NEEDED:
1. Identify **all** pre-remedial actual receptors, the assessed risk and their locations (e.g., both on- and off-site utility corridors, basements or sumps of nearby buildings, direct contact threat from soil, water supplies, surface waters, sediments, vapors, etc.) *For definitions, refer to s. NR 700.03 (47), Wis. Adm. Code.*

   PCE soil concentrations beneath the building exceed USEPA SSL for ingestion, inhalation of volatile pathways, residential use. Limited groundwater PCE concentrations exceed PAL standards. VOC vapor analytical results indicated PCE and TCE vapor concentrations exceeded the target shallow soil gas to target indoor air screening levels. The adjacent buildings either have no basements or basements with no cracks or sumps that would be a conduit for vapor migration.

2. Have the remedial actions addressed the potential or actual impacts to these receptors?
   ___ Y
   √ N If no, please identify the nature of the remaining risk and the receptor at risk, if any:
   A sub-slab depressurization system will be installed in the building basement to reduce the potential for vapor intrusion into the building.

Section C: Soil Investigation Information

ATTACHMENTS:
√ Complete soil data summary table of field screening and laboratory analytical results, including all detects, regardless of ch. NR 720 standards, with dates, sample locations, depths and detection limits. Identify exceedances.
√ Map(s) of all pre-remedial soil sampling locations: depicting all soil sample locations relative to site facilities. Note in bold font those sample locations that exceed ch. NR 720 RCLs (including free product location) and delineate the extent of contamination.
√ Pre-remedial geologic cross-sections; including geology, source location(s), extent of soil and groundwater contamination, free product location/depth, soil sample locations, water table elevation, and bedrock elevation, if encountered.

INFORMATION NEEDED:
1. Extent Defined? √ Y ____N If not, explain why.
2. Soil Type(s): Silty Clay, Sand, Silt Sand

3. Depth of Contamination: Top: ground surface Bottom: 20 feet
4. Type of Bedrock: NA Depth to Bedrock: Not encountered
5. Is Any Contaminated Soil (Unsaturated or Saturated) in Contact With the Bedrock? ____Y √ N

Measurable Free Product? ____Y √ N Depth/Location:

Section D: Soil Remediation Information

ATTACHMENTS:

NA Map showing remediated area (for example, excavation limits or area influenced by SVE) and locations of post-remediation soil samples (if any). This map should show the locations and extent of residual soil contamination exceeding ch. NR 720 RCLs. These samples should be noted in bold font. *A copy of the map(s) from Section I, #10, may be used.*

√ Soil disposal documentation

NA NR 720.19 analysis, assumptions and calculations for site specific RCLs (SSRCLs), with justification

√ Calculations and results of EPA Soil Screening Level Model.

NA Post-remedial cross-section(s) with post remedial soil sampling results, if soil removal or treatment has occurred. Identify sample results and depths. *A copy of the cross-section(s) from Section I, #11, may be used or you may refer to the cross-section(s) in Section E, as appropriate.*
____see Section E

INFORMATION NEEDED:

1. Remedial Action Completed? √ Y ___N
2. Were immediate or interim actions conducted? ___Y √ N If yes, what action was taken?
3. Brief description of remedial action taken: Residual soil impacts will be managed in place with an engineered barrier.
4. Were soils excavated? ___Y √ N Quantity: NA Disposal Method: NA
5. Final Confirmation Sample Collection Methods: NA
6. Final Soil/Drill Cuttings Disposal Location: Badger Disposal facility, Milwaukee, Wisconsin.
7. Estimated volume and depth of in situ soils exceeding ch. NR 720 Table RCLs or Site Specific RCLs: Approximately 1650 cubic yards
8. Estimated volume and depth of in situ soils exceeding ch. NR 746 Table 1 or Table 2 or Site Specific RCLs (*underground petroleum tank systems, as defined in ch. NR 746 only*):
   NA
9. s. NR 720.19 Analysis? ___ Y √ N
   ___ Performance Standard -NR 720.19(2)
   ___SSRCL - NR 720.19(3) and (4),(5) or (6)
10. If the remedy includes a Soil Performance Standard, what type? ____not applicable
    √ Cap ____ Soil √ Building √ Natural Attenuation of Groundwater ____Other
    Specify other: _____
11. Will the maintenance of the SPS be consistent with the planned post remediation land use?
    √ Y_____N If No, please explain: _____
12. Is the EPA Soil Screening Level Model used as justification for closure of sites with residual contaminated soils?
    √ Y_____N Are the input numbers used: _____ Site Specific , or √ WI Defaults?

Section E: Groundwater Information

ATTACHMENTS:

√ Table identifying all contaminants, summarizing all pre- and post-remediation groundwater analytical results, with sample collection dates *(prepared in accordance with guidance document RR-628)*

√ Groundwater sample location map showing the site facilities and all monitoring wells, sumps, extraction wells, and potable and non-potable wells.

√ Isoconcentration map(s) when included as part of the site investigation or map(s) of the horizontal extent of contamination based on most recent data. *A copy of the map(s) from Section I, #7, may be used.*

WDNR BRRTS CASE # 02-41-307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

√ A map showing groundwater flow direction(s) and summarizing the maximum variation in flow direction. *Multiple maps may be used. A copy of the map(s) from Section I, #9, may be used.*

√ A table summarizing all groundwater elevations, with dates, and top and bottom elevations of well screens. (*Wells are to be referenced to national geodetic survey datum, as per NR 141.065(2)).*

NA Graphs and statistical analyses which demonstrate the dynamics of the groundwater plume, for sites requesting closure using natural attenuation that meet the criteria s. NR 726.05(2)(b) or of s. NR 746 (permeable soils). *Refer to WDNR publication RR-614 for guidance.*

NA Geologic cross-sections showing extent of residual soil and/or groundwater contamination, as applicable. *A copy of the cross-section(s) from Section I, #11 may be used.*

INFORMATION NEEDED:

1. Extent of Contamination Defined? √ Y _____N _____ N/A
2. Remedial Action Completed? √ Y _____N _____ N/A
   Brief Description of Remedial Action Taken: Natural attenuation of groundwater.
3. Depth(s) to Groundwater: approximately 13 to 15 feet Flow Direction(s): east/southeast
4. Field Analyses? _____Y √ N
   Lab Analyses? √ Y _____N
5. 5 # of Sample Rounds (4 rounds from monitoring wells and 1 from temporary wells)
   6 # of Sampling Points
   3 # NR 141 Monitoring Wells Sampled
   3 # Temporary GW Sampling Points Sampled
   0 # Recovery Sumps Sampled
   0 # Municipal Wells Sampled
   0 # Private Wells Sampled
6. Was DNR notified of substances in groundwater without standards? _____Y _____N √ N/A
   If yes, how many? What substances?
7. Preventive Action Limit currently exceeded? √ Y _____N If yes, identify location(s)
   Monitoring Wells MW-1 and MW-2
8. Enforcement Standard currently exceeded? ____ Y √ N If yes, identify location(s)
9. Measurable free product detected? ____ Y √ N Pre-remediation
   ____ Y √ N Post-remediation
10. Was free product remediated? ____ Y ____ N √ N/A
    Method:
11. Potable wells within 1200 feet of site? ____ Y √ N
12. Have they been sampled? ____ Y ____ N √ N/A Type (i.e. municipal, private, etc.)?
    [NOTE: Include wells on *groundwater well location map*]
13. Has DNR been provided with **all** results of private well sampling? ____ Y ____ N √ N/A
14. Have well owners/occupants been notified of results? (*Sec. B Attachments*) ____ Y ____ N √ N/A
    (*Results also need to be sent to the DNR Water Supply Specialist)*

Section F. Other Contaminated Media Information:

ATTACHMENTS:

√ Table of analytical results for all contaminants for media other than soil or groundwater

INFORMATION NEEDED:

1. Have other media been impacted (either on-site or off-site e.g. sediment, utilities, air)? √ Y _____N
   Briefly describe type and extent of **all** contamination found in media other than soil or groundwater:
   Basement sump and sub-slab soil vapor probe were sampled, VOC vapor analytical results indicated PCE and TCE vapor concentrations exceeded the target shallow soil gas to target indoor air screening levels.
2. Remedial action completed? _____Y √ N ____N/A
   Brief description of remedial action taken: Following approval of closure, a sub-slab depressurization system will be installed in the building basement to reduce the potential for vapor intrusion into the building.
3. # of Post Remedial Sample Rounds: N/A
   # of Sampling Points: N/A
   Field Analyses? _____Y _____N

WDNR BRRTS CASE # 02–41–307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

Lab Analyses? _____Y _____N

Section G. Associated Site Closure Information:

ATTACHMENTS:

NA	Construction documentation or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), in accordance with s. NR 724.15.
√	Maps and photos documenting the cap area, and/or integrity of the cap, with date.
√	Description of any soil performance standard cover system used, including a description of how it meets the requirement to be protective until residual contaminant concentrations no longer pose a threat to public health, safety, welfare or the environment, per s. NR 720.19(2), s. NR 722.09(2) and (3).
√	Maintenance plan for performance standard remedy. (per ss. NR 720.19(2) and 724.13(2))

INFORMATION NEEDED:

1. Enforcement actions closed out? ____Y _____N √ N/A
2. Permits closed out? ____Y _____N √ N/A
3. Describe how the following pathways are protected:
   a) Direct Contact Pathway: Industrial direct contact exceedances will be managed with soil performance standard cover system and maintenance agreement.
   b) Groundwater: Groundwater impacts are limited and defined. Exemption for PAL exceedances at MW-1 and MW-2.

H. Proposed Institutional Controls: *(See Pub. RR-606)*

ATTACHMENTS:

√ RR GIS Registry of Closed Remediation Sites
- _____ Soil
- _____ Groundwater
- √ Both

_____ Draft deed document (*Contact your DNR project manager for a template or guidance.)*
Type:
- _____ Deed Restriction
- _____ Deed Notice
- _____ Maintenance Agreement
- _____ Other: _____

WDNR BRRTS CASE # 02-41-307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

I. Required GIS Registry Information: Provide the following information, as a separate, stand-alone attachment, in the order specified.

√ 1. **Copy(s) of most recent deed**, including legal description(s), for all affected properties within or partially within the contaminated site boundary. *(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.)*

√ 2. **A copy of certified survey map(s),** as required by s. NR 716.15(2)(j)2., 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).

√ 3. **The parcel identification number** (if county uses them) for each property within the contaminated site boundaries. Include the address of each property within the contaminated site boundary (regardless of whether parcel id # exists). **Geographic position** data for each property (meters in WTM83/91 projection) in compliance with the requirements of s. NR 716.15 (2)(k), unless this information was previously submitted to the agency with administrative authority for the site as part of the site investigation report, or unless the agency with administrative authority has directed that the responsible party does not need to provide geographic position data for a specific site.

√ 4. **A site location map** which outlines all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit the easy location of all parcels. If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200 feet of the site. (If only one property, combine with map required in next item #5.)

√ 5. **A map of contaminated properties within the site boundary** showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. This map shall also 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 ch. NR 140 enforcement standards, and/or in relation to the boundaries of soil contamination exceeding generic or site-specific residual contaminant levels as determined under s. NR 720.09, 720.11 and 720.19.

√ 6. **A table of the most recent analytical results**, with sample collection dates from all monitoring wells, and any potable wells for which samples have been collected for groundwater, and/or showing results for all contaminants found in pre-remedial sampling and in the most recent soil sampling event, for soils (without shading or crosshatching). Note occurrence of free product.

√ 7. **A groundwater isoconcentration map**, if required as part of the site investigation (SI), of the contaminated properties within the site boundaries. The map must include the areal extent of groundwater contamination exceeding PALS and the areal extent of groundwater contamination exceeding ESs, groundwater flow direction(s) based on the most recent data, and sample collection dates. **If an isoconcentration map was not required** as part of the SI, substitute a map showing the horizontal extent of contamination, based on the most recent data. Note free product location(s).

√ 8. **A table of the previous 4 water level elevation measurements from all monitoring wells**, at a minimum, with the date measurements were made, is to be included. If present, note free product elevation and thickness on the table.

√ 9. **A groundwater flow direction map** representative of groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, 2 groundwater flow maps showing the maximum variation in flow direction are to be submitted. *Prepare maps according to the applicable portions of ss. NR 716.15(2)(g)5-8 and 716.15(2)(h)1-2.*

√ 10. For sites closing with residual soil contamination, **include a map showing the location of all soil samples** and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds generic or site specific residual contaminant levels.

√ 11. **A geologic cross section**, if required as part of the SI, showing vertical extent and location of residual soil contamination exceeding generic or site specific RCLs and residual groundwater contamination, source extent and location, isoconcentrations for all groundwater contaminants that exceed PALs that remain when closure is requested; water table and piezometric elevations, and the location and elevation of geologic units, bedrock, and confining units, if any.

√ 12. **A statement signed by the responsible party,** which states that he or she believes that the legal description has been attached for each property that is within, or partially within, the contaminated site boundary. *(The*

WDNR BRRTS CASE # 02-41-307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

purpose of this requirement is that a legal description for each of the contaminated properties has been submitted. The RP is not required to attest to the accuracy of the attached legal descriptions.)

NA 13. **A copy of the letters sent by the RP to all owners of properties with groundwater exceeding ESs** as required by s. NR 726.05(3)(a)4.g. Letters sent to off-source properties must contain standard provisions in Appendix A of ch. NR 726. *(Off source properties are listed separately on the GIS Registry with a link to the source property.)* If the source property is owned by someone other than the person who is applying for case closure, a copy of the letter notifying the current owner of the source property that case closure has been requested should also be included.

NA 14. **A copy of all written notifications** provided to the city/village/municipal/state agency or other entity responsible for maintenance of a public street or highway or railroad right-of-way, within or partially within the boundaries of the contaminated site, for contamination exceeding groundwater ESs and/or soil exceeding generic or site specific RCLs.

NA 15. **A list of addresses for all off-source properties** affected by residual soil or groundwater contamination exceeding applicable standards.

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for case closure is based upon all available data as of 8/01/07 (date). I have read the Case Summary and Close Out Form instructions and all required information has been included.

Form Completed By: _____ 8/1/07
(Signature) (Date)

Previously submitted **$750.00 Closeout Review Fee Attached**
Previously submitted **$250.00 GIS Registry Maintenance Fee Attached (GW)**
Previously submitted **$200.00 GIS Registry Maintenance Fee Attached (Soil)**

Printed Name: Brian Maillet

Company Name: ARCADIS G&M, Inc.

Email address: bmaillet@arcadis-us.com

If not site owner, relationship to site owner: consultant

Address: 126 North Jefferson Street, Suite 400 City/Zip Code: Milwaukee, WI 53202

Telephone Number: (414) 276-7742 FAX Number: (414) 276-7603

Environmental Consultant (if different than above):_____

Address:_____ City/Zip Code _____

Telephone Number: (_____)_____ FAX Number: (___)_____

WDNR BRRTS CASE # 02-41-307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

FOR DEPARTMENT USE ONLY

PROJECT MANAGER: _____ Date Reviewed: _____

( ) Approved ( ) Denied ( ) Sent to Committee

CLOSURE COMMITTEE DECISION ON CLOSURE:

FIRST COMMITTEE REVIEW DATE: _____ ( ) Approved ( ) Denied

_____	_____	_____	_____
(Signature)	(Signature)	(Signature)	(Signature)

COMMITTEE RECOMMENDATION:

_____ **Closure Approved With:**
- _____ No Restrictions
- _____ Listing on GIS Registry due to Groundwater impacts
- _____ Listing on GIS Registry due to Soil impacts
- _____ Zoning Verification
- _____ Deed Restriction
- _____ Deed Notice
- _____ Site Specific Close Out Letter
- _____ Well Abandonment Documentation
- _____ Soil Disposal Documentation
- _____ NR 140 Exemption For: _____
- _____ VPLE Insurance needed
- _____ Other Conditions/Comments: _____

_____

_____

_____

_____ **Closure Denied, Needs More:**
- _____ Investigation
- _____ Groundwater Monitoring
- _____ Soil Remediation
- _____ Groundwater Remediation
- _____ Documentation of Soil Landspreading or Biopile Destiny
- _____ Specific Comments: _____

_____

_____

_____

WDNR BRRTS CASE # 02-41-307576 WDNR SITE NAME : Hoffman's Valet Cleaners, Wauwatosa

FOR DEPARTMENT USE ONLY

PROJECT MANAGER: _____ Date Reviewed: _____

( ) Approved ( ) Denied ( ) Sent to Committee

CLOSURE COMMITTEE DECISION ON CLOSURE:

SECOND COMMITTEE REVIEW DATE: _____ **( ) Approved ( ) Denied**

_____	_____	_____	_____
(Signature)	(Signature)	(Signature)	(Signature)

COMMITTEE RECOMMENDATION:

_____ **Closure Approved With:**

- _____ No Restrictions
- _____ Listing on GIS Registry due to Groundwater impacts
- _____ Listing on GIS Registry due to Soil impacts
- _____ Zoning Verification
- _____ Deed Restriction
- _____ Deed Notice
- _____ Site Specific Close Out Letter
- _____ Well Abandonment Documentation
- _____ Soil Disposal Documentation
- _____ NR 140 Exemption For: _____
- _____ VPLE Insurance needed
- _____ Other Conditions/Comments: _____

_____

_____

_____

_____ **Closure Denied, Needs More:**

- _____ Investigation
- _____ Groundwater Monitoring
- _____ Soil Remediation
- _____ Groundwater Remediation
- _____ Documentation of Soil Landspreading or Biopile Destiny
- _____ Specific Comments: _____

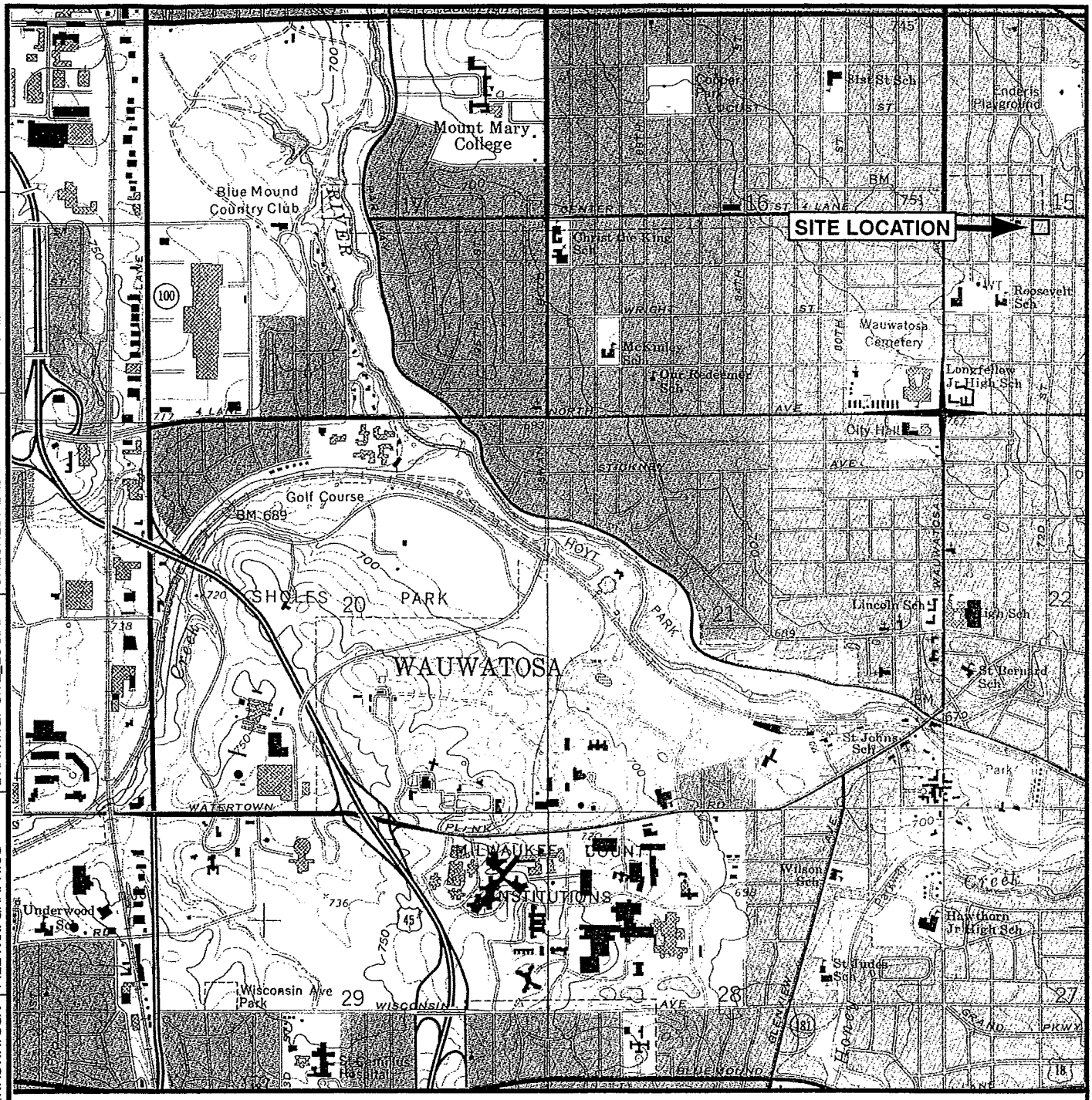
_____

_____

_____

Section A
Case History and Closure Pathway Selected

DRAFTER: LMB | APPROVED: | CHECKED: EAB | DRAWING: SITE_LOC.AI | FILE NO.: GRAPHICS | PN: HOFFMANWI0943\WAUWATOSA | DWG DATE: 11FEB05



