BBR T# 09-41-5487/0

DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

Milwaukee County

George A. Torres • Director

RECEIVED
JAN 19 2007
By T.P.

January 16, 2007

Vicky Stovall
Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee, Wisconsin 53212

RE: Milwaukee County Transit Fleet Maintenance Facility
Abandonment-in-place of UST # 303913 (Co. Tank # T-36)
1525 W. Vine Street, Milwaukee, Wisconsin 53022

Dear Vicky:

Please find enclosed the site assessment report for the abandonment-in-place of an underground storage tank (UST) at the Milwaukee County Transit Fleet Maintenance Facility.

Milwaukee County respectfully requests that the Department assign a No Action Required status to this site based on very low contaminant levels detected in soil samples collected during the site assessment of the above-referenced UST.

This recommendation is based on the following information:

- The 550-gallon fiberglass UST was abandoned-in-place on December 6, 2006.
- Two soil samples were collected from 7 to 8.5 feet below ground surface (bgs) underneath the UST and were analyzed for Diesel Range Organics (DRO). DRO was detected at concentrations ranging from **3.518 mg/kg** and **13 mg/kg**.
- The site is supplied with municipal water and sewer. No municipal or private wells are located within 1,000 and 100 feet respectively from the former UST area:
- The site will remain paved minimizing surface water infiltration and contaminant migration.
- No other receptors or environmental sensitive areas are present at the site.

Based on the above information, Milwaukee County requests that the Department assign a no action required status for this site.

If you have any questions or comments regarding this site, please do not hesitate to call me at (414) 278-2988.

Sincerely,

Tim Detzer
Environmental Engineer

C: Frank Bednar, Milwaukee County Transit System
Gary Mick, Milwaukee County

MILWAUKEE COUNTY-CITY CAMPUS • 2711 WEST WELLS STREET • MILWAUKEE, WI 53208

PHONE NUMBERS: Administration 278-4835 – Transportation 278-5096 – Architecture & Engineering 278-4846
FAX NUMBERS: Administration 223-1899 – Transportation 223-1850 – Architecture & Engineering 223-1366

State of Wisconsin
Department of Natural Resources

RECEIVED
JAN 19 2007

Fax Notification For Hazardous Substance Discharge (Non-Emergency Only)

Form 4400-225 (07/03) Page 1 of 2

Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003

Notice: Hazardous substance discharges must be reported immediately according to the "Spills Law", s. 292.11 Wis. Stats., Section NR 706.05(1)(b), Wis. Adm. Code, requires that hazardous substance discharges are to be reported by one of three methods: telephoning the Department (toll free Spill Hotline number above), telefaxing a report to the Department or visiting a Department office in person. If you choose to notify the Department by telefax, you should use this form to be sure that all necessary information is included. However use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than $10 nor more than $5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.). Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** FAX it to the appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from **(check one)**:

- [X] Underground Petroleum Storage Tank System
- [ ] Aboveground Petroleum Storage Tank System
- [ ] Dry Cleaner Facility (DERP eligibility based on: ☐ Facility owner/operator ☐ Property owner of licensed facility)
- [ ] Other - Describe:

TO DNR, ATTN: **R & R Program Assistant** SOUTHEAST REGION	(Area Code) FAX Number (414) 263-8483

1. Discharge reported by:

Name	Firm	Date FAXed to DNR
GOPAL K. ADHIKARY	HIMALAYAN CONSULTANTS	12/19/2006
Mailing Address		**(Area Code) Phone Number**
P.O. BOX 693, GERMANTOWN, WI 53022		(262) 502-0066

2. Site Information

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence / vacant property FLEET MAINTENANCE TRANSIT CENTER

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60

1525 VINE STREET, MILWAUKEE, WI 53205

Municipality (City, Village, Township) Specify municipality in which the site is located, not mailing address/city

MILWAUKEE

County:	Legal Description:
MILWAUKEE	SE 1/4, NE 1/4, Section 19 Tn 7 Range 22 E [X] or W [ ]

3. Responsible Party (RP) and/or RP Representative

☐ Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all Attach additional pages as necessary

MILWAUKEE COUNTY

☐ Reported in compliance with s. 292.11(2), Wis. Stats., by a local government exempt from liability under s. 292.11(9)(e), Wis. Stats. For more information see http://www.dnr.state.wi.us/org/aw/rr/liability/muni_1.html

Contact Person Name (if different)		Phone Number	
TIM DETZER/MILWAUKEE Co. DTPW-ENVIRONMENTAL SERVICES		(414) 278-2988	
Mailing Address	**City**	**State**	**ZIP Code**
2711 W. WELLS STREET #213	MILWAUKEE	WI	53208

(continued)

4. Hazardous Substance Impact Information

Identify hazardous substance discharged (check all that apply):