SOURCE: USGS 7.5 Minute Topographic Map, WAUWATOSA, WISCONSIN Quadrangle, 1994

N

0 1000 2000 4000

SCALE IN FEET

WISCONSIN

ARCADIS

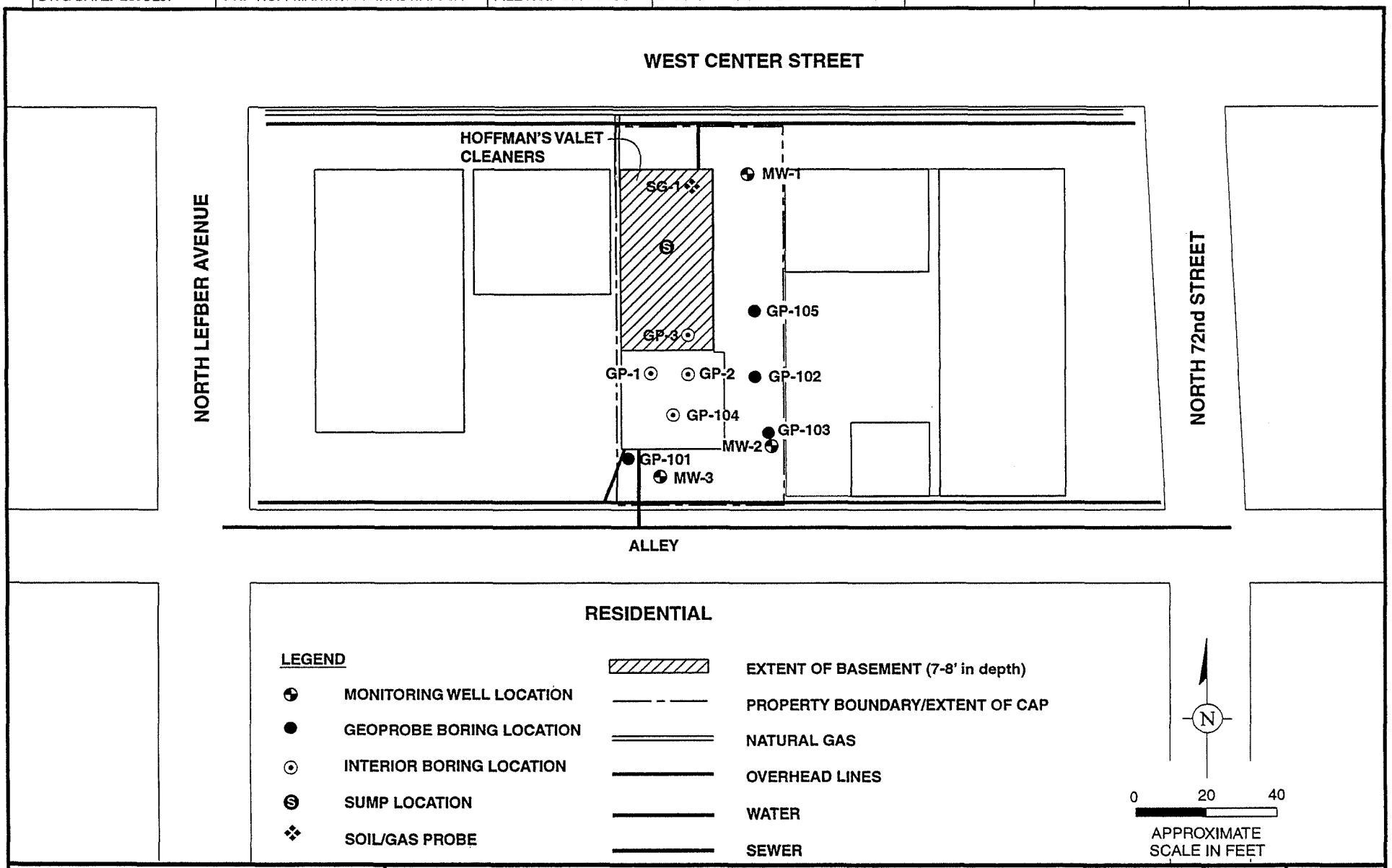
SITE LOCATION MAP

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE

1

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: SAMP LOC EXT CAP.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



ARCADIS

SAMPLE LOCATIONS WITH EXTENT OF CAP

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
1

SEARCH BY: Property Address
Search for one or more properties by address.

SEARCH BY: Parcel Number
Search for a single property by its Parcel Number.

SEARCH FOR: Recent Sales
Search for properties that have recently sold.

SEARCH WITHIN: All Parcels
Search the properties within a user-defined area by providing point of location and radius information.

PROPERTY INFORMATION

PARCEL NUMBER	331-0695-00
PROPERTY ADDRESS	7213 W CENTER ST
PROPERTY TYPE	COMMERCIAL

Bldng address is 7213-7215

ASSESSMENT INFORMATION

ASSESSED LAND VALUE	35,900	ESTIMATED FAIR MARKET VALUE	182,200
ASSESSED IMPROVEMENT VALUE	124,300	ASSESSMENT RATIO	87.91
TOTAL ASSESSED VALUE	160,200		

WHERE DO I VOTE?

ALDERMANIC DISTRICT	5	ALDERMANIC WARD	14
VOTING LOCATION	Roosevelt School 2534 N. 74th Street (74th & Wright)		

COMMERCIAL BUILDINGS

BUILDING 1: TYPE	RETAIL	YEAR BUILT	1952
BUILDING 2: TYPE	RETAIL	YEAR BUILT	1952

BACK TO TOP

LAND INFORMATION

LAND SQUARE FEET	5122	TOTAL ACRES	.12
EFFECTIVE FRONTAGE		EFFECTIVE DEPTH	

BACK TO TOP

ADDITIONAL PROPERTY INFORMATION

NEIGHBORHOOD	906	BUSINESS DISTRICT	NO
ZONING	AA BUSINESS	TIF DISTRICT	
PLANNING AREA	NORTH AVE EAST		
CENSUS BLOCK	606	FLOOD PLAIN	NO
CENSUS TRACT	910	CORNER LOT	NO
GPS NUMBER			
LEGAL DESCRIPTION	RITTER OAK RIDGE EXT LOT 3 BLK 15 SW 1/4 SEC 15		

BACK TO TOP

TAX INFORMATION

Section B
Receptor Summary

No notifications necessary.

Section C
Soil Investigation Information

ARCADIS

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID		SSL	SSL	GP-1	GP-2	GP-101		GP-102		GP-103	
Sample Depth (ft bls)	SSL	Vapor	Groundwater	6-8	4-6	7-11	11-15	4-8	12-16	8-12	12-16
Sample Date	Ingestion	Inhalation	Protection	02/07/02	02/07/02	09/12/02	09/12/02	09/12/02	09/12/02	09/12/02	09/12/02
VOCs											
cis-1,2-Dichloroethene	156,000	1,300,000	27	53	<10	<25	<25	<25	<25	<25	<25
Ethylbenzene	--	--	2,900	<10	<10	<25	<25	<25	<25	<25	<25
Fluorotrichloromethane	4,690,000	410,000	9,200	NA	NA	<25	<25	<25	<25	<25	<25
Methylene Chloride	8,520	2,700	0.98	21 Q	14 Q	<25	<25	<25	<25	<25	<25
Naphthalene	313,000	68,000	340	NA	NA	50 Q	<25	<25	<25	<25	<25
Tetrachloroethene	1,230	2,100	4.1	51	240	<25	<25	150	<25	400	<25
Xylenes, Total	--	--	4,100	<20	<20	<50	<50	<50	<50	<50	<50

Constituent concentrations are reported in micrograms per kilogram (µg/kg).

[ ]	Concentration exceeds the Soil Screening Level for the protection of groundwater.
Bold	Concentration exceeds the soil screening level for vapor inhalation and ingestion.
ft bls	Feet below land surface.
ID	Identification.
NA	Not analyzed.
SSL	Soil Screening Level.
Q	Analyte detected between the Limit of Detection and the Limit of Quantitation.
VOCs	Volatile organic compounds.

ARCADIS

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID		SSL	SSL	GP-104		GP-105		MW-1	MW-2	MW-3
Sample Depth (ft bls)	SSL	Vapor	Groundwater	4-6	8-9	8-12	12-16	10-12	10-12	10-12
Sample Date	Ingestion	Inhalation	Protection	09/12/02	09/12/02	09/12/02	09/12/02	01/19/05	01/19/05	01/19/05
VOCs										
cis-1,2-Dichloroethene	156,000	1,300,000	27	<25	<25	<25	<25	<29	<28	<31
Ethylbenzene	--	--	2,900	<25	<25	<25	<25	<29	<28	<31
Fluorotrichloromethane	4,690,000	410,000	9,200	61	<25	<25	<25	<29	<28	<31
Methylene Chloride	8,520	2,700	0.98	<25	<25	<25	<25	72	96	<62
Naphthalene	313,000	68,000	340	<25	<25	<25	<25	<29	<28	<31
Tetrachloroethene	1,230	2,100	4.1	41 Q	45 Q	130	<25	**2,800**	3,720	<31
Xylenes, Total	--	--	4,100	<50	<50	<50	<50	<58	<56	<62

Constituent concentrations are reported in micrograms per kilogram (µg/kg).

	Concentration exceeds the Soil Screening Level for the protection of groundwater.
Bold	Concentration exceeds the soil screening level for vapor inhalation and ingestion.
ft bls	Feet below land surface.
ID	Identification.
NA	Not analyzed.
SSL	Soil Screening Level.
Q	Analyte detected between the Limit of Detection and the Limit of Quantitation.
VOCs	Volatile organic compounds.

ARCADIS

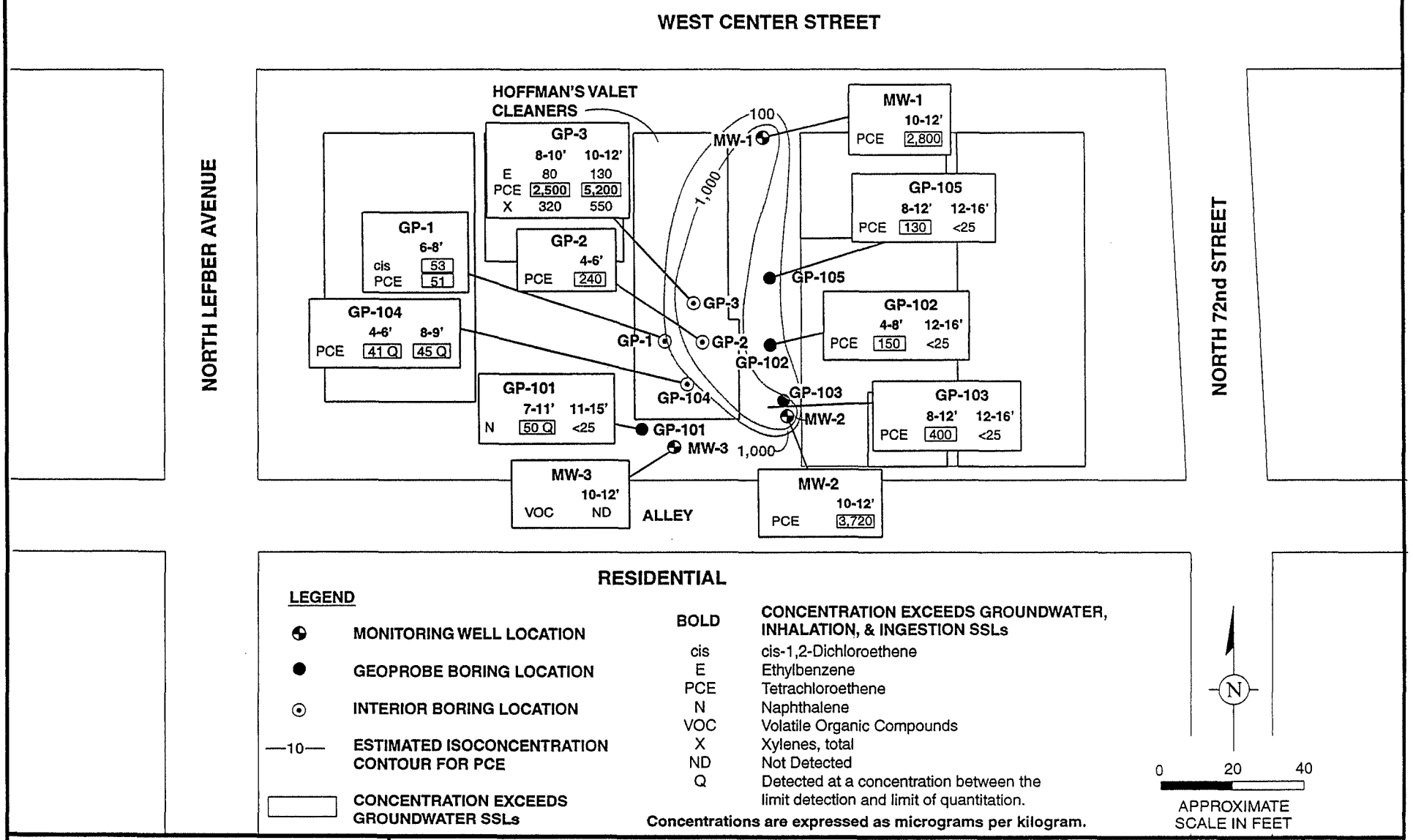
Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID		SSL	SSL	GP-3	
Sample Depth (ft bls)	SSL	Vapor	Groundwater	8-10	10-12
Sample Date	Ingestion	Inhalation	Protection	01/08/07	01/08/07
VOCs					
cis-1,2-Dichloroethene	156,000	1,300,000	27	<35	<54
Ethylbenzene	--	--	2,900	80	130
Fluorotrichloromethane	4,690,000	410,000	9,200	NA	NA
Methylene Chloride	8,520	2,700	0.98	<69	<110
Naphthalene	313,000	68,000	340	<69	<110
Tetrachloroethene	1,230	2,100	4.1	**2,500**	**5,200**
Xylenes, Total	--	--	4,100	320	550

Constituent concentrations are reported in micrograms per kilogram (µg/kg).

[ ]	Concentration exceeds the Soil Screening Level for the protection of groundwater.
Bold	Concentration exceeds the soil screening level for vapor inhalation and ingestion.
ft bls	Feet below land surface.
ID	Identification.
NA	Not analyzed.
SSL	Soil Screening Level.
Q	Analyte detected between the Limit of Detection and the Limit of Quantitation.
VOCs	Volatile organic compounds.

DWG DATE: 27JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: SOIL ANA RES.AI	CHECKED: EAB	APPROVED:	DRAFTER: LMB



RESIDENTIAL

LEGEND

- MONITORING WELL LOCATION
- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- —10— ESTIMATED ISOCONCENTRATION CONTOUR FOR PCE
- CONCENTRATION EXCEEDS GROUNDWATER SSLs

BOLD	CONCENTRATION EXCEEDS GROUNDWATER, INHALATION, & INGESTION SSLs
cis	cis-1,2-Dichloroethene
E	Ethylbenzene
PCE	Tetrachloroethene
N	Naphthalene
VOC	Volatile Organic Compounds
X	Xylenes, total
ND	Not Detected
Q	Detected at a concentration between the limit detection and limit of quantitation.

Concentrations are expressed as micrograms per kilogram.

N

0 20 40

APPROXIMATE SCALE IN FEET

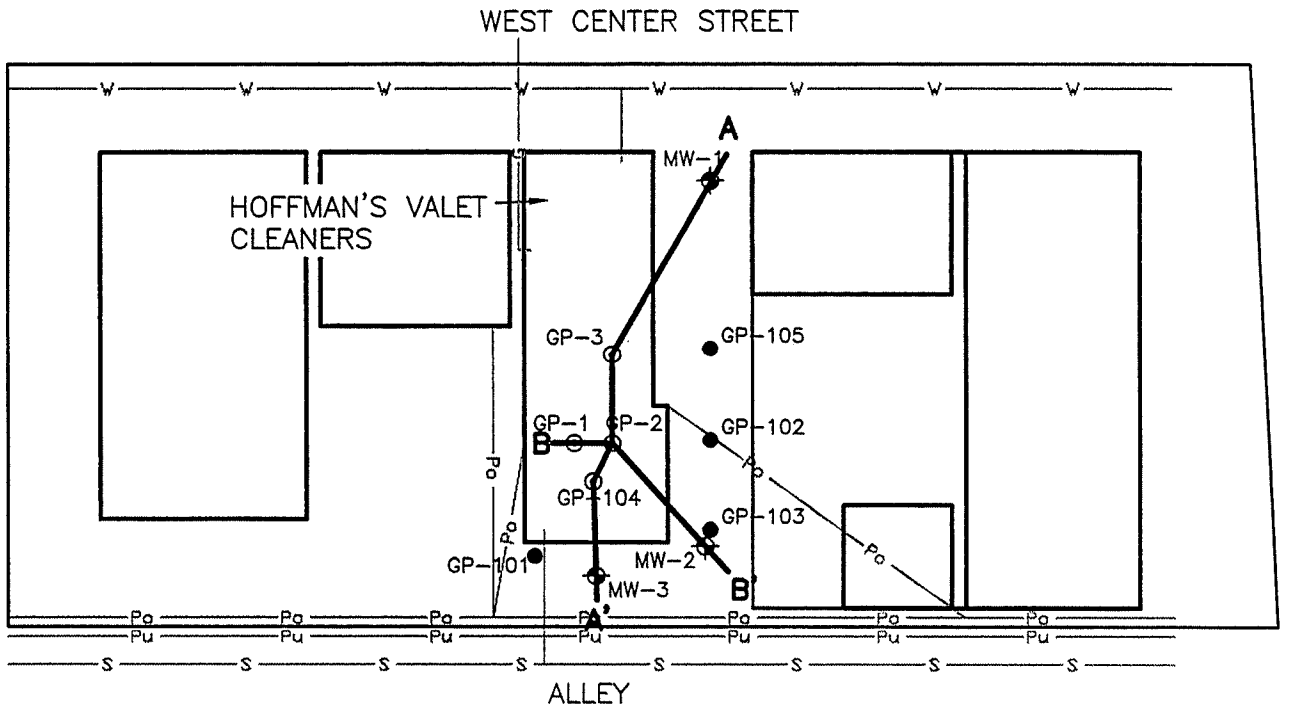
ARCADIS

SOIL ANALYTICAL RESULTS

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE

2



LEGEND

- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- MONITORING WELL LOCATION
- G — GAS UTILITY LINE
- Po — POWER OVERHEAD LINE
- Pu — POWER UNDERGROUND LINE
- S — STORM SEWER LINE
- W — WATER MAIN LINE
- A — A' GEOLOGIC CROSS-SECTION LOCATION

0 20 40
SCALE IN FEET

CROSS-SECTION LOCATIONS

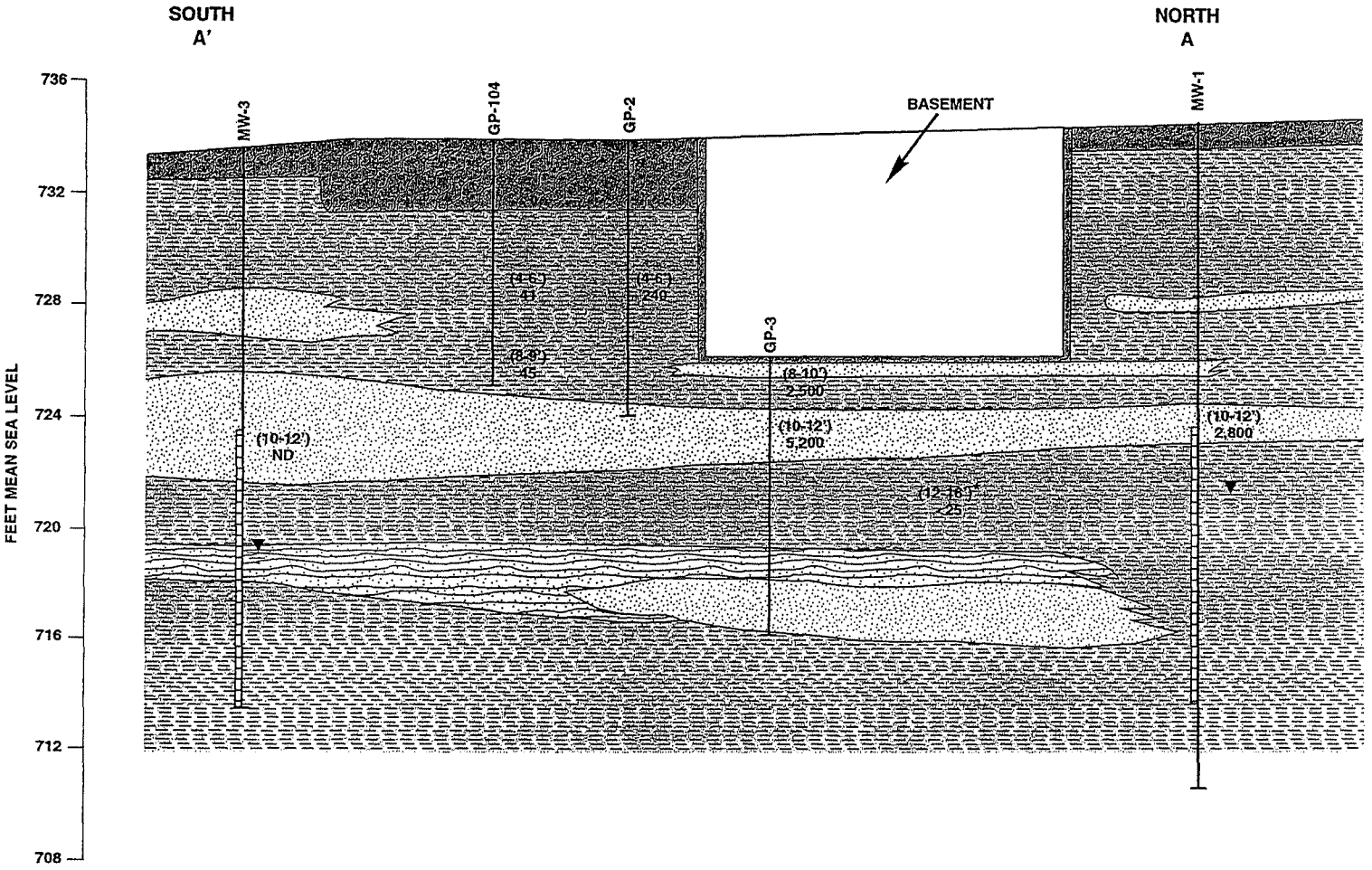
HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

Area Manager	M. MAIERLE
Project Director	E. BUC
Task Manager	B. MAILLET
Technical Review	A. MUMPY

ARCADIS
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

Project Number	WI000943.0002
Drawing Date	3/11/05
Figure	3

User Name : cmcbough
Acad Version : R17.0s (LMS Tech)
Current Plotstyle : ByColor
Data/Time : Fri, 27 Jul 2007 - 10:32am
Page Setup: 5100-ASI11
Plot Table: A-TEST-BLACKGRAY.ctb
Layout Tab: Layout2
Path\Name : G:\Vproject\Hoffman\WI000943\Wauwatosa\Cadd\site map2.dwg



EXPLANATION

- CLAY - with variable silt content, traces of sand.
- SAND - (predominantly fine) silty in places.
- FILL/CONCRETE
- SANDY SILT
- WELL/BORING LOCATION
- (10-12') 45 SOIL SAMPLE DEPTH WITH PCE CONCENTRATION (µg/kg)
- GROUNDWATER TABLE (7/3/07)
- * CLAY SAMPLE CONCENTRATIONS (from GP-102, GP-103, & GP-105)

0 8 16
APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 2x

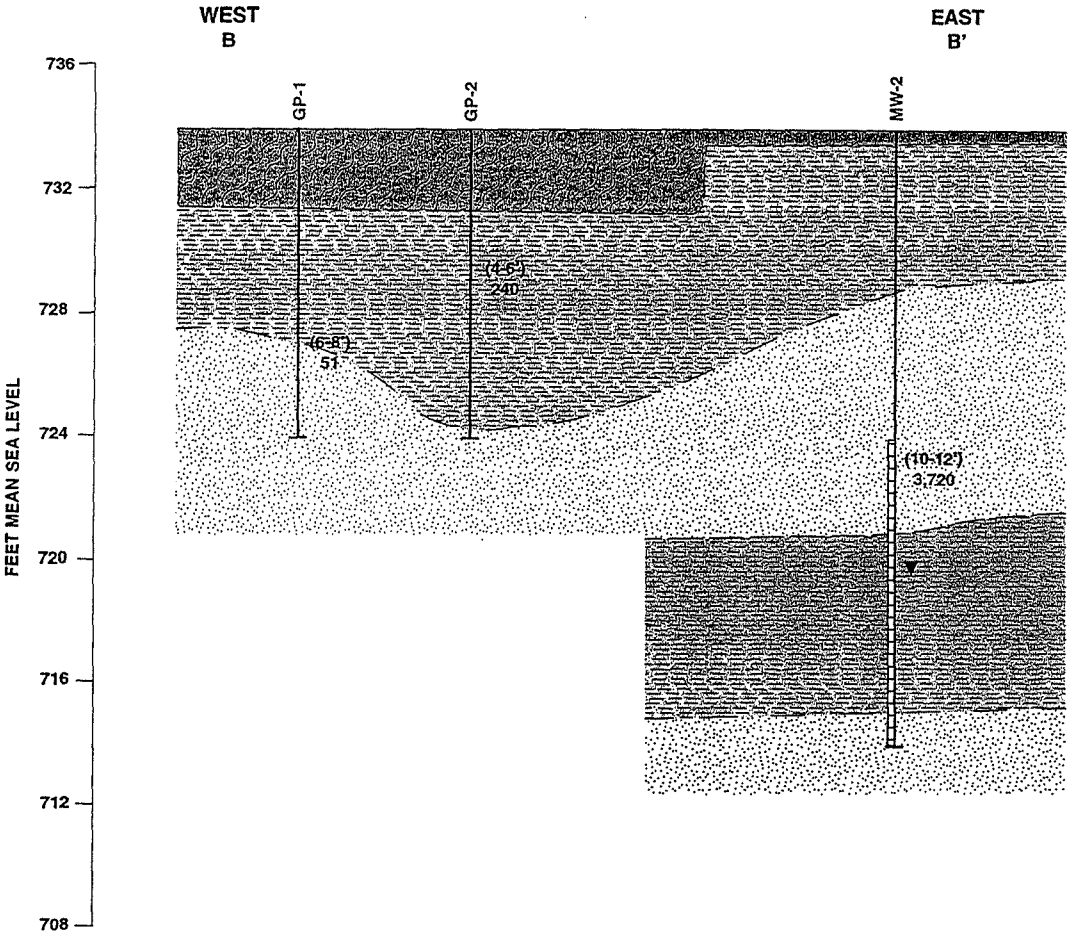
ARCADIS

NORTH/SOUTH GEOLOGIC CROSS-SECTION

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
4

DRAFTER: LMB | APPROVED: | CHECKED: BMJ | DRAWING: XSEC_A'A.AI | FILE NO.: GRAPHICS | PN: HOFFMANWI0943WAUWATOSA | DWG DATE: 27JUL07



EXPLANATION

- CLAY - with variable silt content, traces of sand.
- SAND - (predominantly fine) silty in places.
- FILL/CONCRETE
- WELL/BORING LOCATION
- (6-8') 51 SOIL SAMPLE DEPTH WITH PCE CONCENTRATION (µg/kg)
- GROUNDWATER TABLE (7/3/07)

0 4 8
APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 2x

ARCADIS

WEST/EAST GEOLOGIC CROSS-SECTION

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
5

DRAFTER: LMB | APPROVED: | CHECKED: BMJ | DRAWING: XSEC_BB.AI | FILE NO.: GRAPHICS | PN: HOFFMANW00943\WAUWATOSA | DWG DATE: 27JUL07

Section D
Soil Remediation Information

5611 W. HEMLOCK STREET
MILWAUKEE, WI 53223

WS Number: _____
Approval #: _____

Badger Disposal of WI., Inc.

(414) 760-9175 1-866-271-0961 WID988580056

A.Generator Name: Hoffman Valet Cleaners Customer #____
Address: 7215 west Center Street
City, State, Zip: Wauwatosa WI 53213 SIC Code: ____
Contact: Ralph Hoffman Title: owner
Telephone: 480-451-6110 Ext. ____ FAX #: N/A
EPA ID: N/A

Bill to: ARCADIS
Billing Address: 126 N. Jefferson Street, Suite 400
City, State, Zip: Milwaukee, WI 53202
Contact: Ed Buc Title: Senior Engineer
Phone Number: 414-276-7742 FAX #: 414-276-7603

This profile sheet was completed using: ☐ General Knowledge ☐ Analysis (attached) ☐ MSDS ☐ Both

B. WASTE DESCRIPTION AND GENERAL CHARACTERISTICS

Name of Waste: Soil cuttings
Process Generating Waste: monitoring well installation
Color: brown Odor: none ☒ None ☐ Mild ☐ Strong ☐ Single Layer ☐ Double Layer ☐ Multi-Layer
Free Phases: ____ ☐ Liquid 0 % ☐ Powder ____ % ☐ Solid 100 % ☐ Sludge ____ %

C. RCRA AND DOT INFORMATION

Is this a USEPA Hazardous Waste? ☐ Yes ☒ No Please list the USEPA Hazardous waste codes: ____
Is this a DOT Hazardous Material? ☐ Yes ☒ No Anticipated Annual Volume: 7 / Units: 55 gal drums
Proper Shipping Name: non-regulated waste
Hazardous Class #: ____ PG #: ____ UN/NA #: ____ Additional Description: ____
Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☒ Drum Container Type: metal Size: 55 gall

D. SPECIAL HANDLING INSTRUCTIONS

If Special handling techniques are required, specify: lift gate needed for pickup - no dock or forklift
Treatment: ____ Is a representative sample provided? ☐ Yes ☐ No

E. METALS (Indicate in parts per million [ppm] if this waste contains any of the following using): ☐ TCLP ☐ Generator Knowledge ☐ TOTAL

Metal	Less than	or Actual	Metal	Less than	or Actual	Metal	Less than	or Actual
Arsenic	☒<5 ☐<500		Mercury	☒<0.2 ☐<20		Nickel	☒<5 ☐<134	
Barium	☒<100		Selenium	☒<1 ☐<100		Thallium	☒<5 ☐<130	
Cadmium	☒<1 ☐<100		Silver	☒<5		Zinc	☒<5	
Chromium	☒<5		Chromium-Hex	☒<5 ☐<500				
Lead	☒<5 ☐<500		Copper	☒<5				

F. PHYSICAL/CHEMICAL PROPERTIES

Specific Gravity:	☐<0.8	☐0.8-1.0	☐1.0-1.2	☒1.2-1.4	☐1.4-1.7	☐>1.7	Actual: ____
Total Suspended Solids:	☐0.5	☐0.5-2.0	☐2.0-5.0	☐5.0-20	☐>20		Actual: ____
pH:	☐<2	☐2-6	☒6-8	☐8-10	☐10-12.5	☐>12.5	Actual: ____
BTU's:	☒<1	☐1-4	☐4-8	☐8-12	☐12-16		Actual: ____
Flash Point Degree F:	☐<73°F	☐73-140°F	☐>140-200°F	☒>200°F			Actual: ____
Sulfur (WT):	☒<0.5	%☐0.5-2.0	☐2-5	☐>5.0			Actual: ____

G. HAZARDOUS CHARACTERISTICS AND OTHER COMPONENTS

Reactivity: ☒None ☐Explosive ☐Pyrophoric ☐Shock Sensitive ☐Water Reactive ☐Etiological ☐Radioactive ☐Acutely Hazardous Waste
Viscosity: ☐Low ☐Medium ☐High Are TC Codes present? ☐Yes ☒No (If yes, please list in USEPA Waste Code Section).
Halogens: ☒<1 % Chlorine ☐____ % Fluorine ☐____ % Bromine ☐____ % Iodine
Cyanides (ppm) ____ PCB's (ppm) ____ Pesticides: (ppm)____ Sulfides: (ppm): ____ Phenolics: (ppm)____

H. CHEMICAL COMPOSITION (MUST TOTAL 100%)

Soil	>99	%		%		%	
Tetrachloroethene	<1	%		%		%	
		%		%		%	
		%		%		%	
		%		%		%	
		%		%		%	
		%		%		%	
		%		%		%	

I hereby certify that all information submitted in this and all attached documents is complete and accurate, and that all known or suspected hazards have been disclosed. The Generator further recognizes that for reasons of efficiency and speed in processing it is desirable to name Badger Disposal of WI., Inc. as Generator's agent for disposal of waste. Accordingly Generator specifically authorizes office and/or employees of Badger Disposal of WI., Inc. to sign forms and/or contract in respect to waste disposal utilizing only information and matters that appear on the Badger Disposal "master sheet" above. In this respect, Badger Disposal of WI., Inc. is to in no manner change or alter the data on the above master sheet. The Generator specifically acknowledges that it has carefully reviewed the above master sheet data and information. With the above limitations, Generator further consents and directs that the officer and/or employee of Badger Disposal sign the name of the undersigned agent of Generator to any and all such forms and/or contracts respecting processing and disposal of Generator's waste.

SIGNATURE OF GENERATOR'S OFFICER AND/OR AGENT TITLE DATE

BADGER DISPOSAL
Badger Disposal of WI, Inc.

To: Ed Buc
Arcadis, G & M Inc.
126 N. Jefferson St., Suite 400
Milwaukee, WI 53202

FAX: 414-276-7603

Date: March 31, 2005
Technical Representative:
Henry J. Krier
Telephone Number:
414-760-9175/866-271-0961

PRICE PROPOSAL

WS DESCRIPTION	DISPOSAL PRICE
Non-Haz. Soil Drums – Wauwatosa	$75.00/55 gal. drum
Transportation	$15.00/drum
Stop Fee	$35.00

Stated prices for all services are firm for thirty (30) days from the date of this quotation. Invoices are issued on waste pick-up dates and are payable 15 days after received. Customer is responsible for all costs of collection, including reasonable attorney fees. Any deviation of waste from the stated constituents on the Waste Profile Sheet can result in rejection of the load or off-spec charges.

We appreciate the opportunity to be of service. If you should have any questions, please contact me.

Please indicate acceptance of this quotation by signing in the space provided below, including a purchase order number, and mailing or faxing a copy to the above address/number.

Quotation by: _____ **Accepted by:** _____ **Date:**
Henry J. Krier

5611 W. Hemlock St. Milwaukee, WI 53223
866-271-0961 • 414-760-9175 • Fax: 414-760-9189 • www.badgerdisposal.com

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. WI000943.0002

WAUWAUTOSA,WI

Lot #: A5B170265

Ed Buc

ARCADIS Geraghty & Miller, Inc
126 North Jefferson Street
Suite 400
Milwaukee, WI 53202

SEVERN TRENT LABORATORIES, INC.

Denise Pohl
Project Manager

March 2, 2005

CASE NARRATIVE

A5B170265

The following report contains the analytical results for one solid sample submitted to STL North Canton by ARCADIS Geraghty & Miller, Inc from the Wauwautosa, WI Site, project number WI000943.0002. The sample was received February 17, 2005, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The sample presented in this report was analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Brian Maillet and Ed Buc on March 01, 2005. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Denise Pohl, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 6.0°C.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

Y:\Barb\STL headers\Qc846-Narrative_060204.doc, Revised06/02/04 DJL

EXECUTIVE SUMMARY - Detection Highlights

A5B170265

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DRUMS 02/09/05 13:50 001				
Chloroform	0.0021	0.025	mg/L	SW846 8260B
	Qualifiers: J,B			

ANALYTICAL METHODS SUMMARY

A5B170265

PARAMETER	ANALYTICAL METHOD
Volatile Organics by GC/MS	SW846 8260B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A5B170265

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G4MCP	001	DRUMS	02/09/05	13:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: DRUMS

TCLP GC/MS Volatiles

Lot-Sample #...:	A5B170265-001	Work Order #...:	G4MCP1AA	Matrix.....:	SO
Date Sampled...:	02/09/05 13:50	Date Received..:	02/17/05		
Leach Date.....:	02/23/05	Prep Date.....:	02/25/05	Analysis Date..:	02/25/05
Leach Batch #..:	P505410	Prep Batch #...:	5056388		
Dilution Factor:	1				
% Moisture.....:		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	0.025	mg/L
Carbon tetrachloride	ND	0.025	mg/L
Chlorobenzene	ND	0.025	mg/L
Chloroform	**0.0021 J,B**	**0.025**	**mg/L**
1,2-Dichloroethane	ND	0.025	mg/L
1,1-Dichloroethylene	ND	0.070	mg/L
Methyl ethyl ketone	ND	0.050	mg/L
Tetrachloroethylene	ND	0.070	mg/L
Trichloroethylene	ND	0.050	mg/L
Vinyl chloride	ND	0.025	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(86 - 125)
1,2-Dichloroethane-d4	88	(80 - 122)
Toluene-d8	103	(90 - 122)
4-Bromofluorobenzene	96	(84 - 125)

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TCLP GC/MS Volatiles

Client Lot #...: A5B170265 Work Order #...: G46E21AD Matrix.....: SOLID
MB Lot-Sample #: A5B250000-388
Leach Date.....: 02/23/05 Prep Date.....: 02/25/05 Analysis Date..: 02/25/05
Leach Batch #..: P505410 Prep Batch #...: 5056388
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.025	mg/L	SW846 8260B
Carbon tetrachloride	ND	0.025	mg/L	SW846 8260B
Chlorobenzene	ND	0.025	mg/L	SW846 8260B
Chloroform	**0.0034 J**	**0.025**	**mg/L**	**SW846 8260B**
1,2-Dichloroethane	ND	0.025	mg/L	SW846 8260B
1,1-Dichloroethylene	ND	0.070	mg/L	SW846 8260B
Methyl ethyl ketone	**0.0051 J**	**0.050**	**mg/L**	**SW846 8260B**
Tetrachloroethylene	ND	0.070	mg/L	SW846 8260B
Trichloroethylene	ND	0.050	mg/L	SW846 8260B
Vinyl chloride	ND	0.025	mg/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(86 - 125)
1,2-Dichloroethane-d4	86	(80 - 122)
Toluene-d8	101	(90 - 122)
4-Bromofluorobenzene	97	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A5B170265 Work Order #...: G46E21AA-LCS Matrix.....: SOLID
LCS Lot-Sample#: A5B250000-388 G46E21AC-LCSD
Prep Date.....: 02/25/05 Analysis Date..: 02/25/05
Prep Batch #...: 5056388
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**97**	**(76 - 118)**			**SW846 8260B**
	99	**(76 - 118)**	**1.5**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**100**	**(76 - 113)**			**SW846 8260B**
	100	**(76 - 113)**	**0.38**	**(0-30)**	**SW846 8260B**
1,1-Dichloroethylene	**112**	**(67 - 128)**			**SW846 8260B**
	105	**(67 - 128)**	**6.3**	**(0-30)**	**SW846 8260B**
Trichloroethylene	**98**	**(76 - 119)**			**SW846 8260B**
	95	**(76 - 119)**	**2.8**	**(0-20)**	**SW846 8260B**
Toluene	**96**	**(72 - 117)**			**SW846 8260B**
	96	**(72 - 117)**	**0.28**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(86 - 124)
	98	(86 - 124)
1,2-Dichloroethane-d4	86	(80 - 122)
	89	(80 - 122)
Toluene-d8	100	(90 - 122)
	103	(90 - 122)
4-Bromofluorobenzene	105	(84 - 125)
	104	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP GC/MS Volatiles