METALS
- ☐ Arsenic
- ☐ Chromium
- ☐ Lead
- ☐ Mercury
- ☐ Metals (specify):_____

SOLVENTS
- ☐ Solvent-Chlorinated
- ☐ Solvent-Non Chlorinated
- ☐ PERC
- ☐ VOC's

INDUSTRIAL CHEMICALS
- ☐ Ammonia
- ☐ Cyanide
- ☐ Paint
- ☐ PCB's
- ☐ VOC's
- ☐ Fertilizers
- ☐ Pesticide/Herbicide/Insecticide(s)
- ☐ Leachate
- ☐ RCRA Hazardous Waste

PETROLEUM
- ☒ Diesel/Fuel Oil
- ☐ Engine Oil/Waste Oil
- ☐ Mineral/Transmission/Hydraulic Oil
- ☐ Gasoline (Pb/Non-Pb/Unknown)
- ☐ Jet Fuel/Kerosene
- ☐ MTBE
- ☐ VOC's
- ☐ PAH's/SVOC
- ☐ Petroleum-Unknown Type
- ☐ Other (specify):_____
- ☐ Unknown

Impacts to the environment (enter "K" for known/confirmed or "P" for potential for all that apply)

- ___ Air Contamination
- ___ Co-contamination
- ___ Concrete/Asphalt
- ___ Contained/Recovered
- ___ Contamination Within 1 Meter of Bedrock
- ___ Contaminated Private Well
- ___ Contaminated Public Well
- ___ Contamination in Fractured Bedrock
- ___ Contamination in Right of Way
- ___ Direct Contact
- ___ Expanding Plume
- ___ Fire Explosion Threat
- ___ Free Product
- ___ Groundwater Contamination
- ___ Off-Site Contamination
- ___ Other
- ___ Sanitary Sewer Contamination
- K Soil Contamination
- ___ Storm Sewer Contamination
- ___ Surface Water Contamination
- ___ Within 100 ft of Private Well
- ___ Within 1000 ft of Public Well

Contamination was discovered as a result of:

☒ Tank closure assessment Date 12/6/2006
☐ Site assessment Date 11/30/2006
Other – Describe:_____ Date

Lab results:
- ☐ Lab results will be faxed upon receipt
- ☒ Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.

FAX numbers to report non-emergency releases in DNR's five regions are as follows:

Northeast Region (920-492-5859); Attention - RR Program Assistant:
Brown, Calumet, Door, Fond du Lac ***(except City of Waupun - see South Central Region)***, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Waupaca, Waushara, Winnebago Counties

Northern Region (715-365-8932); Attention - RR Program Assistant:
Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn Counties

South Central Region (608-275-3338); Attention - RR Program Assistant:
Columbia, Dane, Dodge, Fond du Lac ***(City of Waupun only)***, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk Counties

Southeast Region (414-263-8483); Attention - RR Program Assistant:
Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, Waukesha Counties

West Central Region (715-839-6076); Attention – RR Program Assistant:
Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood Counties

HIMALAYAN CONSULTANTS, LLC

Engineers and Hydrogeologists

N116 W 16150 Main Street, P.O. Box 693, Germantown, WI 53022

SITE ASSESSMENT FOR UNDERGROUND STORAGE TANK

Milwaukee County Transit's Fleet Maintenance Facility
1525 Vine Street, Milwaukee, Wisconsin

Himalayan Consultants, LLC (Himalayan) performed a site assessment in conjunction with the closure-in-place of a 550-gallon underground storage tank (UST) located at Milwaukee County Transit's Fleet Maintenance Facility (see Figure 1, Appendix A for general location of the site). The diesel fuel UST was associated with an emergency generator located at the maintenance facility. Himalayan was contracted by Milwaukee County to conduct the UST site assessment.

1.0 UST SITE INFORMATION

The following is the UST site information:

UST System/Land Owner:	Milwaukee County Department of Transportation and Pubic Works 2711 W. Wells Street, 2nd Floor Milwaukee, Wisconsin 53208 Contact: Tim Detzer, Environmental Engineer Phone: (414) 278-2988
UST Site Address:	MCTS Fleet Maintenance Facility 1525 W. Vine Street Milwaukee, Wisconsin 53208
Legal Description:	SE ¼, NE ¼, Section 19, T 7N, R 22E
Certified Site Assessor:	Gopal K. Adhikary Himalayan Consultants, LLC N116 W 16150 Main Street, Suite #2 P.O. Box 693 Germantown, WI 53022 Phone: (262) 502-0066 Site Assessor Certification Number: 41905

The land adjacent to the UST site has historically been used for automobile servicing and parking. Due to the tank's proximity to the building, removal activities could compromise the foundation integrity. Therefore closure-in-place has been deemed appropriate for this UST.

The subject building is serviced by City of Milwaukee municipal water supply, which is derived from Lake Michigan surface water.

2.0 TANK ACTIVITIES

2.1 UST Information

UST Description:	Capacity: 550 gallons Dimension: Length = 6 feet, Diameter = 48 inches Age: Unknown Substance stored: Diesel Fuel
UST Closure Contractor:	Petroleum Equipment, Inc. 3950 W. Douglas Avenue Milwaukee, WI 53209 Contact: Duane C. Lindhorst Phone: (414) 466-3000 Tank Remover/Cleaner Certification Number: 42183
Date of Closure-In-Place:	12/06/2006

Petroleum Equipment, Inc. (PEI) completed an Underground Flammable / Combustible / Hazardous / Liquid Storage Tank Registration Form (ER-7437) for the tank; for the purpose of registering the tank in accordance with the requirements of Wis. Adm. Code Comm 10. A copy of this form is presented in Appendix B.

A Checklist for Tank Closure Form (ERS-8951) was also completed for the tank and signed by the City of Milwaukee Building Inspector, Mr. Tim Temperly. A copy of this form is presented in Appendix C.

2.2 UST Cleaning and Abandonment

According to Duane Lindhorst of PEI, the UST was closed-in-place by cleaning the tank and then filling with inert material (slurry consisting of concrete and fly ash). Mr. Lindhorst noted that the UST was properly inerted of any explosive gases by an eductor, prior to cleaning. According to Lindhorst, no significant tank sludge or any wastewater was encountered during

tank cleaning activities. Absorbents were used to wipe out and clean the tank bottom. Inert material was then poured into the tank through a fill pipe until the tank was full.

3.0 SOIL SAMPLING AND FIELD SCREENING

On November 30, 2006, Wisconsin Soil Testing (WST), under a contract with Himalayan, advanced two soil borings near the UST area using a truck-mounted rotary drilling rig (See Figure 2, Appendix A for boring locations). The drilling and sampling was performed in general accordance with specifications for the Standard Penetration Test (SPT) ASTM D-1586 using hollow stem augers. The borings were advanced adjacent to each end of the UST to collect soil sample(s) from beneath the tank bed (See site photographs in Appendix G). Each boring was blind-drilled to just below the tank bed depth [about 7 feet below ground surface (bgs)].

A soil sample was collected from each boring [B-1 and B-2] at a depth of 7 to 8.5 feet bgs. Both samples were submitted to APL, Inc. [WDNR Certified Laboratory #241340550] for DRO analysis in accordance with WDNR UST Site Assessment guidelines [Ref. 2]. The analytical method used was WDNR Modified DRO Method for DRO [Ref. 3].

The sediments encountered at 7 to 8.5 feet bgs consisted of native, stiff to very stiff brown silty lays. See soil boring log forms in Appendix D.

No saturated conditions were observed in the borings during drilling within 8.5 feet bgs, the maximum depth explored. Based on the absence of any significant redoximorphic features (soil mottling) observed in the soil samples, depth to groundwater is likely to be greater than 8.5 feet bgs.

The boreholes were properly abandoned by backfilling with bentonite chips after completion of sampling, in accordance with Wis. Adm. Code NR 141 requirements. See borehole abandonment forms for each boring presented in Appendix D.

4.0 FIELD SCREENING AND LABORATORY ANALYTICAL RESULTS

Himalayan field-screened the soil samples for the presence of Volatile Range Organics (VOCs) using a photoionization detector (PID) [MiniRAE 2000] equipped with a 10.6 eV lamp. See sampling and field screening procedures in Appendix E.

The PID screening results for the samples ranged from 0 to 0.1 parts per million (ppm). No obvious petroleum odor or staining was noted in the samples. The PID values for each sample are presented in soil boring logs presented in Appendix D.

Based on laboratory analytical results, DRO concentrations in the samples ranged from 3.518 mg/kg for B-2 (7-8.5) to 13 mg/kg for B-1(7-8.5). See Appendix F for complete laboratory results.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on field observations, PID screening and laboratory analytical results, no significant petroleum impact remains at the UST location. The DRO concentrations are well below the respective NR 720 generic soil residual contaminant level (RCL) of 250 mg/kg (for low permeability soils) for the protection of groundwater quality.

The low level petroleum impact remaining at the site is unlikely to pose any significant risk to human health and the environment. Therefore, WDNR review of this report will most likely result in a "No Action Required" designation. This low risk ranking is based on the following reasons:

- Abandonment-in-place of the primary contaminant source;
- The continued land use of the site as a paved parking space that will limit/minimize any further contaminant migration, surface water infiltration and any direct contact threat;
- The anticipated naturally occurring biodegradation of the residual petroleum impact over time, and;
- The potable water source for the site and surrounding area is provided by the City of Milwaukee.

Consequently, Himalayan recommends that no further site investigation or remediation is necessary for the site.

We hope the above information meets your needs at this time. We greatly appreciate the opportunity to be of service in this project. If you have any questions or comments, which require further clarification, please feel free to contact us at (262) 502-0066.

Sincerely,

HIMALAYAN CONSULTANTS, LLC

Gopal K. Adhikary, P. E.
Principal

Thomas J. Dueppen, P.G.
Senior Geologist/Hydrogeologist

REFERENCES

1. USGS Topographic Map (1958, Photo-revised 1971). Milwaukee Quadrangle, 7.5 minute series.

2. Wisconsin Department of Natural Resources (September 1992). Site Assessments for Underground Storage Tanks Technical Guidance (PUBL-SW-17597).

3. Wisconsin Department of Natural Resources (July 1993). Leaking Underground Storage Tank (LUST) and Petroleum Analytical and Quality Assurance Guidance (PUBL-SW-13093).