Client Lot #...:	A5B170265	**Work Order #...:**	G40V21AP-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	A5B230191-007		G40V21AQ-MSD		
Date Sampled...:	02/11/05 10:25	**Date Received..:**	02/23/05		
Leach Date.....:	02/23/05	**Prep Date.....:**	02/25/05	**Analysis Date..:**	02/25/05
Leach Batch #..:	P505410	**Prep Batch #...:**	5056388		
Dilution Factor:	1				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**97**	**(76 - 117)**			**SW846 8260B**
	96	**(76 - 117)**	**0.21**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**90**	**(72 - 114)**			**SW846 8260B**
	95	**(72 - 114)**	**5.5**	**(0-30)**	**SW846 8260B**
1,1-Dichloroethylene	**101**	**(67 - 129)**			**SW846 8260B**
	99	**(67 - 129)**	**1.6**	**(0-30)**	**SW846 8260B**
Trichloroethylene	**90**	**(72 - 121)**			**SW846 8260B**
	91	**(72 - 121)**	**0.89**	**(0-30)**	**SW846 8260B**
Toluene	**89**	**(67 - 113)**			**SW846 8260B**
	91	**(67 - 113)**	**2.3**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(86 - 125)
	98	(86 - 125)
1,2-Dichloroethane-d4	90	(80 - 122)
	89	(80 - 122)
Toluene-d8	103	(90 - 122)
	100	(90 - 122)
4-Bromofluorobenzene	104	(84 - 125)
	101	(84 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

ARCADIS

Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Number/Name WI000943.0002/Hoffman

Project Location Wauwatosa, WI

Laboratory STL

Project Manager Ed Buc

Sampler(s)/Affiliation Brian Meillet/ARCADIS

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	ANALYSIS / METHOD / SIZE: VOC TCLP - Glass Jar						Remarks	Total
DRUMS	S	2/4/05 1350		1							1

Sample Matrix: L = Liquid; S = Solid; ~~A = Air~~

Total No. of Bottles/ Containers: 1

Relinquished by: [signature]	Organization: ARCADIS	Date 2/6/05	Time 1511	Seal Intact?		
Received by: [signature]	Organization: STL NC	Date 2/7/05	Time 9:40	(Yes)	No	N/A
Relinquished by: _____	Organization: _____	Date / /	Time _____	Seal Intact?		
Received by: _____	Organization: _____	Date / /	Time _____	Yes	No	N/A

Special Instructions/Remarks: _____

Delivery Method: ☐ In Person ☒ Common Carrier FedEx (SPECIFY) ☐ Lab Courier ☐ Other _____ (SPECIFY)

AG 05-1201

STL North Canton

14

STL Cooler Receipt Form/Narrative **Lot Number:** ASB170265
North Canton Facility

Client: Arcadis Project: Way Wauwatosa, WI Quote#: 60311
Cooler Received on: 2-17-05 Opened on: 2-17-05 by: (Signature)

Fedx ☑ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☑ Other: ____
STL Cooler No# ____ Foam Box ☐ Client Cooler ☑ Other ____

1. Were custody seals on the outside of the cooler? Yes ☑ No ☐ Intact? Yes ☑ No ☐ NA ☐
   If YES, Quantity 1
   Were the custody seals signed and dated? Yes ☑ No ☐ NA ☐
2. Shipper's packing slip attached to this form? Yes ☑ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☑ No ☐ Relinquished by client? Yes ☑ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☑ No ☐
5. Packing material used: Bubble Wrap ☑ Foam ☐ None ☐ Other: ____
6. Cooler temperature upon receipt 6.0 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☑ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☑ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☑ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☑ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☐ No ☐ NA ☑
10. Were correct bottles used for the tests indicated? Yes ☑ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☑
12. Sufficient quantity received to perform indicated analyses? Yes ☑ No ☐

Contacted PM ____ Date: ____ by: ____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning: ____

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot # 101104HNO3; Sulfuric Acid Lot # 102804-H2SO4; Sodium Hydroxide Lot # -082404-NaOH; Hydrochloric Acid Lot # 100902-HCl; Sodium Hydroxide and Zinc Acetate Lot # 071604-CH3COO2ZN/NaOH*
Sample(s) ____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials

END OF REPORT

ARCADIS

Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

Project Number/Name WI000943.0002/Hoffman

Project Location Wauwatosa, WI

Laboratory STL

Project Manager EJ Bus

Sampler(s)/Affiliation Brian Mellet/ARCADIS

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	ANALYSIS / METHOD / SIZE: VOC TCLP - Glass 3oz						Remarks	Total
DRUMS	S	2/9/05/1350		1							1

Sample Matrix: L = Liquid; S = Solid; A = Air

Total No. of Bottles/ Containers: 1

						Seal Intact?
Relinquished by: [signature]	Organization: ARCADIS	Date 2/16/05	Time 1511			
Received by: _____	Organization: _____	Date / /	Time _____			Yes No N/A
Relinquished by: _____	Organization: _____	Date / /	Time _____			Seal Intact?
Received by: _____	Organization: _____	Date / /	Time _____			Yes No N/A

Special Instructions/Remarks: _____

Delivery Method: ☐ In Person ☒ Common Carrier Fedex SPECIFY ☐ Lab Courier ☐ Other _____ SPECIFY

U.S. Environmental Protection Agency

Superfund

Soil Screening Guidance for Chemicals

Equation Values for Ingestion

Noncarcinogenic Parameter	Value	Carcinogenic Age-adjusted Parameter	Value	Carcinogenic Nonadjusted Parameter	Value
Target Hazard Quotient (unitless)	0.2	Target Risk (unitless)	1.0E-7	Target Risk (unitless)	1.0E-6
Body Weight (kg)	15	Adult Body Weight (kg)	70	Body Weight (kg)	70
		Child Body Weight (kg)	15		
Exposure Duration (yr)	6	Adult Exposure Duration (yr)	24	Exposure Duration (yr)	25
		Child Exposure Duration (yr)	6		
Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	250
Intake Rate (mg/day)	200	Adult Intake Rate (mg/day)	100	Intake Rate (mg/day)	100
		Child Intake Rate (mg/day)	200		
		Average Lifetime (yr)	70	Average Lifetime (yr)	70
		Age-adjusted Ingestion Factor (mg-yr/kg-day)	114.29		

Soil Screening Levels for Ingestion (mg/kg)

Analyte	Cas Number	Oral RfD	Oral Slope Factor	Noncarcinogenic	Carcinogenic (Age-adjusted)	Carcinogenic (Nonadjusted)

Dichloroethylene, 1,2-cis-	156592	1.00E-02 [b]	1.56E+02		
Methylene Chloride	75092	6.00E-02 [a] 7.50E-03 [a]	9.39E+02	8.52E+00	3.82E+02
Naphthalene	91203	2.00E-02 [a]	3.13E+02		
Tetrachloroethylene	127184	1.00E-02 [a] 5.20E-02 [v]	1.56E+02	1.23E+00	5.50E+01

This site is maintained and operated through a cooperative agreement between the EPA Office of Superfund and Oak Ridge National Laboratory. For questions or comments please contact the Office of Superfund.

OSWER Home | Superfund Home | Oil Spill Home

EPA Home | Privacy and Security Notice | Contact Us

Last updated on Wednesday, December 31st, 1969
URL: http://risk.lsd.ornl.gov/cgi-bin/epa/ssl2.cgi

Soil Screening Guidance for Chemicals

Equation Values for Inhalation of Volatiles

Volatilization Factor Parameter	Value	Soil Saturation Concentration Parameter	Value	Noncarcinogenic Parameter	Value	Carcinogenic Parameter	Value
Surface Area (acres)	0.5			Target Hazard Quotient (unitless)	0.2	Target Risk (unitless)	1.0E-7
City (climate zone)	Chicago (VII)			Exposure Duration (yr)	30	Exposure Duration (yr)	30
Q/C (g/m^2-s per kg/m^3)	97.78			Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	350
Fraction organic carbon (unitless)	0.006	Fraction organic carbon (unitless)	0.006			Average Lifetime (yr)	70
Dry soil bulk density (g/cm^3)	1.5	Dry soil bulk density (g/cm^3)	1.5				
Soil particle density (g/cm^3)	2.65	Soil particle density (g/cm^3)	2.65				
Water-filled soil porosity (L_{water}/L_{soil})	0.2	Water-filled soil porosity (L_{water}/L_{soil})	0.2				
Exposure interval (s)	9.5e08						

Soil Screening Levels for Inhalation of Volatiles (mg/kg)

Analyte	Cas Number	Inhalation RfC	Inhalation Unit Risk	Volatilization Factor	Soil Saturation Concentration	Noncarcinogenic	Carcinogenic
Dichloroethylene, 1,2-cis-	156592			5.9E+03	1.3E+03		
Methylene Chloride	75092	3.0E+00 [b]	4.7E-07 [a]	5.2E+03	2.8E+03	3.3E+03	2.7E+00
Naphthalene	91203	3.0E-03 [a]		1.1E+05		6.8E+01	
Tetrachloroethylene	127184	6.0E-01 [v]	5.8E-07 [v]	5.0E+03	2.4E+02	6.2E+02	2.1E+00

This site is maintained and operated through a cooperative agreement between the EPA Office of Superfund and Oak Ridge National Laboratory. For questions or comments please contact the Office of Superfund.

Soil Screening Guidance for Chemicals

Equation Values for Inhalation of Volatiles

Volatilization Factor Parameter	Value	Soil Saturation Concentration Parameter	Value	Noncarcinogenic Parameter	Value	Carcinogenic Parameter	Value
Surface Area (acres)	0.5			Target Hazard Quotient (unitless)	0.2	Target Risk (unitless)	1.0E-7
City (climate zone)	Chicago (VII)			Exposure Duration (yr)	30	Exposure Duration (yr)	30
Q/C (g/m^2-s per kg/m^3)	97.78			Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	350
Fraction organic carbon (unitless)	0.006	Fraction organic carbon (unitless)	0.006			Average Lifetime (yr)	70
Dry soil bulk density (g/cm^3)	1.5	Dry soil bulk density (g/cm^3)	1.5				
Soil particle density (g/cm^3)	2.65	Soil particle density (g/cm^3)	2.65				
Water-filled soil porosity (L_{water}/L_{soil})	0.2	Water-filled soil porosity (L_{water}/L_{soil})	0.2				
Exposure interval (s)	9.5e08						

Soil Screening Levels for Inhalation of Volatiles (mg/kg)

Analyte	Cas Number	Inhalation RfC	Inhalation Unit Risk	Volatilization Factor	Soil Saturation Concentration	Noncarcinogenic	Carcinogenic
Trichlorofluoromethane	75694	7.0E-01 b,c		2.8E+03	1.6E+03	4.1E+02	

This site is maintained and operated through a cooperative agreement between the EPA Office of Superfund and Oak Ridge National Laboratory. For questions or comments please contact the Office of Superfund.

OSWER Home | Superfund Home | Oil Spill Home

EPA Home | Privacy and Security Notice | Contact Us

Last updated on Wednesday, December 31st, 1969
URL: http://risk.lsd.ornl.gov/cgi-bin/epa/ssl2.cgi

Soil Screening Guidance for Chemicals

Equation Values for Ingestion

Noncarcinogenic Parameter	Value	Carcinogenic Age-adjusted Parameter	Value	Carcinogenic Nonadjusted Parameter	Value
Target Hazard Quotient (unitless)	0.2	Target Risk (unitless)	1.0E-7	Target Risk (unitless)	1.0E-6
Body Weight (kg)	15	Adult Body Weight (kg)	70	Body Weight (kg)	70
		Child Body Weight (kg)	15		
Exposure Duration (yr)	6	Adult Exposure Duration (yr)	24	Exposure Duration (yr)	25
		Child Exposure Duration (yr)	6		
Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	250
Intake Rate (mg/day)	200	Adult Intake Rate (mg/day)	100	Intake Rate (mg/day)	100
		Child Intake Rate (mg/day)	200		
		Average Lifetime (yr)	70	Average Lifetime (yr)	70
		Age-adjusted Ingestion Factor (mg-yr/kg-day)	114.29		

Soil Screening Levels for Ingestion (mg/kg)

Analyte	Cas Number	Oral RfD	Oral Slope Factor	Noncarcinogenic	Carcinogenic (Age-adjusted)	Carcinogenic (Nonadjusted)

Trichlorofluoromethane	75694	3.00E-01 [a]	4.69E+03

This site is maintained and operated through a cooperative agreement between the EPA Office of Superfund and Oak Ridge National Laboratory. For questions or comments please contact the Office of Superfund.

OSWER Home | Superfund Home | Oil Spill Home

EPA Home | Privacy and Security Notice | Contact Us

Last updated on Wednesday, December 31st, 1969
URL: http://risk.lsd.ornl.gov/cgi-bin/epa/ssl2.cgi

EPA United States Environmental Protection Agency — Superfund Risk Assessment

Equation Values for Soil to Ground Water

Partitioning Equation Parameter	Value
Dilution factor (unitless)	1.27
Fraction organic carbon in soil (unitless)	0.001
Water-filled soil porosity (L_{water}/L_{soil})	0.2
Dry soil bulk density (kg/L)	1.5
Soil particle density (kg/L)	2.65

Soil Screening Levels for Soil to Ground Water (mg/kg)

Analyte	Cas Number	Ground Water Concentration* (mg/L)	Ground Water Concentration Source	Soil Screening Level
Trichlorofluoromethane	75694	1.4E+01	HBL	9.2E+00

*Ground Water Concentration=Ground Water Concentration Source × Dilution Factor

[Risk Assessment Home]
[EPA Home | OSWER Home | Superfund Home]
[Search EPA | Search Superfund | What's New | Contact Us]

URL: http://risk.lsd.ornl.gov/epa/ssl1.htm
This page was last updated on: May 12, 1999
Site maintained by: Office of Emergency and Remedial Response
beasley.lynn@epa.gov

http://risk.lsd.ornl.gov/epa/ssl1.htm

EPA United States Environmental Protection Agency — Superfund Risk Assessment

Equation Values for Soil to Ground Water

Partitioning Equation Parameter	Value
Dilution factor (unitless)	2
Fraction organic carbon in soil (unitless)	0.001
Water-filled soil porosity (L_{water}/L_{soil})	0.2
Dry soil bulk density (kg/L)	1.5
Soil particle density (kg/L)	2.65

Soil Screening Levels for Soil to Ground Water (mg/kg)

Analyte	Cas Number	Ground Water Concentration* (mg/L)	Ground Water Concentration Source	Soil Screening Level
Tetrachloroethylene	127184	1.0E-02	MCL	4.1E-03

*Ground Water Concentration=Ground Water Concentration Source × Dilution Factor

[Risk Assessment Home]
[EPA Home | OSWER Home | Superfund Home]
[Search EPA | Search Superfund | What's New | Contact Us]

URL: http://risk.lsd.ornl.gov/epa/ssl1.htm
This page was last updated on: May 12, 1999
Site maintained by: Office of Emergency and Remedial Response
beasley.lynn@epa.gov

EPA United States Environmental Protection Agency — Superfund Risk Assessment

Equation Values for Soil to Ground Water

Partitioning Equation Parameter	Value
Dilution factor (unitless)	.22
Fraction organic carbon in soil (unitless)	0.001
Water-filled soil porosity (L_{water}/L_{soil})	0.2
Dry soil bulk density (kg/L)	1.5
Soil particle density (kg/L)	2.65

Soil Screening Levels for Soil to Ground Water (mg/kg)

Analyte	Cas Number	Ground Water Concentration* (mg/L)	Ground Water Concentration Source	Soil Screening Level
Naphthalene	91203	1.6E-01	HBL	3.4E-01

*Ground Water Concentration=Ground Water Concentration Source × Dilution Factor

[Risk Assessment Home]
[EPA Home | OSWER Home | Superfund Home]
[Search EPA | Search Superfund | What's New | Contact Us]

URL: http://risk.lsd.ornl.gov/epa/ssl1.htm
This page was last updated on: May 12, 1999
Site maintained by: Office of Emergency and Remedial Response
beasley.lynn@epa.gov

EPA United States Environmental Protection Agency — Superfund Risk Assessment

Equation Values for Soil to Ground Water

Partitioning Equation Parameter	Value
Dilution factor (unitless)	2
Fraction organic carbon in soil (unitless)	0.001
Water-filled soil porosity (L_{water}/L_{soil})	0.1
Dry soil bulk density (kg/L)	1.5
Soil particle density (kg/L)	2.65

Soil Screening Levels for Soil to Ground Water (mg/kg)

Analyte	Cas Number	Ground Water Concentration* (mg/L)	Ground Water Concentration Source	Soil Screening Level
Methylene Chloride	75092	1.0E-02	MCL	9.8E-04

*Ground Water Concentration=Ground Water Concentration Source × Dilution Factor

[Risk Assessment Home]
[EPA Home | OSWER Home | Superfund Home]
[Search EPA | Search Superfund | What's New | Contact Us]

URL: http://risk.lsd.ornl.gov/epa/ssl1.htm
This page was last updated on: May 12, 1999

EPA United States Environmental Protection Agency — Superfund Risk Assessment

Equation Values for Soil to Ground Water

Partitioning Equation Parameter	Value
Dilution factor (unitless)	2
Fraction organic carbon in soil (unitless)	0.001
Water-filled soil porosity (L_{water}/L_{soil})	0.2
Dry soil bulk density (kg/L)	1.5
Soil particle density (kg/L)	2.65

Soil Screening Levels for Soil to Ground Water (mg/kg)

Analyte	Cas Number	Ground Water Concentration* (mg/L)	Ground Water Concentration Source	Soil Screening Level
Dichloroethylene, 1,2-cis-	156592	1.4E-01	MCLG	2.7E-02

*Ground Water Concentration=Ground Water Concentration Source × Dilution Factor

[Risk Assessment Home]
[EPA Home | OSWER Home | Superfund Home]
[Search EPA | Search Superfund | What's New | Contact Us]

URL: http://risk.lsd.ornl.gov/epa/ssl1.htm
This page was last updated on: May 12, 1999

Section E
Groundwater Information

Table 4. Groundwater Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	NR 140	NR 140	GP-102	GP-103	GP-105	MW-1		MW-99*	MW-1	MW-99*	MW-1
Sample Date	ES	PAL	09/12/02	09/12/02	09/12/02	01/28/05	01/08/07	01/08/07	04/05/07	04/05/07	07/03/07
VOCs											
Methylene Chloride	5	0.5	<0.43	<0.43	<0.43	<1.0	<0.43	<0.43	<0.43	<0.43	<0.43
Tetrachloroethene	5	0.5	<0.63	2.9	<0.63	<0.50	1.1	1.1	1.4 Q	1.4 Q	1.0 Q
Trichloroethene	5	0.5	<0.48	<0.48	<0.48	<0.20	<0.48	<0.48	<0.48	<0.48	0.81 Q

Constituent concentrations are reported in micrograms per liter (µg/L).

	Concentration exceeds the NR 140 PAL.
BOLD	Concentration exceeds the NR 140 ES.
ID	Identification.
ES	NR 140 Enforcement Standard.
PAL	NR 140 Preventive Action Limit.

Table 4. Groundwater Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	NR 140	NR 140	MW-99* (continued)	MW-2				MW-3			
Sample Date	ES	PAL	07/03/07	01/28/05	01/08/07	04/05/07	07/03/07	01/28/05	01/08/07	04/05/07	07/03/07
VOCs											
Methylene Chloride	5	0.5	0.73 Q	<1.0	<1.0	<0.43	<0.43	<1.0	<1.0	<0.43	<0.43
Tetrachloroethene	5	0.5	1.2 Q	<0.50	<0.50	**5.5**	1.7	<0.50	<0.50	<0.45	<0.45
Trichloroethene	5	0.5	1.4 Q	<0.20	<0.20	<0.48	0.95 Q	<0.20	<0.20	<0.48	<0.48

Constituent concentrations are reported in micrograms per liter (µg/L).

	Concentration exceeds the NR 140 PAL.
BOLD	Concentration exceeds the NR 140 ES.
ID	Identification.
ES	NR 140 Enforcement Standard.
PAL	NR 140 Preventive Action Limit.