LIMITATIONS

Himalayan prepared this report for Milwaukee County's use for evaluation of a potential petroleum release to the subsurface environment at the UST site. It was prepared in accordance with the currently accepted environmental and engineering practices. Because the evaluation is based upon subsurface physical and chemical data obtained from soil borings only at specific locations and times and only to the depths sampled, additional unidentified environmental impacts may be present at the UST site that could not be identified within the scope of the investigation or that were not apparent at the time of report preparation. The conclusions and recommendations contained in this report represent our professional opinions. No warranty or guarantee is expressed or implied regarding the findings of this assessment.

APPENDICES

Appendix A Site Maps and Figures

Figure 1. Site Location Map
Figure 2. Boring/Sample Location Map

Appendix B Underground Flammable/Combustible/Hazardous Liquid Storage Tank Registration Forms (ER-7437)
Appendix C Checklist for Tank Closure (ERS-8951)
Appendix D Soil Boring Log and Borehole Abandonment Form
Appendix E Sampling and Field Screening Procedures
Appendix F Laboratory Analytical Report-Site Assessment Sample
Appendix G Photographs

APPENDIX A

SITE MAPS AND FIGURES

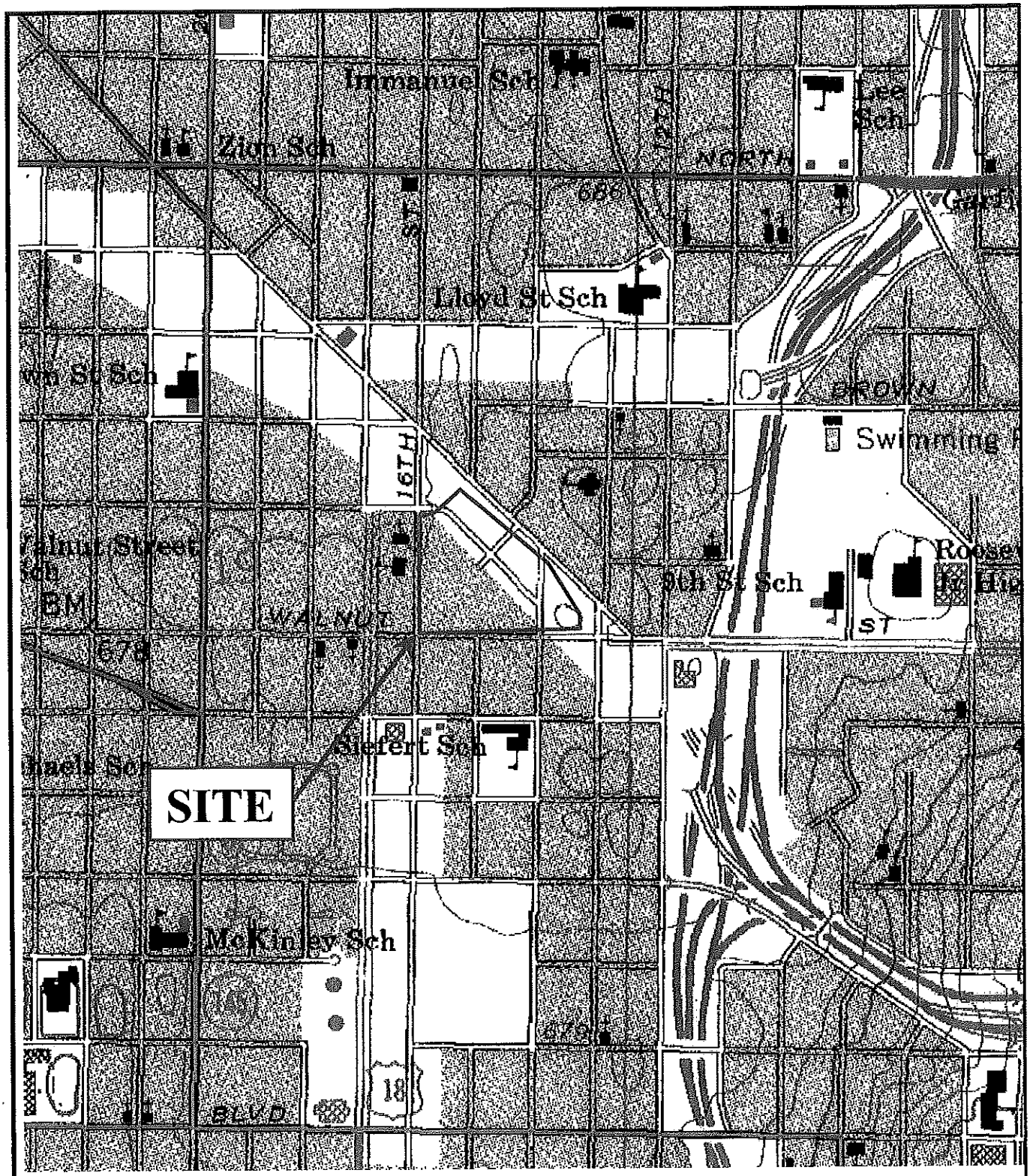


Figure 1. SITE LOCATION MAP

Legend: USGS 7.5' Series Topographic Map – Milwaukee Quadrangle
Scale: 1 inch =~ 660 feet