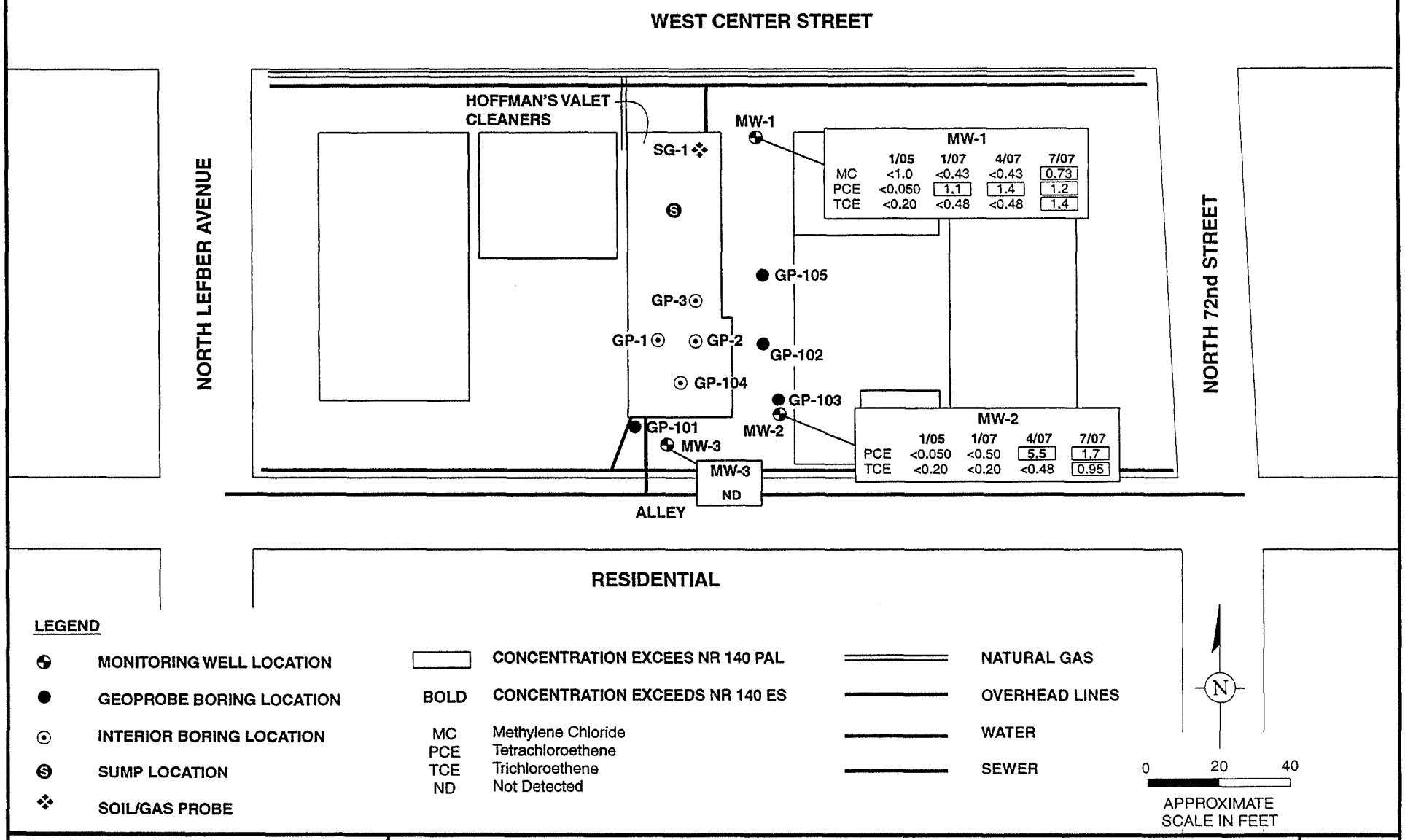
Table 4. Groundwater Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	Trip Blank			
Sample Date	**01/28/05**	**01/08/07**	**04/05/07**	**07/03/07**
VOCs				
Methylene Chloride	<1.0	<1.0	<0.43	1.3 Q
Tetrachloroethene	<0.50	<0.50	<0.45	<0.45
Trichloroethene	<0.20	<0.20	<0.48	0.95 Q

Constituent concentrations are reported in micrograms per liter (µg/L).

	Concentration exceeds the NR 140 PAL.
BOLD	Concentration exceeds the NR 140 ES.
ID	Identification.
ES	NR 140 Enforcement Standard.
PAL	NR 140 Preventive Action Limit.

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: MW GW ANA RES.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



LEGEND

- MONITORING WELL LOCATION
- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- SUMP LOCATION
- SOIL/GAS PROBE

- CONCENTRATION EXCEES NR 140 PAL
- BOLD — CONCENTRATION EXCEEDS NR 140 ES
- MC — Methylene Chloride
- PCE — Tetrachloroethene
- TCE — Trichloroethene
- ND — Not Detected

- NATURAL GAS
- OVERHEAD LINES
- WATER
- SEWER

N

0 20 40

APPROXIMATE SCALE IN FEET

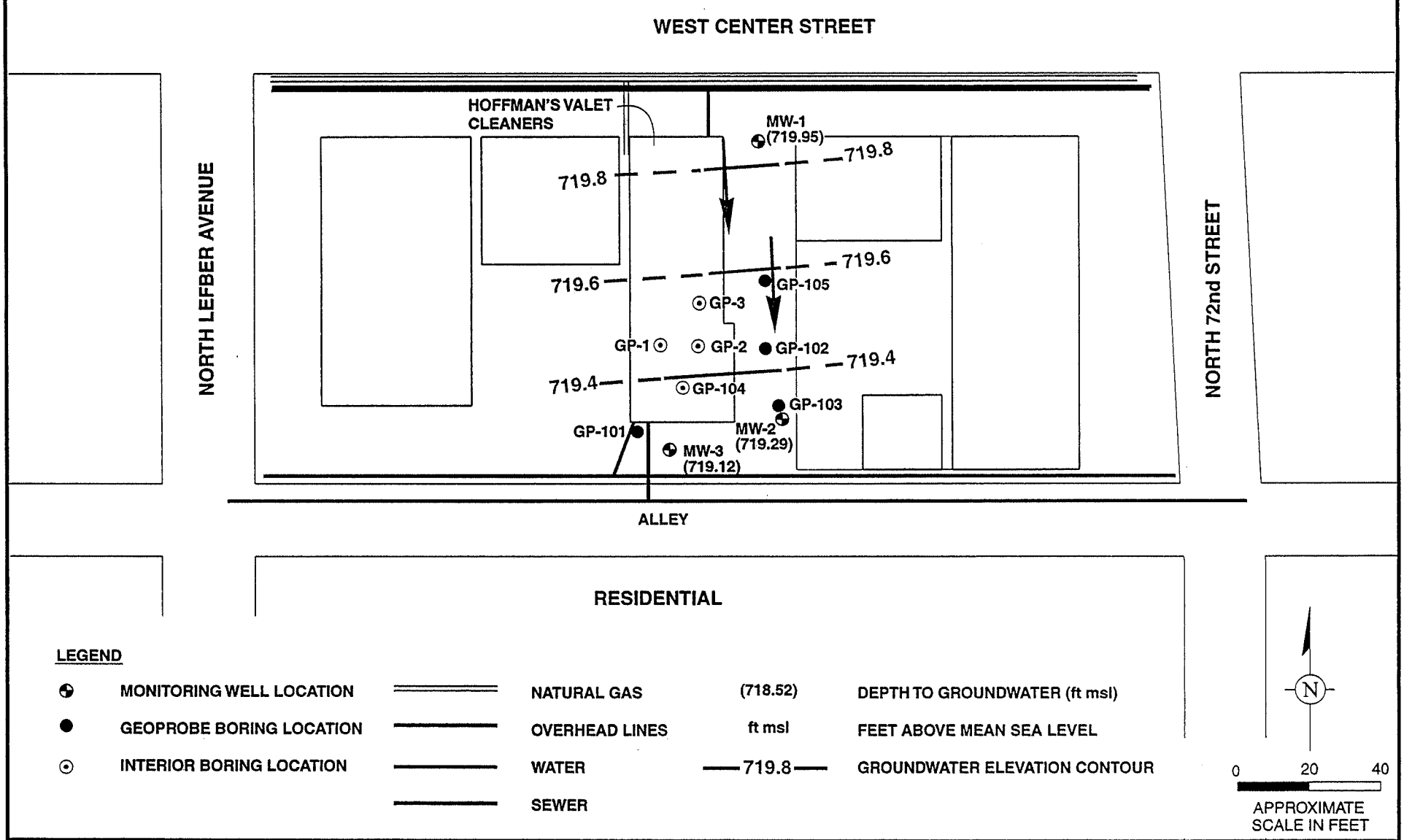
ARCADIS

MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
8

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: POTEN MAP 4507.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



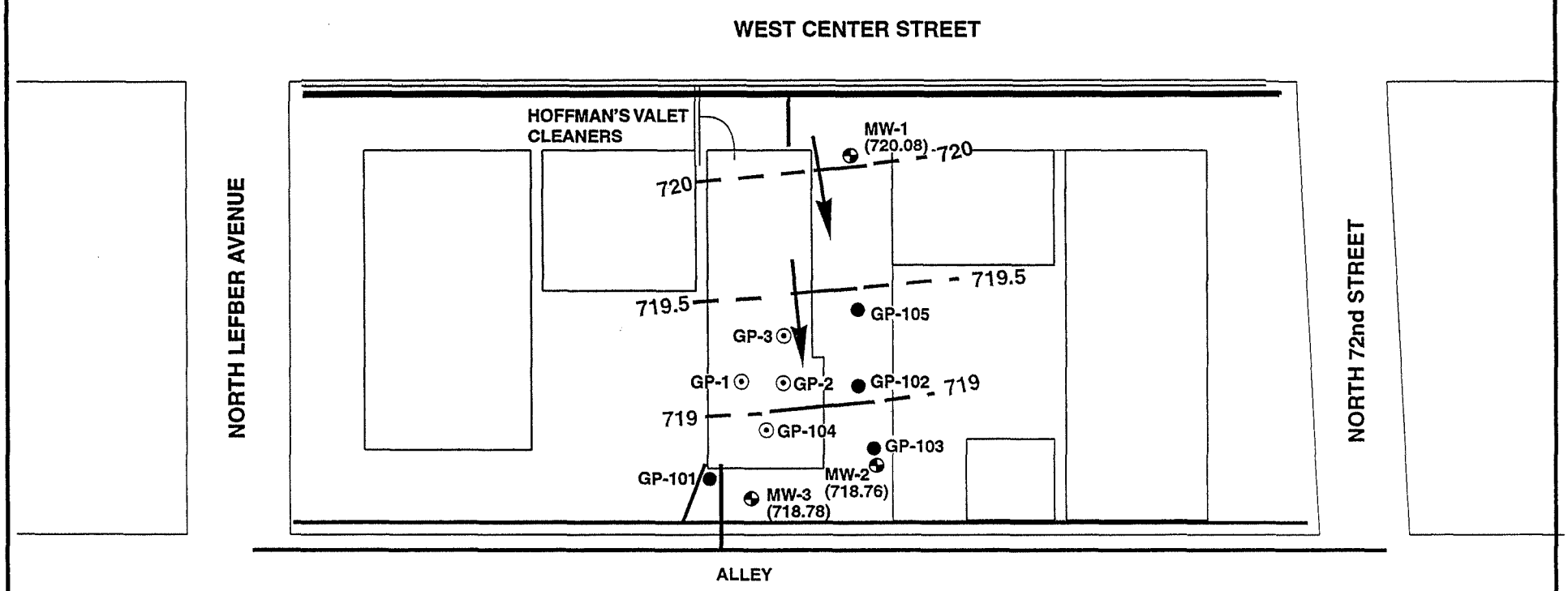
ARCADIS

POTENTIOMETRIC SURFACE MAP
APRIL 5, 2007

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
6

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: POTEN MAP 7307.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



LEGEND

- MONITORING WELL LOCATION
- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- NATURAL GAS
- OVERHEAD LINES
- WATER
- SEWER
- (718.52) ft msl — DEPTH TO GROUNDWATER (ft msl) FEET ABOVE MEAN SEA LEVEL
- 718.5 — GROUNDWATER ELEVATION CONTOUR

N

0 20 40

APPROXIMATE SCALE IN FEET

ARCADIS

POTENTIOMETRIC SURFACE MAP
JULY 3, 2007

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
7

Table 3. Static Groundwater Elevation Data, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Monitoring Well	Ground Surface Elevation (ft msl)	Top-of-Casing Elevation (ft msl)	Screened Interval (ft msl)	Measurement Date	Depth to Water (feet)	Water Level Elevation (ft msl)
MW-1	734.85	733.91	723.85 - 713.85	1/28/05	16.53	717.38
				1/8/07	13.91	720.00
				4/5/07	13.96	719.95
				7/3/07	13.83	720.08
MW-2	733.73	733.01	723.73 - 713.73	1/28/05	14.42	718.59
				1/8/07	14.12	718.89
				4/5/07	13.72	719.29
				7/3/07	14.25	718.76
MW-3	733.49	733.13	723.49 - 713.49	1/28/05	14.61	718.52
				1/8/07	14.2	718.93
				4/5/07	14.01	719.12
				7/3/07	14.35	718.78

* Ground surface elevation is based USGS elevation datum and standard leveling techniques.

ft msl Feet above mean sea level.

Section F
Other Contaminated Media Information

Table 2. Summary of Vapor Probe Sampling Analytical Results, Hoffman's Valet Cleaners, Wauwautosa, Wisconsin.

Sample Name	Table 3C		Basement Sump		SG-1	
Sample Date	Screening Levels		07/26/06		07/28/06	
Units	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3
Acetone	150,000	350,000	230	550	<500	<1,200
Carbon disulfide	220,000	700,000	40	120	<50	<160
Cyclohexane	NE	NE	53	180	<20	<69
1,2-Dichloroethene (total)	NE	NE	7	28	<20	<79
cis-1,2-Dichloroethene	NE	NE	7	28	<20	<79
n-Hexane	57,000	200,000	26	110	<50	<180
Isopropyl Alcohol	NE	NE	400	980	<500	<1,200
Methyl Ethyl Ketone	340,000	1,000,000	18	53	<50	<150
Toluene	110,000	400,00	13	49	<20	<75
Tetrachloroethene	120	810	750	5,100	3,000	20,000
Trichloroethene	4.1	22	10	54	<20	<110

Results are reported in parts per billion by volume (ppbv) and micrograms per cubic meter (µg/m^3).

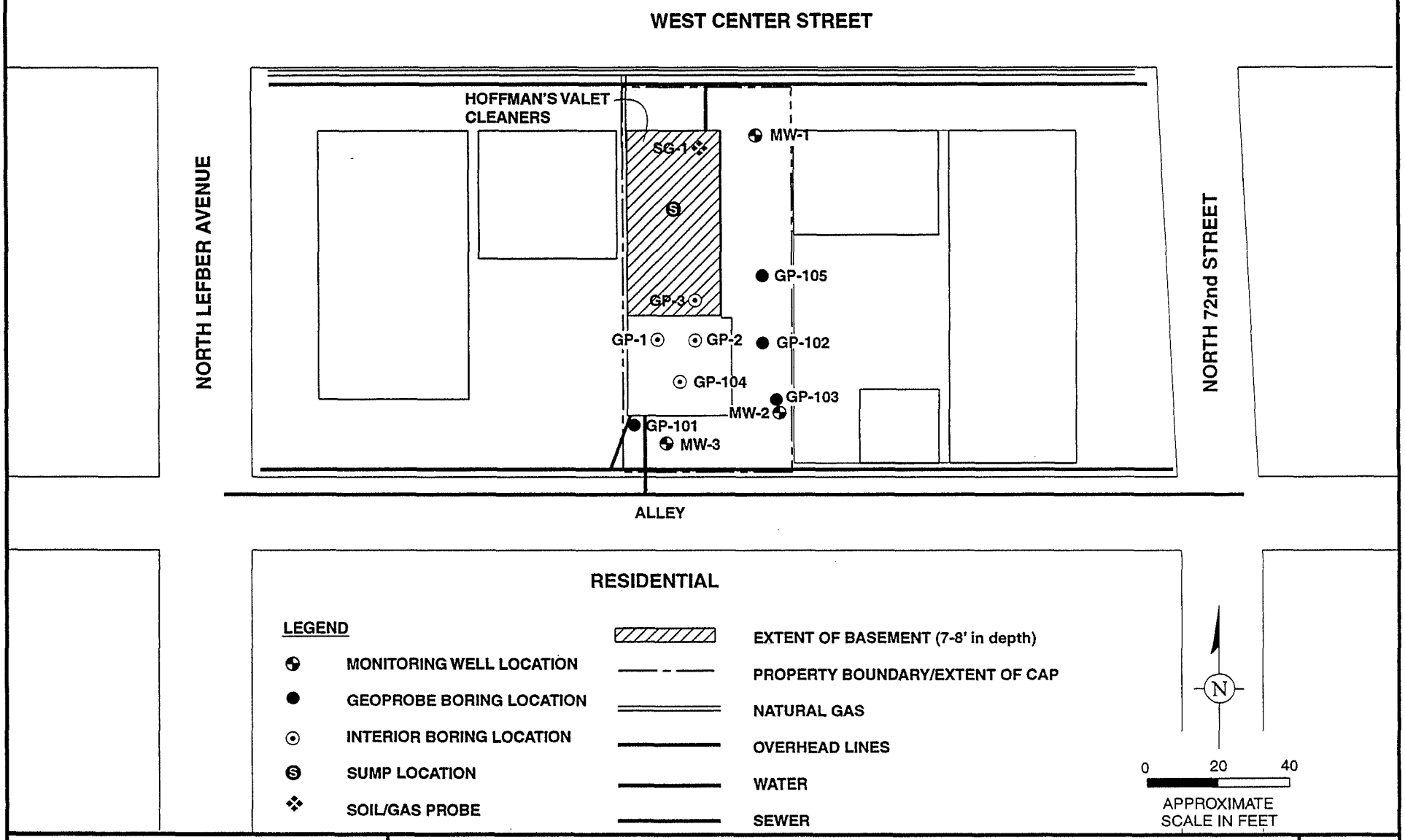
Note: Only analytes detected in vapor samples are presented.

Vapor Probe Samples analyzed for VOCs by EPA Method TO-15.

Value is above the Table 3C Screening Value presented in the U.S. EPA's Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance).

Section G
Associated Site Closure Information

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: SAMP LOC EXT CAP.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



ARCADIS

SAMPLE LOCATIONS WITH EXTENT OF CAP

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
1

Cap Maintenance and Materials Handling Plan

This Cap Maintenance and Materials Handling Plan is applicable to the Site known as the Hoffman's Valet Cleaners located at 7215 West Center Street in the village of Wauwatosa, Milwaukee County, Wisconsin ("Property"), and depicted on Figure 1. A copy of this Plan shall at all times be kept on file in the offices of: (1) the Wisconsin Department of Natural Resources (WDNR), Southeast Region; (2) the owner of the Property, its successors and assigns (hereinafter identified collectively as the "Owner"); (3) the Property manger, if any; and (4) the Property. The Plan shall be made available by Owner to contractors, utilities and maintenance personnel, and any other public or private persons or entities authorized to perform work at the Property.

The Cap elements which are the subject of this Cap Maintenance and Materials Handling Plan are a vapor mitigation system and engineered barriers which may consist of asphalt parking lot, and/or concrete flooring and sidewalks placed over the Unsaturated Soils. Soils at the site consist of silty clay with sand and silty sand lenses.

Unsaturated Soils are hereby defined as the full depth of soils, extending from the ground surface to the water table, which is approximately 13 feet to 15 feet below grade surface (ft bgs). The Unsaturated Soils contain residual chlorinated volatile organic compound (CVOC) contaminants which resulted from the use of chlorinated solvents during dry cleaning activities. The vapor mitigation system is hereby defined as the sealed basement sump, sealed cracks in the basement floors and walls, and the sub-slab depressurization system used to prevent the potential migration of vapors from the underlying soils to ambient air. Engineered Barrier(s) is hereby defined as the asphalt, concrete surfaces, and landscaping materials placed over the Unsaturated Soils to function as a barrier to surface water infiltration, subsurface vapor migration, and to limit direct contact exposure.

The purpose of this Cap Maintenance and Materials Handling Plan is to describe the procedures and controls that need to be followed to maintain the function of the vapor mitigation system and engineered barriers and to properly manage potentially contaminated materials encountered during construction and maintenance activities. Maintaining the function of the vapor mitigation system and engineered barriers will provide continued protection of human health and the environment by minimizing potential exposure to the residual contamination in the Unsaturated Soils.

The WDNR and its successor and assigns (hereinafter identified collectively as the "Department") shall be notified of any activity, which is not in accordance with this Plan.

Required Activities

Semi-annual Inspections. Not less than semi-annually, preferably during the spring and fall seasons, the Property shall be inspected by the Owner to ensure that the vapor mitigation system is functional and the integrity basement sump seal, and basement floors and walls are maintained and that no significant cracks or fissures have developed which would allow the migration of vapors into the ambient air.

In addition, the Property shall be inspected by the Owner to ensure that the integrity of the Engineered Barriers is maintained and that no significant cracks or fissures have developed in the asphalt or concrete cap surfaces which would allow a materially significant increase in the infiltration and percolation of precipitation or surface water into the Unsaturated Soils.

Upon completion of the inspection by the Owner, a brief report shall be prepared which identifies the date of the inspection, the individuals conducting the inspection, any observed disturbances of the vapor mitigation system and Engineered Barriers and any significant cracks or fissures in the asphalt, concrete, or basement surfaces. All inspection reports shall be maintained on file by the Owner, the Property manager, if any, and at the Property.

Annual Inspections. Not less than annually, the Property shall be inspected by the Owner to ensure that the vapor mitigation system is functional and the integrity basement sump seal, and basement floors and walls is maintained and that no significant cracks or fissures have developed which would allow the migration of vapors into the ambient air.

In addition, the Property shall be inspected by the Owner to ensure that the integrity of the Engineered Barriers is maintained and that no significant cracks or fissures have developed in the asphalt or concrete cap surfaces which would allow a materially significant increase in the infiltration and percolation of precipitation or surface water into the Unsaturated Soils.

Upon completion of the inspection by the Owner, a brief report shall be prepared which identifies the date of the inspection, the individuals conducting the inspection, any observed disturbances of the vapor mitigation system and Engineered Barriers and any significant cracks or fissures in the asphalt, concrete, or basement surfaces. All inspection reports shall be maintained on file by the Owner, the Property manager, if any, and at the Property.

Repairs. If, during the semi-annual and annual inspections or other routine inspections of the Property, the vapor mitigation system or Engineered Barriers are observed to have been disturbed or significant fissures, cracks or erosional features are observed in the asphalt, or concrete caps, the Owner shall arrange to have repairs made to such areas, in a manner consistent with this Cap Maintenance and Materials Handling Plan. Such repairs shall be carried out within a reasonable period of time, not to exceed 120 days, subject to weather and seasonal considerations. All repair reports shall be maintained on file by the Owner, the Property manager, if any, and at the Property.

Allowed Activities

The following allowed activities must comply with all listed requirements:

1. **Landscaping Maintenance.** In the event the Owner desires to install trees, shrubs, fencing or retaining walls, or perform other landscaping that will extend into on disturb the unsaturated soils, all such work shall be undertaken in accordance with the requirements of the Cap Maintenance and Materials Handling Plan. For any such work, the following steps shall be taken:

   A) The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by Owner and shall prepare a health and safety plan, appropriate for the work being performed.

   B) A memorandum or report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner, the Property manger, if any, and at the Property, and shall be made available for inspection by the Department, upon reasonable notice, during normal business hours.

2. **Construction or Installation of Buildings, Structures or Other Improvements.** Buildings, structures or other improvements may be constructed or installed on the Property using footings or other foundations which are placed into the Unsaturated in the following manner:

   A) The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by Owner and shall

prepare a health and safety plan, appropriate to the work being performed.

B) All materials used in the pavement or foundation shall not contain any hazardous substances. Any Unsaturated Soils or granular layer materials which are excavated shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. Any such excavation of Unsaturated Soils or granular layer materials shall be conducted in accordance with the health and safety plan, and all such excavated Unsaturated Soils or granular layer materials shall be segregated and kept on-site until completion of the work. All excavated Unsaturated Soils shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box.

C) Upon completion of the work, previously excavated Unsaturated Soils and granular layer materials may be backfilled provided, however, that the backfilled Unsaturated Soils maintains the compaction characteristics of the surrounding Unsaturated Soils. The Unsaturated Soils or granular layered material, as well as any additional clean soil or granular fill material necessary to backfill to grade, shall be backfilled in such a manner as to maintain the original depth of the Unsaturated Soils or granular layer material as the case may be. The backfill area shall be restored in a manner consistent with the original Cap condition. Any previously excavated Unsaturated Soils, or excavated granular material that has been commingled, mixed or otherwise in contact with Unsaturated Soils, which is not backfilled or otherwise made a part of the Cap, along with any groundwater encountered and removed during construction, shall be properly characterized and managed in accordance with state law with notice to the Department.

D) A memorandum or report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner and the Property manager, if any, and shall be filed with the Department.

3. **Replacement and Repair of Engineered Barriers.** If it becomes necessary or desirable to replace or repair the asphalt or concrete caps, the repair or replacement shall be undertaken in the following manner:

   A) The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by Owner and shall prepare a health and safety plan, appropriate to the work being performed.

   B) Any Unsaturated Soils or granular layer materials which are excavated from beneath the Engineered Barriers shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. Any such excavation of Unsaturated Soils or granular layer materials shall be conducted in accordance with the health and safety plan, and all such excavated Unsaturated Soils or granular layer materials shall be segregated and kept on site until completion of the work. All excavated Unsaturated Soils shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box.

   C) Upon completion of the work, previously excavated Unsaturated Soils may be placed back into the excavation provided, however, that the replaced Unsaturated Soils maintain the compaction characteristics of the surrounding Unsaturated Soils. The Unsaturated Soils or granular layered material, as well as any additional clean soil or granular layered material necessary to bring the excavation back to grade, shall be placed in the excavation in such a manner as to maintain the original depth of the Unsaturated Soils or granular layer material as the case may be. The area of the excavation shall be restored in a manner consistent with the original Cap condition. Any previously excavated Unsaturated Soils, or excavated granular material that has been commingled, mixed or otherwise in contact with Unsaturated Soils, which is not placed back in the excavation or which is not otherwise made a part of the Cap, along with any groundwater encountered and removed during construction, shall be properly characterized and managed in accordance with state law with notice to the Department.

   D) A memorandum report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials

Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner, the Property manager, if any, and at the property, and shall be filed with the Department.

4. **Utility Installations or Repairs.** No utility repairs or installation of new or replacement utilities shall be conducted on the Property until after the utility and any contractor(s) for the utility have acknowledged receipt of a copy of this Cap Maintenance and Materials Handling Plan. The utility repairs or installation(s) shall be conducted in strict conformance with the standards set forth below with respect to excavations into and/or beneath the Cap, and such excavations are to be undertaken in the following manner:

   A) The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by Owner and shall prepare a health and safety plan, appropriate to the work being performed.

   B) Any Unsaturated Soils which are excavated, granular layer materials which are excavated, or clean fill above the Unsaturated Soils which are excavated, all for purposes of utility installation or repair, shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. All excavated Unsaturated Soils shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box.

   C) Upon completion of such work, the Unsaturated Soils may be placed back into the excavation provided, however, that the Unsaturated Soils shall maintain the compaction characteristics of the surrounding Unsaturated Soils. Similarly, the clean fill above the Unsaturated Soils and any granular layer material may be placed back into the excavation in order to bring the excavation back to grade. The area of the excavation shall be restored in a manner consistent with the original Cap condition.

   D) Any excavation of soils beneath the Unsaturated Soils shall be conducted in accordance with the health and safety plan. Any such soils excavated from beneath the Unsaturated Soils shall be segregated, properly characterized and managed in accordance with state law with notice to the Department. Any other soils which have been commingled, mixed or otherwise have come into contact with

soils excavated from beneath Unsaturated Soils shall be properly characterized and managed in accordance with state law with notice to the Department. Provided, further, that any groundwater affected by such activities shall be managed in accordance with state law after notice to the Department.

E) Clean fill used in connection with utility installation or construction shall not include any granular or porous material but may include low strength flowable fill or other fill with low hydraulic conductivity.

F) If the utility installation or construction involves any disturbance of the seals used to seal the entrance of utility lines and the structures on the Property, such seals shall be replaced with new seals of like or superior quality.

G) The utility contractor shall prepare a memorandum report describing the work performed, identifying the person performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file with the utility, the Owner, the Property manager, if any, and at the Property and shall be filed with the Department.

5. **Offsite Disposal of Excavated Soils.** If it becomes necessary or desirable to dispose of excavated soils from the allowed construction, repair, and installation activities, the excavation and resulting soils shall be managed in the following manner:

A) All excavated soils shall meet the analytical requirements of the licensed disposal facility prior to transportation.

B) A report shall be filed with the Department including maps depicting the excavation area, laboratory analysis, and transport manifests.

Request for Deviations

Owner shall not conduct any activities at the Property that are not in compliance with this Cap Maintenance and Materials Handling Plan, unless written approval to do so is obtained from the Department.

Section H
Proposed Institutional Controls

Attachments:

1. RR GIS Registry of Closed Remediation Sites – See Section I.
2. Draft Deed Documents – A deed restriction is not required for this closure request, based on changes in the closure requirements made in 2006.

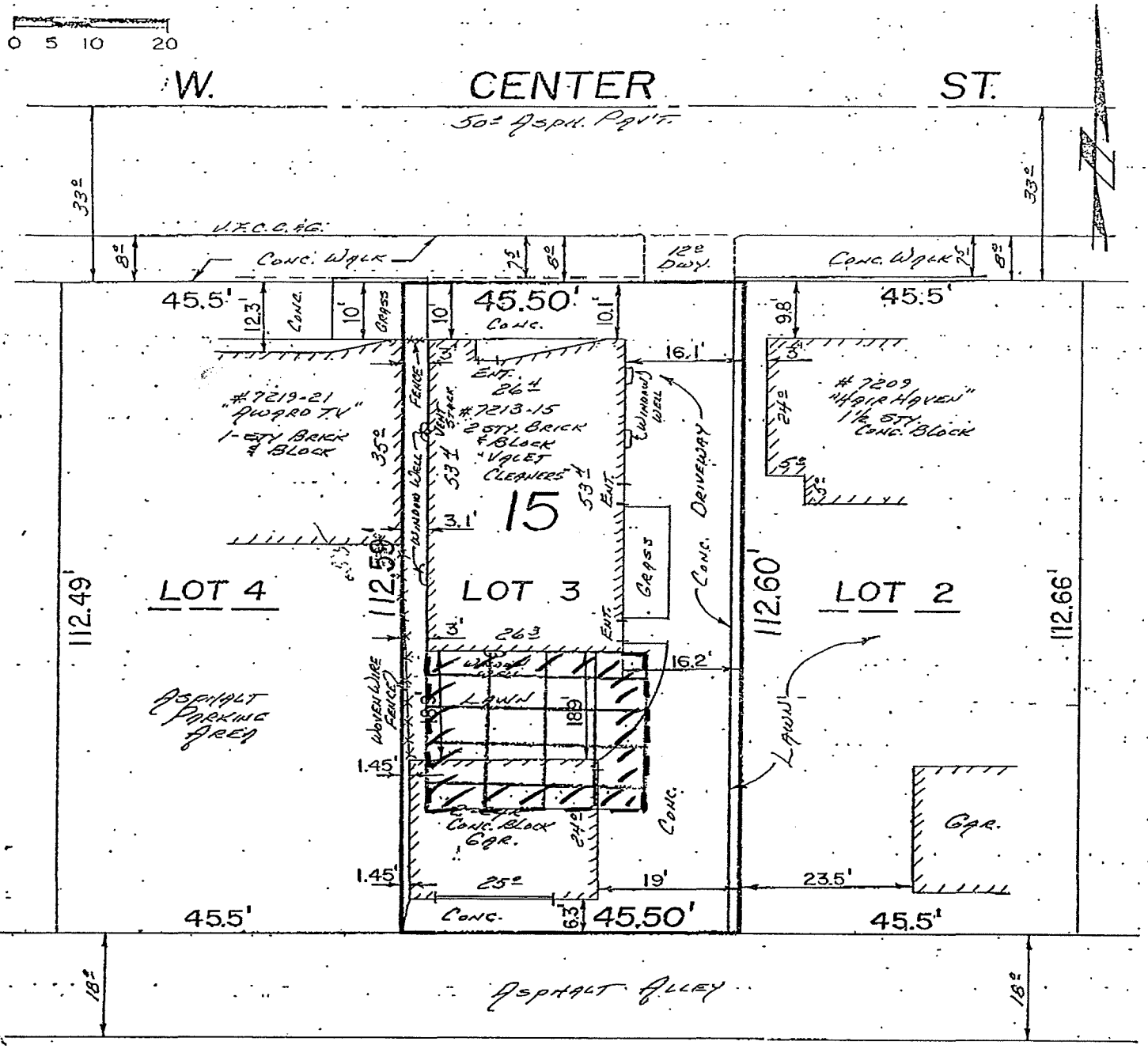
Section I
Required GIS Registry Information

PLAT OF SURVEY

DATE OF SURVEY -- 11-20-84 SURVEY NO. 11-2-84

LOCATION OF PROPERTY — 7213--15 W. CENTER ST.

DESCRIPTION OF PROPERTY — LOT 3, BLOCK 15 IN RITTER OAK RIDGE EXTENSION BEING A SUBDIVISION IN THE S.W. 1/4 SEC. 15, T. 7N., R. 21 E. IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, STATE OF WISCONSIN.



SURVEYED FOR RALPH HOFFMAN
7215 W. CENTER ST.
WAUWATOSA, WI. 53210

SCALE 1" = 20'

NOV 1984
City of Wauwatosa
Building Dept.

5754 North 93rd Street
Milwaukee, Wisconsin 53225

SURVEYED BY JOSEPH HOFFMANN

TELEPHONE: 463-8278

that the above plat is an accurate
terior boundary lines, visible im-
icipal buildings on said property. I
bove named owner, or representative

S — 1158 — STATE OF WISCONSIN

WISCONSIN
JOSEPH HOFFMANN
S-1158
MILWAUKEE
WISCONSIN

NOTE:
NOT ORIGINAL UNLESS SEAL IS STAMPED IN RED.

Post-it® Fax Note 7671	Date 7/28/05	# of pages ▶ 1
To Ed Buck	From Chris B	
Co./Dept.	Co. Tosa	
Phone #	Phone # 479-8935	
Fax # 276-7603	Fax #	

000039255

Document Number

WARRANTY DEED

7868377

REGISTER'S OFFICE) SS
Milwaukee County, WI
RECORDED AT 9:15 AM
02-01-2000
REEL_____IMAGE_____
WALTER R. BARCZAK
REGISTER OF DEEDS

AMOUNT 10.00

Recording Area
Name and Return Address

Mark J. Rogers
Angermeier & Rogers
312 East Wisconsin Avenue
Suite 210
Milwaukee, WI 53202

331-0695-00
(Parcel Identification Number)

FEE
77.25 (16)
EXEMPT

This Deed, made between Ralph L. Hoffman and Harleene S. Hoffman, his wife, Grantor, and RALPH L. HOFFMAN and HARLEENE HOFFMAN, Trustees or their successors in trust, under the RALPH AND HARLEENE HOFFMAN LIVING TRUST, dated January 27, 2000, Grantee.

Witnesseth, That the said Grantor, for a valuable consideration conveys to Grantee the following described real estate in Milwaukee County, State of Wisconsin:

Lot 3, in Block 15, in Ritter Oak Ridge Extension, being a Subdivision of a part of the South West ¼ of Section 15, in Township 7 North, Range 21 East, in the City of Wauwatosa, County of Milwaukee and State of Wisconsin.

This is not homestead property.

Together with all and singular hereditaments and appurtenances thereunto belonging;
And Grantors warrant that the title is good, indefeasible in fee simple and free and clear of encumbrances except municipal and zoning ordinances, recorded easements for public utilities serving the property, and all building and use restrictions, and all other easements, restrictions, and covenants of record, and will warrant and defend the same.

Dated this 27th day of January, 2000.

Ralph L. Hoffman
*Ralph L. Hoffman

Harleene S. Hoffman
*Harleene S. Hoffman

AUTHENTICATION

Signature(s)_____

authenticated this ____ day of _____

_____
signature

_____
type or print name

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

THIS INSTRUMENT WAS DRAFTED BY
Mark J. Rogers, Angermeier & Rogers
312 E. Wisconsin Ave., Milwaukee, WI 53202

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

ACKNOWLEDGMENT

STATE OF WISCONSIN
MILWAUKEE COUNTY
Personally came before me this 27th day of January, 2000, the above named Ralph L. Hoffman and Harleene S. Hoffman to me known to be the persons who executed the foregoing instrument and acknowledge the same.

_____
signature
type or print name Mark J. Rogers

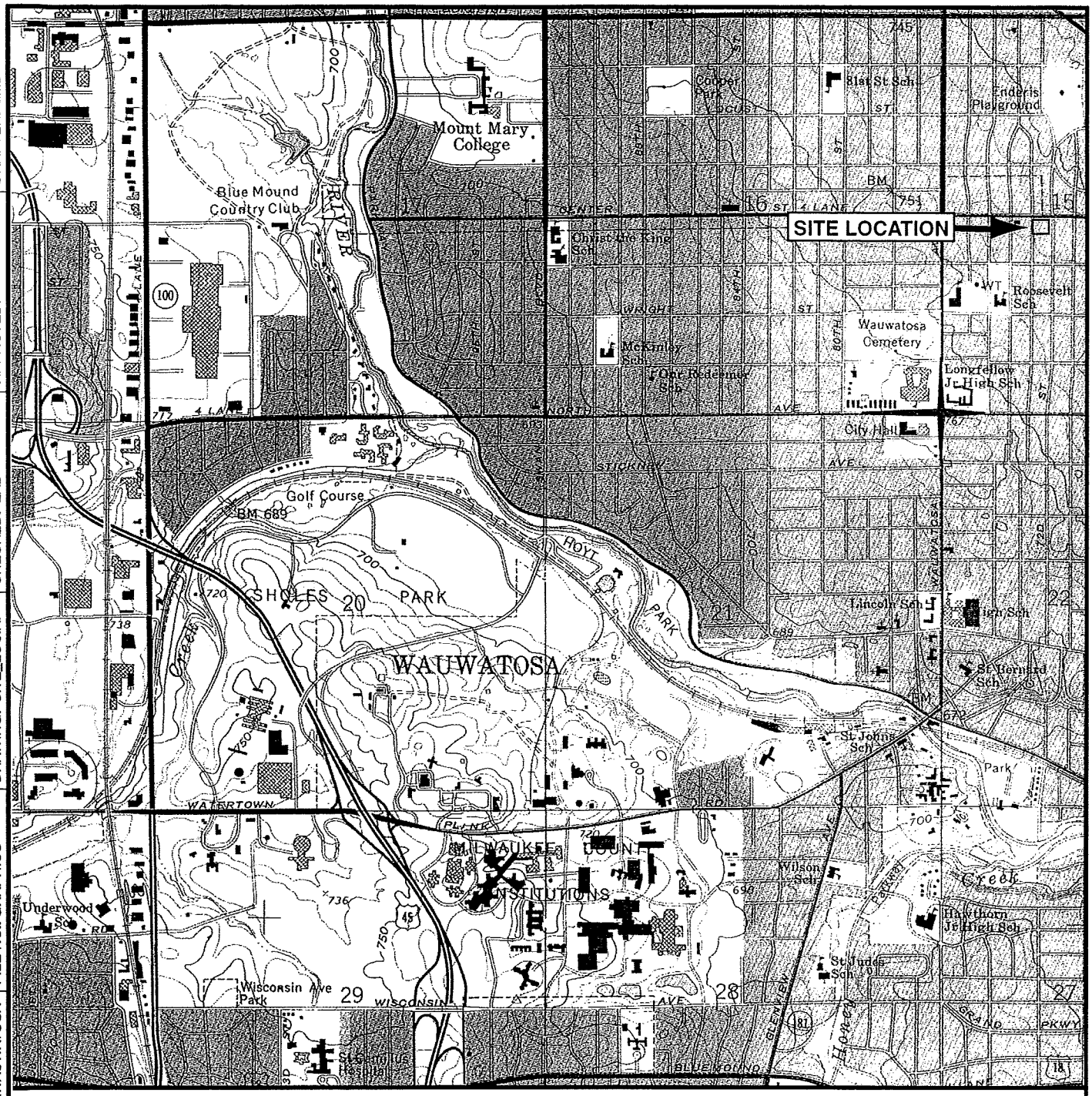
Notary Public Milwaukee County, Wisconsin.
My commission is permanent.