HIMALAYAN CONSULTANTS, LLC
GERMANTOWN, WISCONSIN
Phone: (262) 502-0066
Fax: (262) 502-0077

MCTS Fleet Maintenance Center
1525 W. Vine Street
Milwaukee County, WI

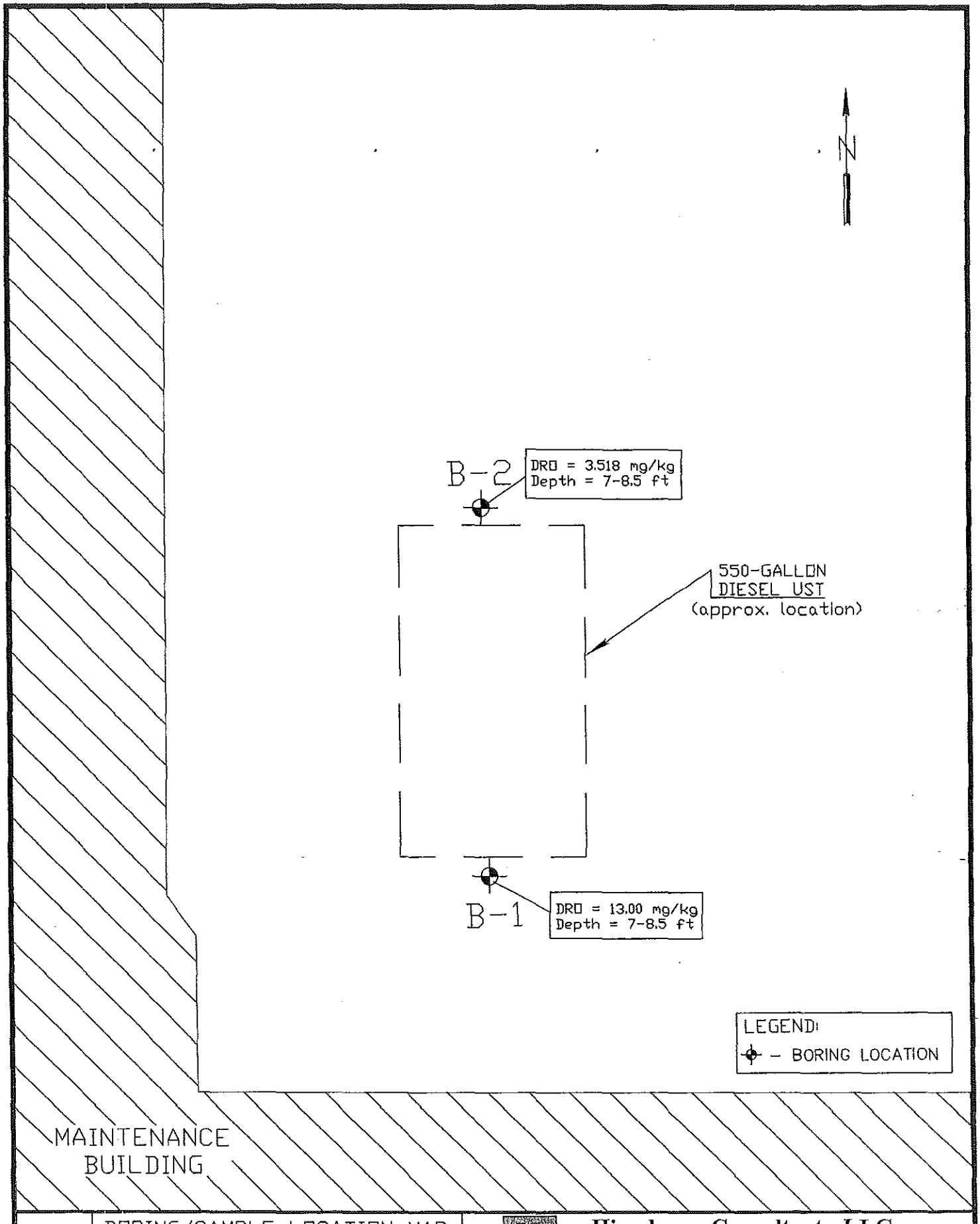


FIGURE 2	BORING/SAMPLE LOCATION MAP MCTS FLEET MAINTENANCE CENTER 1525 W. VINE STREET MILWAUKEE, WISCONSIN	Himalayan Consultants, LLC Germantown, Wisconsin
		Drawn by: TJD | SCALE, FEET 0 1 2 | Date: 12-28-2006

APPENDIX B

UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION FORMS (ER-7437)

File #:
Reg Obj #:

UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION

Information Required By Section 101.142, Wis. Stats. Madison, WI 53707-7837

Send Completed Form To:
Department of Commerce
Bureau of Storage Tank Regulation
P.O. Box 7837
Madison, WI 53707-7837

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner. Have you previously registered this tank by submitting a form? ☒ Yes ☒ No If yes, are you correcting/updating information only? ☒ Yes ☐ No

Personal information you provide may be used for secondary purposes (Privacy Law, s. 15.04 (1)(m)).

This registration applies to a tank status that is (check one):
☐ In Use ☐ Newly Installed ☐ Abandoned with Product ☐ Abandoned without Product (empty)
☐ Closed - Tank Removed ☒ Closed – Filled with Inert Materials ☐ Abandoned with Water ☐ Temporarily Out of Service – Provide Date: ☐ Ownership Change (Indicate new owner name in block 2)

Fire Department providing fire coverage where tank is located:
☒ City ☐ Village ☐ Town of: Milwaukee

A. IDENTIFICATION (Please Print)

1. Tank Site Name	Site Street Address	Site Telephone Number
FLEET MAINTENANCE	1525 W VIRGINIA ST	414 344 4550
☒ City ☐ Village ☐ Town of: Milwaukee	State: WISCONSIN / Zip Code: 53205	County: Mil
2. Tank Owner Name	Mailing Address	Telephone Number
MCTS	1942 N 17th St	
☒ City ☐ Village ☐ Town of: Milwaukee	State: WISCONSIN / Zip Code: 53205	County: Mil
3. Previous Site Name	Previous site address if different than #1	

B. Site ID #: 582521 **Facility ID #:** 303913 **Customer ID #:** 40200-5632

C. Tank Capacity (gallons): 550 Tank Age (age or date installed): Vehicle fueling? ☐ Yes ☒ No

D. LAND OWNER TYPE (check one) Refer to back
☒ County ☐ State ☐ Federal Leased ☐ Federal Owned ☐ Tribal Nation ☐ Municipal ☐ Other Government ☐ Private

E. OCCUPANCY TYPE (check one) Refer to back
☐ Retail Fuel Sales ☐ Bulk Storage ☐ Terminal Storage ☐ Mercantile/Commercial ☐ Industrial ☐ Residential ☐ School
☐ Agricultural (crop of livestock production) ☒ Backup or Emergency Generator ☐ Gov't Fleet ☐ Utility ☐ Other (specify):

F. Tank Construction:
☐ Bare Steel ☐ Coated Steel ☐ Stainless Steel ☐ Steel - Fiberglass Reinforced Plastic Composite
☒ Fiberglass ☐ Unknown ☐ Other (specify): ☐ Lined (date):
Overfill Protection? ☐ Yes ☐ No
Spill Containment? ☐ Yes ☐ No

G. Tank Cathodic Protection: ☐ Sacrificial Anodes ☐ Impressed Current ☐ N/A
Tank Double Walled? ☐ Yes ☒ No

H. Primary Tank Leak Detection Method:
☐ Automatic tank gauging ☐ Interstitial monitoring ☐ Inventory control and tightness testing ☐ Groundwater monitoring ☐ Vapor monitoring
☐ Manual tank gauging (only for tanks of 1,000 gallons or less) ☐ Statistical Inventory Reconciliation (SIR) ☐ Unknown

I. Piping Construction:
☐ Bare Steel ☐ Coated Steel ☐ Stainless Steel ☐ Fiberglass ☐ Flexible ☐ Copper ☐ Unknown ☐ NA ☐ Other

J. Piping Cathodic Protection: ☐ Sacrificial Anodes ☐ Impressed Current ☐ N/A
Pipe Double Walled? ☐ Yes ☐ No

K. Primary Piping System Type: ☐ Pressurized piping with → A. ☐ auto shutoff; B. ☐ alarm, or C. ☐ flow restrictor ☐ Unknown
☐ Suction piping with check valve at tank ☐ Suction piping with check valve at pump and inspectable ☐ Not needed if waste oil

L. Piping Leak Detection Method: (used if pressurized or check valve at tank): ☐ SIR ☐ Tightness testing ☐ Electronic line leak monitor
☐ Groundwater monitoring ☐ Vapor monitoring ☐ Interstitial monitoring ☐ Not required ☐ Unknown

M. Vapor Recovery/Stage II ☐ **Fiberglass** ☐ **Flexible** ☐ **Other (specify):**
☐ Operational – Provide Date (mo./day/yr.): CARB #:

N. TANK CONTENTS (Current, or previous product if tank now empty)
☒ Diesel ☐ Leaded ☐ Unleaded ☐ Gasohol ☐ Aviation ☐ Premix ☐ Fuel Oil ☐ Kerosene
☐ Empty* ☐ Sand/Gravel/Slurry* ☐ Waste/Used Motor Oil ☐ Hazardous Waste* ☐ Unknown*
☐ Chemical* Name CAS #: ☐ Other (specify):

*If chosen, this tank is NOT PECFA eligible.