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

Parcel Identification Number: 331-0695-00

GIS Registry Information
Site Name: Hoffman's Valet Cleaners
Address: 7215 West Center Street
City/Zip Code: Wauwatosa/53209

Geographic Coordinates (meters in WTM83/91):
E 682647 N 290285



SOURCE: USGS 7.5 Minute Topographic Map, WAUWATOSA, WISCONSIN Quadrangle, 1994

N

0 1000 2000 4000

SCALE IN FEET

WISCONSIN

DRAFTER: LMB | APPROVED: | CHECKED: EAB | DRAWING: SITE_LOC.AI | FILE NO.: GRAPHICS | PN: HOFFMANWI0943WAUWATOSA | DWG DATE: 11FEB05

ARCADIS

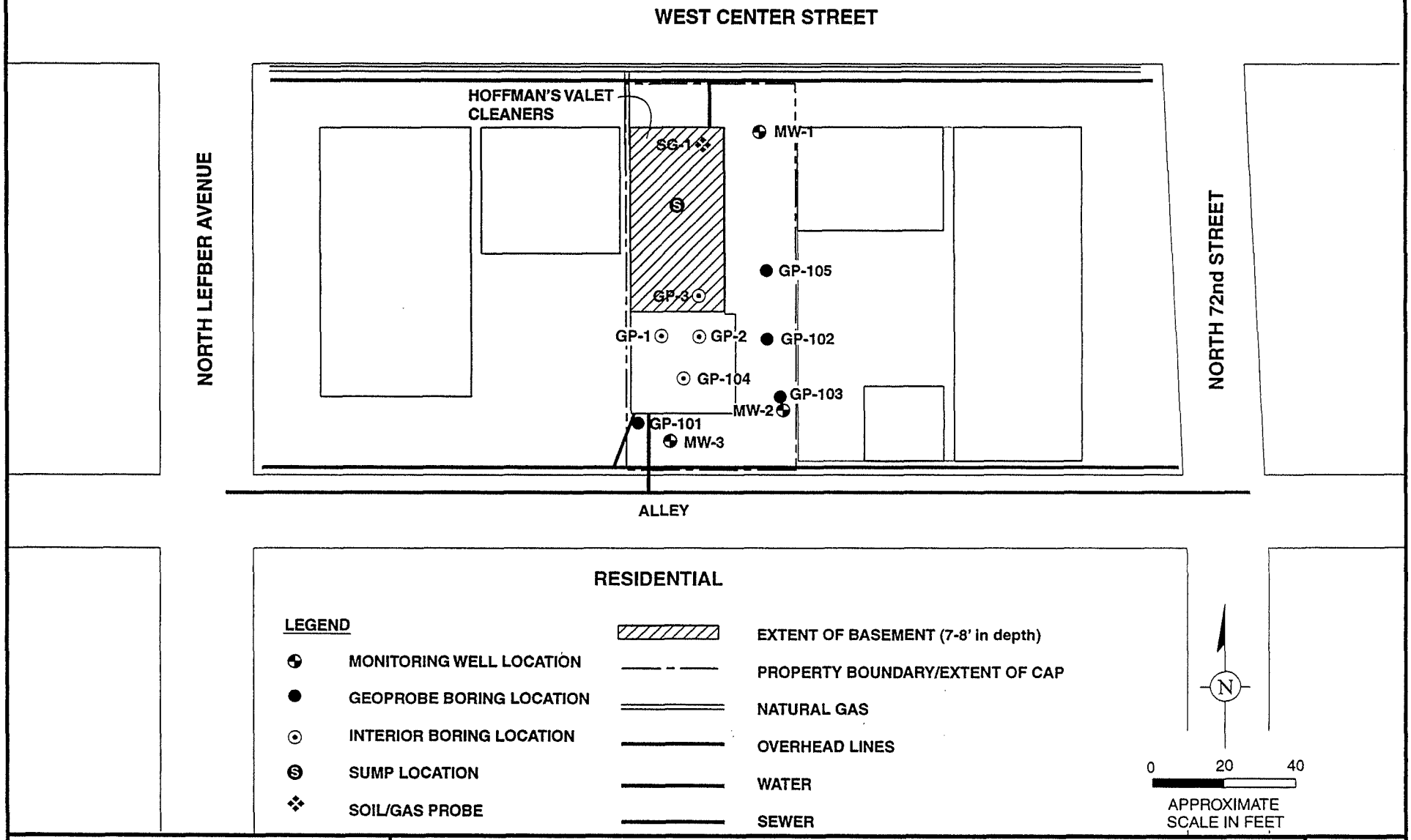
SITE LOCATION MAP

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE

1

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: SAMP LOC EXT CAP.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



ARCADIS

SAMPLE LOCATIONS WITH EXTENT OF CAP

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
1

ARCADIS

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID		SSL	SSL	GP-1	GP-2	GP-101		GP-102		GP-103	
Sample Depth (ft bls)	SSL	Vapor	Groundwater	6-8	4-6	7-11	11-15	4-8	12-16	8-12	12-16
Sample Date	Ingestion	Inhalation	Protection	02/07/02	02/07/02	09/12/02	09/12/02	09/12/02	09/12/02	09/12/02	09/12/02
VOCs											
cis-1,2-Dichloroethene	156,000	1,300,000	27	53	<10	<25	<25	<25	<25	<25	<25
Ethylbenzene	--	--	2,900	<10	<10	<25	<25	<25	<25	<25	<25
Fluorotrichloromethane	4,690,000	410,000	9,200	NA	NA	<25	<25	<25	<25	<25	<25
Methylene Chloride	8,520	2,700	0.98	21 Q	14 Q	<25	<25	<25	<25	<25	<25
Naphthalene	313,000	68,000	340	NA	NA	50 Q	<25	<25	<25	<25	<25
Tetrachloroethene	1,230	2,100	4.1	51	240	<25	<25	150	<25	400	<25
Xylenes, Total	--	--	4,100	<20	<20	<50	<50	<50	<50	<50	<50

Constituent concentrations are reported in micrograms per kilogram (µg/kg).

[ ]	Concentration exceeds the Soil Screening Level for the protection of groundwater.
Bold	Concentration exceeds the soil screening level for vapor inhalation and ingestion.
ft bls	Feet below land surface.
ID	Identification.
NA	Not analyzed.
SSL	Soil Screening Level.
Q	Analyte detected between the Limit of Detection and the Limit of Quantitation.
VOCs	Volatile organic compounds.

ARCADIS

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID		SSL	SSL	GP-104		GP-105		MW-1	MW-2	MW-3
Sample Depth (ft bls)	SSL	Vapor	Groundwater	4-6	8-9	8-12	12-16	10-12	10-12	10-12
Sample Date	Ingestion	Inhalation	Protection	09/12/02	09/12/02	09/12/02	09/12/02	01/19/05	01/19/05	01/19/05
VOCs										
cis-1,2-Dichloroethene	156,000	1,300,000	27	<25	<25	<25	<25	<29	<28	<31
Ethylbenzene	--	--	2,900	<25	<25	<25	<25	<29	<28	<31
Fluorotrichloromethane	4,690,000	410,000	9,200	61	<25	<25	<25	<29	<28	<31
Methylene Chloride	8,520	2,700	0.98	<25	<25	<25	<25	72	96	<62
Naphthalene	313,000	68,000	340	<25	<25	<25	<25	<29	<28	<31
Tetrachloroethene	1,230	2,100	4.1	41 Q	45 Q	130	<25	**2,800**	**3,720**	<31
Xylenes, Total	--	--	4,100	<50	<50	<50	<50	<58	<56	<62

Constituent concentrations are reported in micrograms per kilogram (µg/kg).

[ ]	Concentration exceeds the Soil Screening Level for the protection of groundwater.
Bold	Concentration exceeds the soil screening level for vapor inhalation and ingestion.
ft bls	Feet below land surface.
ID	Identification.
NA	Not analyzed.
SSL	Soil Screening Level.
Q	Analyte detected between the Limit of Detection and the Limit of Quantitation.
VOCs	Volatile organic compounds.

ARCADIS

Table 1. Soil Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID		SSL	SSL	GP-3	
Sample Depth (ft bls)	SSL	Vapor	Groundwater	8-10	10-12
Sample Date	Ingestion	Inhalation	Protection	01/08/07	01/08/07
VOCs					
cis-1,2-Dichloroethene	156,000	1,300,000	27	<35	<54
Ethylbenzene	--	--	2,900	80	130
Fluorotrichloromethane	4,690,000	410,000	9,200	NA	NA
Methylene Chloride	8,520	2,700	0.98	<69	<110
Naphthalene	313,000	68,000	340	<69	<110
Tetrachloroethene	1,230	2,100	4.1	**2,500**	**5,200**
Xylenes, Total	--	--	4,100	320	550

Constituent concentrations are reported in micrograms per kilogram (µg/kg).

	Concentration exceeds the Soil Screening Level for the protection of groundwater.
Bold	Concentration exceeds the soil screening level for vapor inhalation and ingestion.
ft bls	Feet below land surface.
ID	Identification.
NA	Not analyzed.
SSL	Soil Screening Level.
Q	Analyte detected between the Limit of Detection and the Limit of Quantitation.
VOCs	Volatile organic compounds.

ARCADIS

Table 4. Groundwater Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	NR 140	NR 140	GP-102	GP-103	GP-105	MW-1		MW-99*	MW-1	MW-99*	MW-1
Sample Date	ES	PAL	09/12/02	09/12/02	09/12/02	01/28/05	01/08/07	01/08/07	04/05/07	04/05/07	07/03/07
VOCs											
Methylene Chloride	5	0.5	<0.43	<0.43	<0.43	<1.0	<0.43	<0.43	<0.43	<0.43	<0.43
Tetrachloroethene	5	0.5	<0.63	2.9	<0.63	<0.50	1.1	1.1	1.4 Q	1.4 Q	1.0 Q
Trichloroethene	5	0.5	<0.48	<0.48	<0.48	<0.20	<0.48	<0.48	<0.48	<0.48	0.81 Q

Constituent concentrations are reported in micrograms per liter (µg/L).

[ ]	Concentration exceeds the NR 140 PAL.
BOLD	Concentration exceeds the NR 140 ES.
ID	Identification.
ES	NR 140 Enforcement Standard.
PAL	NR 140 Preventive Action Limit.

Table 4. Groundwater Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	NR 140	NR 140	MW-99* (continued)	MW-2				MW-3			
Sample Date	ES	PAL	07/03/07	01/28/05	01/08/07	04/05/07	07/03/07	01/28/05	01/08/07	04/05/07	07/03/07
VOCs											
Methylene Chloride	5	0.5	0.73 Q	<1.0	<1.0	<0.43	<0.43	<1.0	<1.0	<0.43	<0.43
Tetrachloroethene	5	0.5	1.2 Q	<0.50	<0.50	**5.5**	1.7	<0.50	<0.50	<0.45	<0.45
Trichloroethene	5	0.5	1.4 Q	<0.20	<0.20	<0.48	0.95 Q	<0.20	<0.20	<0.48	<0.48

Constituent concentrations are reported in micrograms per liter (µg/L).

	Concentration exceeds the NR 140 PAL.
BOLD	Concentration exceeds the NR 140 ES.
ID	Identification.
ES	NR 140 Enforcement Standard.
PAL	NR 140 Preventive Action Limit.

ARCADIS

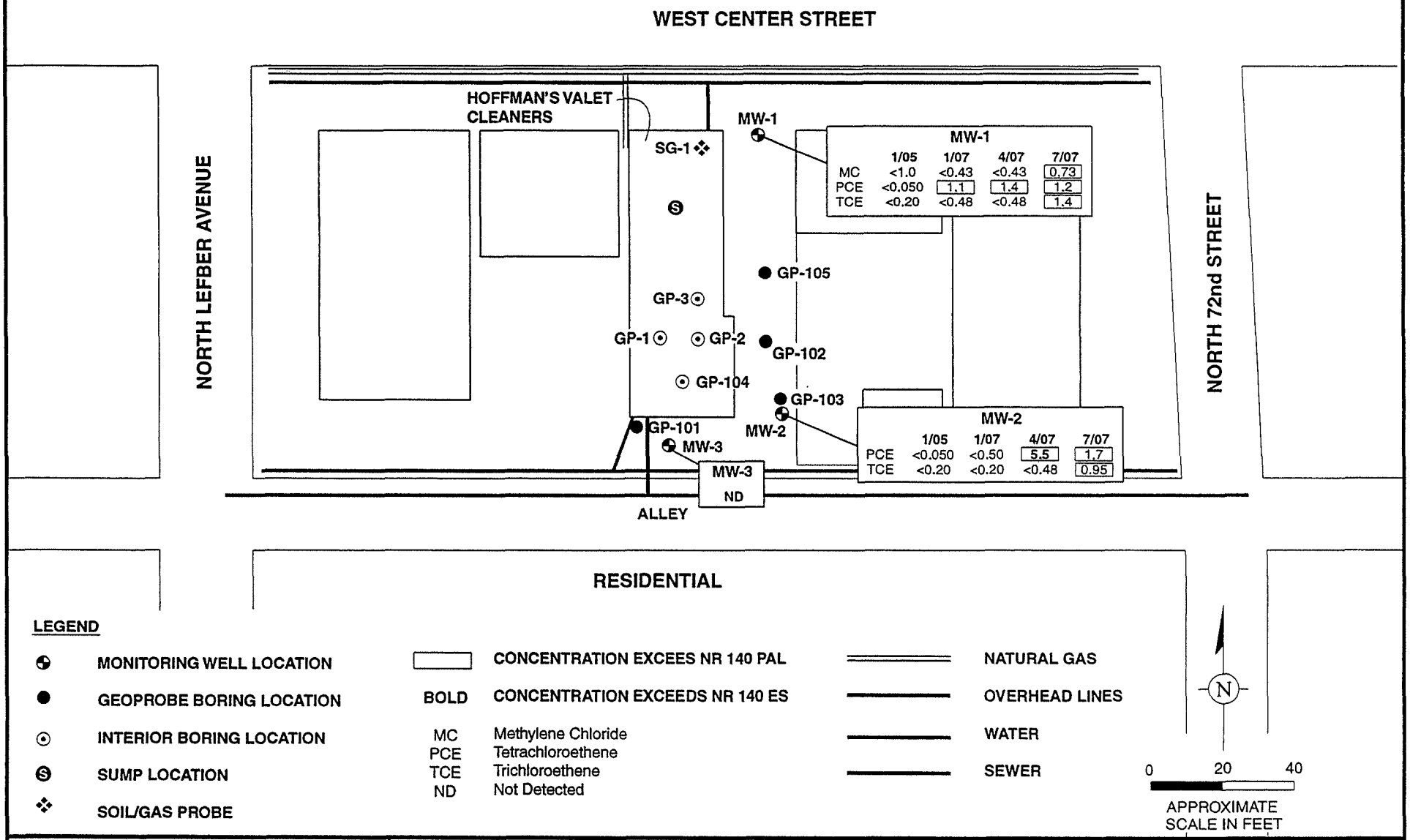
Table 4. Groundwater Analytical Results, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Sample ID	Trip Blank			
Sample Date	**01/28/05**	**01/08/07**	**04/05/07**	**07/03/07**
VOCs				
Methylene Chloride	<1.0	<1.0	<0.43	1.3 Q
Tetrachloroethene	<0.50	<0.50	<0.45	<0.45
Trichloroethene	<0.20	<0.20	<0.48	0.95 Q

Constituent concentrations are reported in micrograms per liter (µg/L).

	Concentration exceeds the NR 140 PAL.
BOLD	Concentration exceeds the NR 140 ES.
ID	Identification.
ES	NR 140 Enforcement Standard.
PAL	NR 140 Preventive Action Limit.

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: MW GW ANA RES.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



LEGEND

- MONITORING WELL LOCATION
- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- SUMP LOCATION
- SOIL/GAS PROBE

- CONCENTRATION EXCEES NR 140 PAL
- BOLD — CONCENTRATION EXCEEDS NR 140 ES
- MC — Methylene Chloride
- PCE — Tetrachloroethene
- TCE — Trichloroethene
- ND — Not Detected

- NATURAL GAS
- OVERHEAD LINES
- WATER
- SEWER

N

0 20 40

APPROXIMATE SCALE IN FEET

ARCADIS

MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
8

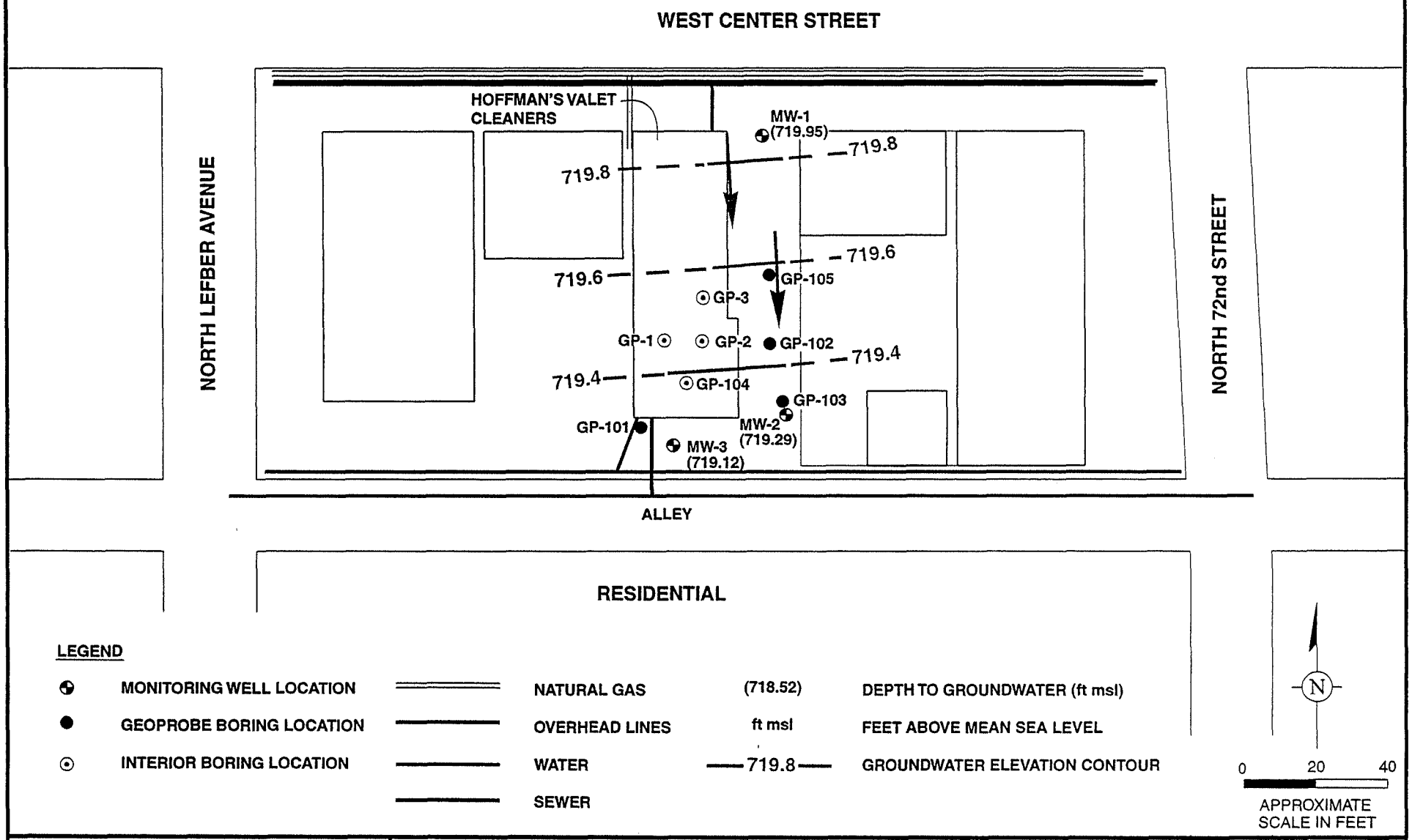
Table 3. Static Groundwater Elevation Data, Hoffman's Valet Cleaners, 7215 W. Center Street, Wauwatosa, Wisconsin.

Monitoring Well	Ground Surface Elevation (ft msl)	Top-of-Casing Elevation (ft msl)	Screened Interval (ft msl)	Measurement Date	Depth to Water (feet)	Water Level Elevation (ft msl)
MW-1	734.85	733.91	723.85 - 713.85	1/28/05	16.53	717.38
				1/8/07	13.91	720.00
				4/5/07	13.96	719.95
				7/3/07	13.83	720.08
MW-2	733.73	733.01	723.73 - 713.73	1/28/05	14.42	718.59
				1/8/07	14.12	718.89
				4/5/07	13.72	719.29
				7/3/07	14.25	718.76
MW-3	733.49	733.13	723.49 - 713.49	1/28/05	14.61	718.52
				1/8/07	14.2	718.93
				4/5/07	14.01	719.12
				7/3/07	14.35	718.78

* Ground surface elevation is based USGS elevation datum and standard leveling techniques.

ft msl Feet above mean sea level.