Geo Latitude: **Geo Longitude:**

O. If Tank Closed, Abandoned or Out of Service Give date (mo/day/yr): 12-6-06
Has a site assessment been completed? (see reverse side for details) ☒ Yes ☐ No

Owner or Operator Name (please print): Milwaukee Transport Services
Indicate if you are: ☐ Owner or ☒ Operator

Owner or Operator Signature (Note: By signing, signer is accepting legal and financial responsibility for the storage tank system.) Mark Bedner **Date** 12/6/06

ER-7437 (R12/99) Note: Refer to comments on reverse side of form.

APPENDIX C

CHECKLIST FOR TANK CLOSURE
(ERS-8951)

Complete one form for each site closure.

The information you provide may be used for secondary purposes (Privacy Law, s.15.04 (1)(m)).

CHECKLIST FOR TANK CLOSURE

[redacted]

FOR PORTIONS OF THE FORM THAT DO NOT APPLY, CHECK THE N/A BOX.

RETURN COMPLETED CHECKLIST TO:
Wisconsin Department of Commerce
ERS Division
Bureau of Petroleum Products and Tanks
P.O. Box 7837
Madison, WI 53707-7837

A. IDENTIFICATION: (Please Print) Indicate whether closure is for: ☒ Tank System ☐ Tank Only ☐ Piping Only

1. Site Name	2. Owner Name
[illegible]	[illegible]
Site Street Address (not P.O. Box)	Owner Street Address
[illegible]	[illegible]
☒ City ☐ Village ☐ Town of:	☒ City ☐ Village ☐ Town of:
State / Zip Code / County	State / Zip Code / County / Telephone No. (include area code)
[illegible]	[illegible]
3. Closure Company Name (print)	Closure Company Street Address
[illegible]	[illegible]
Closure Company Telephone No. (include area code)	Closure Company City, State, Zip Code
[illegible]	[illegible]
4. Name of Company Performing Closure Assessment	Assessment Company Street Address, City, State, Zip Code
HIMALAYAN CONSULTANTS, LLC	N116 W16150 MAIN STREET, GERMANTOWN WI 53022
Telephone No. (include area code) / Certified Assessor Name (print)	Assessor Signature / Assessor Certification No.
(262) 502-0016 GOPAL K. ADHIKARI	[illegible] 4195

Tank ID #	Closure	Temp. Closure	Closure In Place	Tank Capacity	Contents*	Closure Assessment
1.	☐	☐	☒	550	Diesel	☒ Y ☐ N
2.	☐	☐	☐			☐ Y ☐ N
3.	☐	☐	☐			☐ Y ☐ N
4.	☐	☐	☐			☐ Y ☐ N

* Indicate which product: Diesel, Leaded, Unleaded, Fuel Oil, Gasohol, Aviation Fuel, Kerosene, Premix, Waste/Used Motor Oil, Flammable/Combustible Hazardous Waste, Chemical (indicate the chemical name(s) _____ and CAS number(s) _____ Other _____

Written notification was provided to the local agent 15 days in advance of closure date ☒ Y ☐ N
All local permits were obtained before beginning closure ☒ Y ☐ N ☐ NA

Check applicable box at right in response to all statements in Sections B-E.

	Remover Verified		Inspector Verified	NA
B. ☐ TEMPORARILY OUT OF SERVICE				
1. Product Removed:				
a. Product lines drained into tank (or other container) and liquid removed, AND	☐ Y	☐ N	☐	☐
b. All product removed to bottom of suction line, OR	☐ Y	☐ N	☐	☐
c. All product removed to within 1" of bottom	☐ Y	☐ N	☐	☐
2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped	☐ Y	☐ N	☐	☐
3. All product lines at the islands or pumps located elsewhere are removed and capped, OR	☐ Y	☐ N	☐	☐
4. Dispensers/pumps left in place but locked and power disconnected	☐ Y	☐ N	☐	☐
5. Vent lines left open	☐ Y	☐ N	☐	☐
6. Inventory form filed indicating Temporary Out-Of-Service (TOS) closure	☐ Y	☐ N		☑
C. ☐ CLOSURE BY REMOVAL				
1. Product from piping drained into tank (or other container)	☐ Y	☐ N	☐	☐
2. Piping disconnected from tank and removed	☐ Y	☐ N	☐	☐
3. All liquid and residue removed from tank using explosion proof pumps or hand pumps	☐ Y	☐ N	☐	☐
4. All pump motors and suction hoses bonded to tank or otherwise grounded	☐ Y	☐ N	☐	☐
5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed	☐ Y	☐ N	☐	☐
NOTE: DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCTOR.				
6. Vent lines left connected until tanks purged	☐ Y	☐ N	☐	☐
7. Tank openings temporarily plugged so vapors exit through vent	☐ Y	☐ N	☐	☐
8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section E	☐ Y	☐ N	☐	☐
9. Tank removed from excavation after PURGING/INERTING; placed on level ground and blocked to prevent movement	☐ Y	☐ N	☐	☐
10. Tank cleaned before being removed from site	☐ Y	☐ N	☐	☑

- CONTINUE ON NEXT PAGE -

11. Tank labeled in 2" high letters after removal but before being moved from site.	☐Y	☐N	☐	☒
NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE; FORMER CONTENTS; VAPOR STATE; VAPOR FREEING TREATMENT; DATE.				
12. Tank vent hole (1/8" in uppermost part of tank) installed prior to moving the tank from site.	☐Y	☐N	☐	☐
13. Site security is provided while the excavation is open.	☐Y	☐N	☐	☐

D. ☒ CLOSURE IN PLACE

NOTE: CLOSURES IN PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF COMMERCE OR LOCAL AGENT.