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: POTEN MAP 4507.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



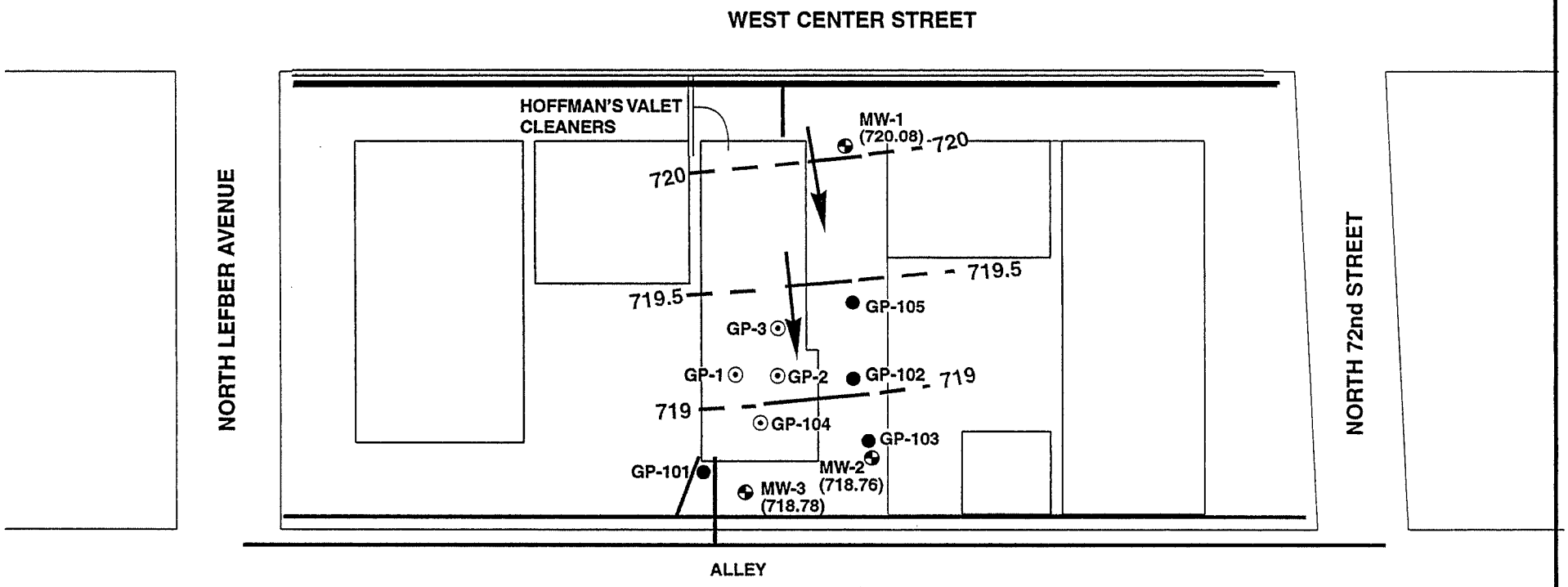
ARCADIS

POTENTIOMETRIC SURFACE MAP
APRIL 5, 2007

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
6

DWG DATE: 26JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: POTEN MAP 7307.AI	CHECKED: BJM	APPROVED:	DRAFTER: LMB



LEGEND

- MONITORING WELL LOCATION
- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- NATURAL GAS
- OVERHEAD LINES
- WATER
- SEWER
- (718.52) ft msl — DEPTH TO GROUNDWATER (ft msl) / FEET ABOVE MEAN SEA LEVEL
- 718.5 — GROUNDWATER ELEVATION CONTOUR

N

0 20 40

APPROXIMATE SCALE IN FEET

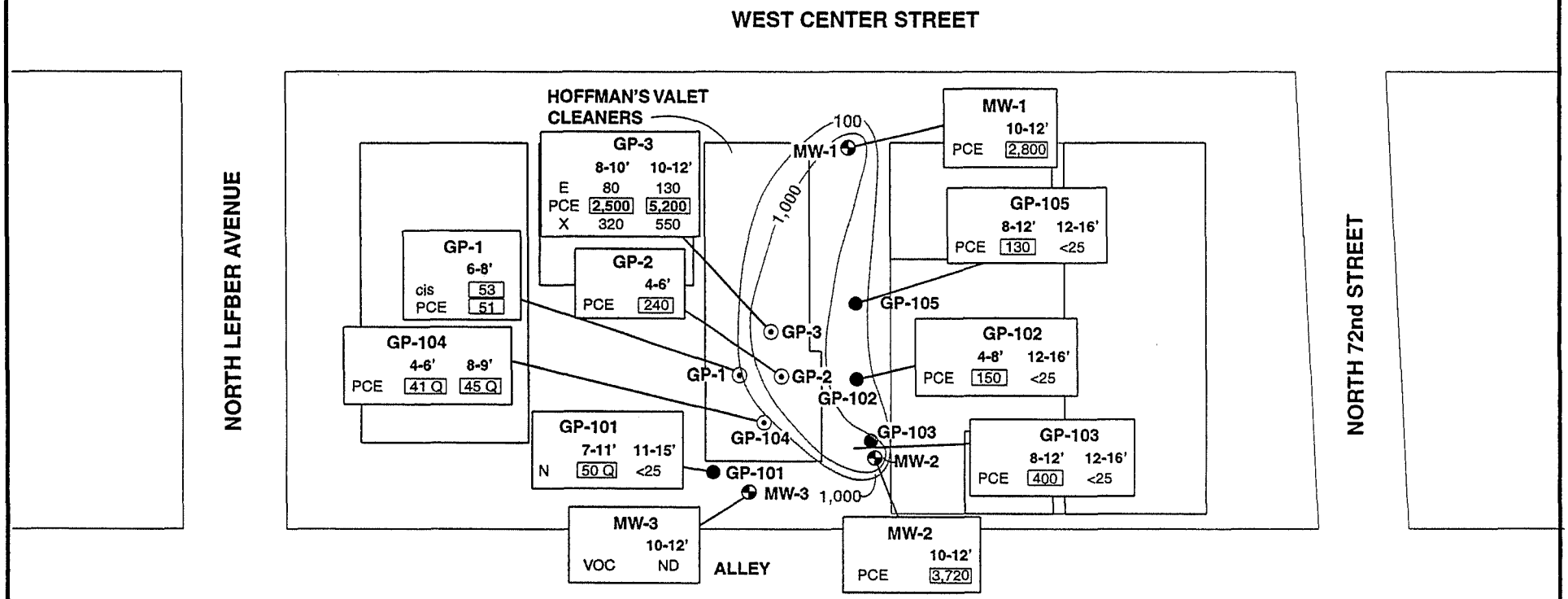
ARCADIS

POTENTIOMETRIC SURFACE MAP
JULY 3, 2007

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
7

DWG DATE: 27JUL07	PN: HOFFMAN\WI0943\WAUWATOSA	FILE NO.: GRAPHICS	DRAWING: SOIL ANA RES.AI	CHECKED: EAB	APPROVED:	DRAFTER: LMB



RESIDENTIAL

LEGEND

- MONITORING WELL LOCATION
- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- —10— ESTIMATED ISOCONCENTRATION CONTOUR FOR PCE
- CONCENTRATION EXCEEDS GROUNDWATER SSLs

BOLD	**CONCENTRATION EXCEEDS GROUNDWATER, INHALATION, & INGESTION SSLs**
cis	cis-1,2-Dichloroethene
E	Ethylbenzene
PCE	Tetrachloroethene
N	Naphthalene
VOC	Volatile Organic Compounds
X	Xylenes, total
ND	Not Detected
Q	Detected at a concentration between the limit detection and limit of quantitation.

Concentrations are expressed as micrograms per kilogram.

N

0 20 40

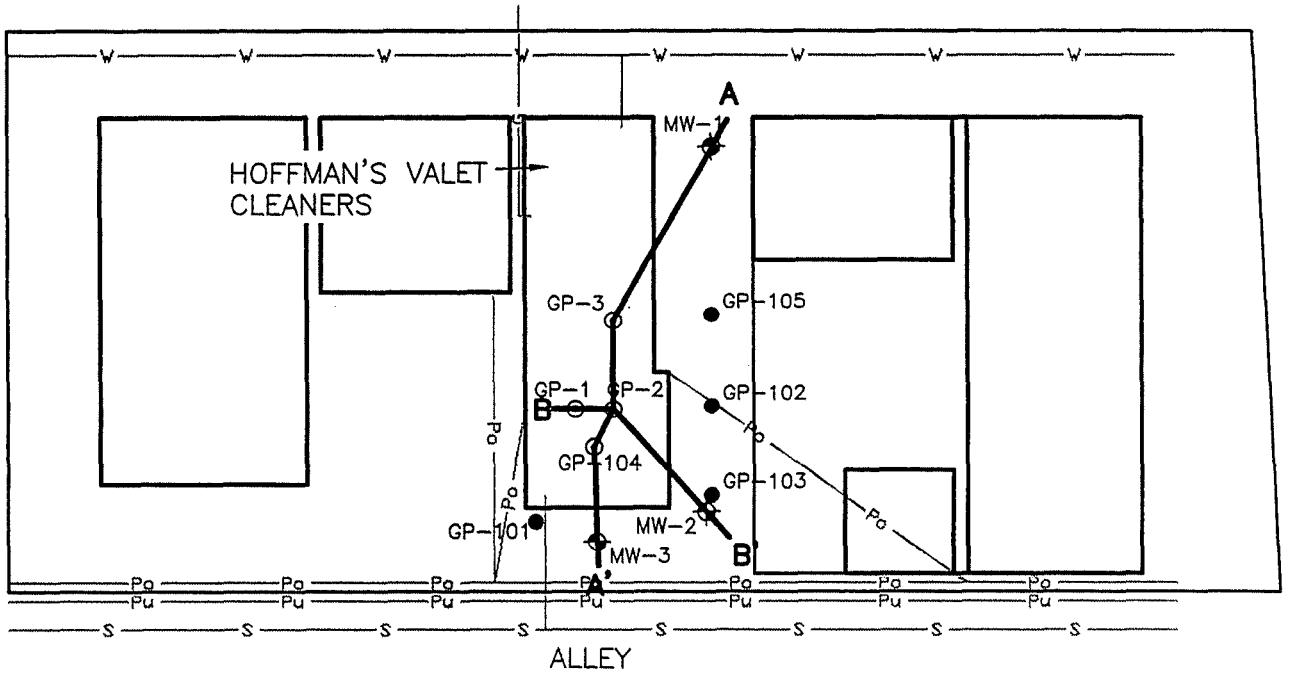
APPROXIMATE SCALE IN FEET

ARCADIS

SOIL ANALYTICAL RESULTS

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
2



RESIDENTIAL

LEGEND

- GEOPROBE BORING LOCATION
- INTERIOR BORING LOCATION
- MONITORING WELL LOCATION
- G — GAS UTILITY LINE
- Po — POWER OVERHEAD LINE
- Pu — POWER UNDERGROUND LINE
- S — STORM SEWER LINE
- W — WATER MAIN LINE
- A — A' GEOLOGIC CROSS-SECTION LOCATION

N

0 20 40

SCALE IN FEET

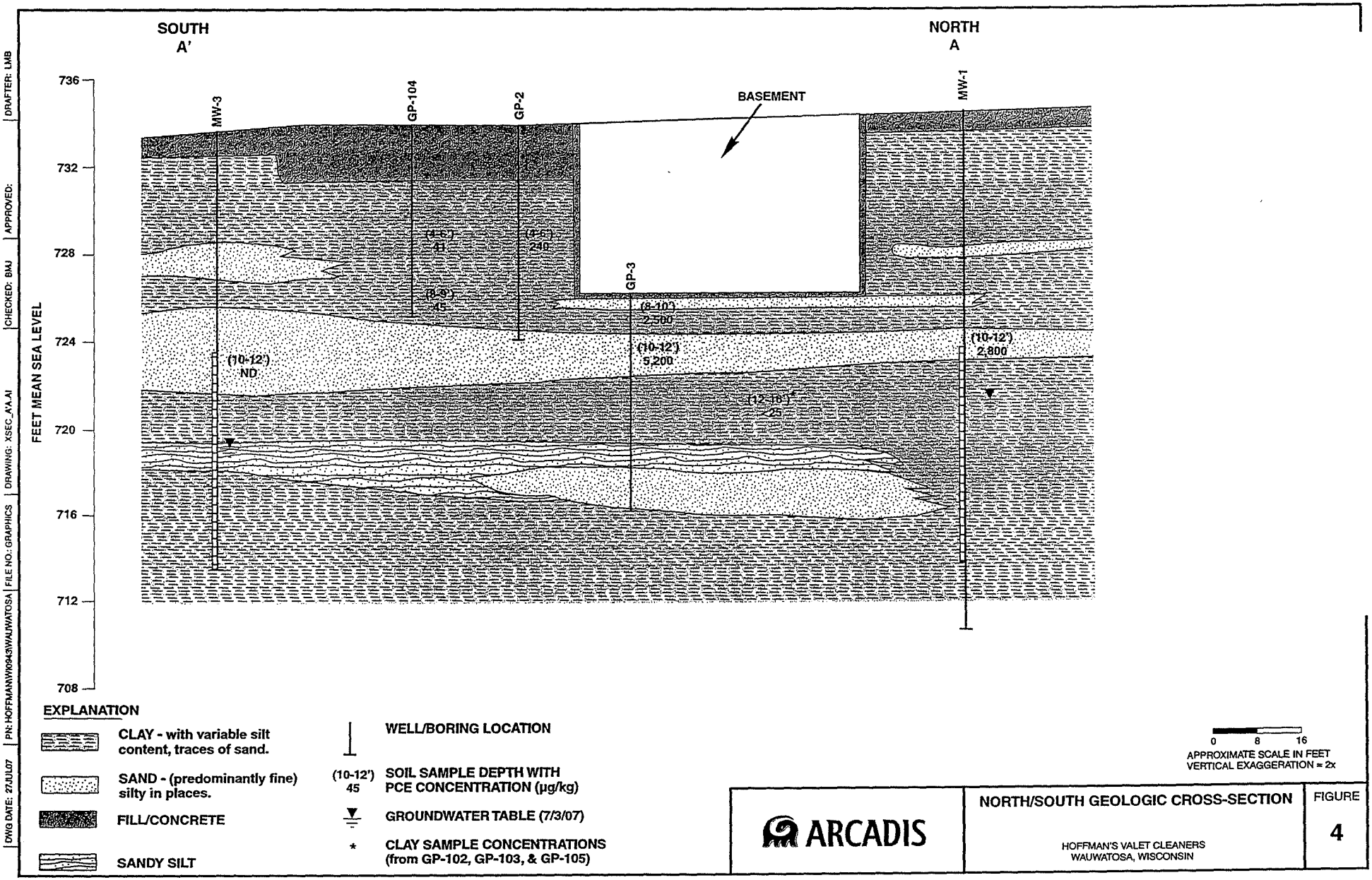
Area Manager	M. MAIERLE
Project Director	E. BUC
Task Manager	B. MAILLET
Technical Review	A. MUMPY

ARCADIS
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

CROSS-SECTION LOCATIONS

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

Project Number	WI000943.0002
Drawing Date	3/11/05
Figure	3



EXPLANATION

- CLAY - with variable silt content, traces of sand.
- SAND - (predominantly fine) silty in places.
- FILL/CONCRETE
- SANDY SILT
- WELL/BORING LOCATION
- (10-12') 45 — SOIL SAMPLE DEPTH WITH PCE CONCENTRATION (µg/kg)
- GROUNDWATER TABLE (7/3/07)
- * — CLAY SAMPLE CONCENTRATIONS (from GP-102, GP-103, & GP-105)

0 8 16
APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 2x

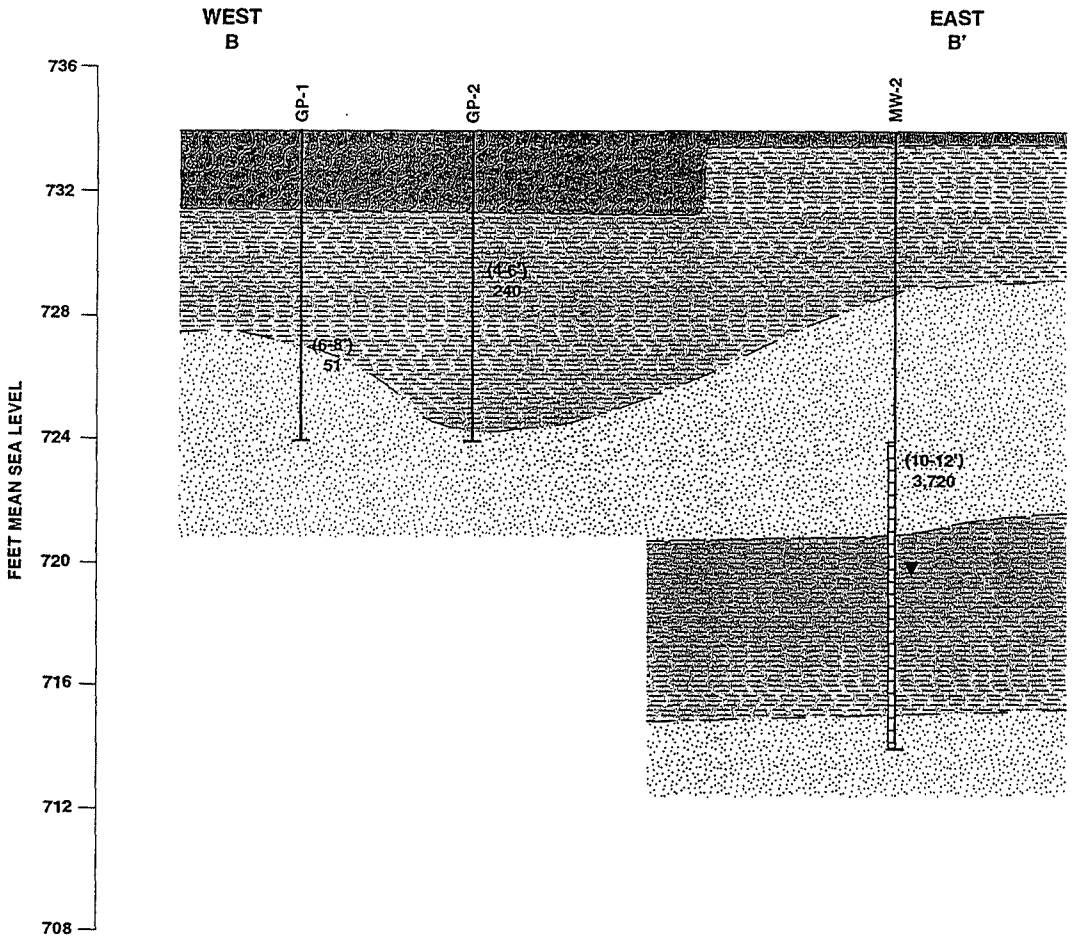
ARCADIS

NORTH/SOUTH GEOLOGIC CROSS-SECTION

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE 4

DWG DATE: 27JUL07 | PN: HOFFMANW09943\WAUWATOSA | FILE NO.: GRAPHICS | DRAWING: XSEC_A'A.AI | CHECKED: BMJ | APPROVED: | DRAFTER: LMB



EXPLANATION

- CLAY - with variable silt content, traces of sand.
- SAND - (predominantly fine) silty in places.
- FILL/CONCRETE
- WELL/BORING LOCATION
- (6-8') 51 SOIL SAMPLE DEPTH WITH PCE CONCENTRATION (µg/kg)
- GROUNDWATER TABLE (7/3/07)

0 4 8
APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 2x

ARCADIS

WEST/EAST GEOLOGIC CROSS-SECTION

HOFFMAN'S VALET CLEANERS
WAUWATOSA, WISCONSIN

FIGURE
5

DRAFTER: LMB | APPROVED: | CHECKED: BMJ | DRAWING: XSEC_BB.AI | FILE NO.: GRAPHICS | PN: HOFFMAN\W0094\WAUWATOSA | DWG DATE: 27-JUL-07

ARCADIS

Certification of Legal Description

Parcel Identification No. 331-0695-00

7215 West Center Street

Wauwatosa, Wisconsin

Lot 3, in Block 15, in Ritter Oak Ridge Extension, being a Subdivision of a part of the South West ¼ of Section 15, in Township 7 North, Range 21 East, In the City of Wauwatosa, County of Milwaukee, State of Wisconsin.

I, Ralph L. Hoffman, certify that the legal description provided above and on the attached Warranty Deed (Doc#39255, recorded on 2-01-2000) is complete and accurate to the best of my knowledge for the purpose of registering this site onto the Wisconsin Geographical Information System (GIS) Registry of Closed Remediation Sites.

Signature: Ralph L. Hoff

Title: Owner

Date: 4/22/05