1. Product from piping drained into tank (or other container).	☒Y	☐N	☒	☐
2. Piping disconnected from tank and removed.	☒Y	☐N	☒	☐
3. All liquid and residue removed from tank using explosion proof pumps or hand pumps.	☒Y	☐N	☒	☐
4. All pump motors and suction hoses bonded to tank or otherwise grounded.	☒Y	☐N	☒	☐
5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.	☒Y	☐N	☒	☐
NOTE: Refer to section E for method of vapor freeing the tank				
6. Vent lines left connected until tanks purged.	☒Y	☐N	☒	☐
7. Tank openings temporarily plugged so vapors exit through vent.	☒Y	☐N	☒	☐
8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) see Section F.	☒Y	☐N	☒	☐
9. Tank properly cleaned to remove all sludge and residue.	☒Y	☐N	☒	☐
10. Solid inert material (sand, cyclone boiler slag, pea gravel recommended) introduced and tank filled.	☒Y	☐N	☒	☐
11. Vent line disconnected or removed.	☒Y	☐N	☒	☐
12. Inventory form filed by owner with the Department of Commerce indicating closure in place.	☒Y	☐N	☒	☐

E. METHOD OF VAPOR FREEING TANK

☒ Displacement of vapors by Eductor or Diffused Air Blower
Eductor driven by compressed air, bonded and drop tube left in place; vapors discharged minimum of 12 feet above ground.
Diffused air blower bonded and drop tube removed. Air pressure not exceeding 5 psig.

☐ Inert Gas using Dry Ice or Liquid Carbon Dioxide
Dry ice introduced at 1.5 pounds per 100 gallons of tank capacity. Dry ice crushed and distributed over the greatest possible tank area.

☐ Inert Gas using CO_2 or N_2 NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. LEL METERS MAY NOT FUNCTION ACCURATELY. THE TANK MAY NOT BE ENTERED IN THIS STATE WITHOUT SPECIAL EQUIPMENT.
Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank opposite the vent.
Gas introduced under low pressure not to exceed 5 psig to reduce static electricity. Gas introducing device grounded.

☐ Readings of 10% or less of the lower flammable range (LEL) or 0% oxygen obtained before removing tank from ground.

☐ Tank atmosphere monitored for flammable or combustible vapor levels prior to and during cleaning and cutting.

☐ Calibrate combustible gas indicator and/or oxygen meter prior to use. Drop tube removed prior to checking atmosphere. Tank space monitored at bottom, middle and upper portion of tank.

F. CLOSURE ASSESSMENTS

NOTE: DETERMINE IF A CLOSURE ASSESSMENT IS REQUIRED BY REFERRING TO COMM 10.

	Remover Verified	Inspector Verified
1. Individual conducting the assessment has a closure assessment plan (written) which is used as the basis for their work on the site.	☐Y ☐N	☒Y ☐N
2. Do points of obvious contamination exist? Surface to tank top: ☐Y ☒N Within tank excavation: ☐Y ☐N Piping:	☐Y ☐N	☒Y ☐N
3. Was a field screening instrument used to pre-screen soil sample locations?	☒Y ☐N	☒Y ☐N
4. Was the DNR notified of suspected or obvious contamination?	☐Y ☒N	☒Y ☐N

Agency, office and person contacted: _____

5. Contamination suspected because of: ☐Odor ☐Soil Staining ☐Free Product ☐Sheen on Groundwater ☐Field Instrument Test

G. ☒ **Form ERS-7437 or** ☐ **ERS-8731 filed by owner with the Dept. of Commerce indicating closure.** ☐Yes ☐No

H. NOTE SPECIFIC CLOSURE PROBLEMS OR CONCERNS BELOW

I. REMOVER/CLEANER INFORMATION

Remover Name (print)	Remover Signature	Remover Certification No.	Date Signed
Duane C. Lemanski		4218	12-6-06

I certify that the procedures and information that I have provided as the tank closure contractor are correct and comply with Comm 10.

J. INSPECTOR INFORMATION

Inspector Name (print)	Inspector Signature	Inspector Cert #	LPO Agency #
T. Tomaselli		7777	

DID # For Location Where Inspection Performed	Inspector Telephone Number	Date Signed
4070	286-2500	12/7/06

TANK INVENTORY FORM ERS-7437 or ERS-8731 SIGNED BY THE OWNER MUST BE SUBMITTED WITH EACH CLOSURE CHECKLIST

Copy Distribution: White – Commerce Blue – Inspector Pink – Contractor Yellow - Owner

APPENDIX D

SOIL BORING LOGS
AND
BOREHOLE ABANDONMENT FORMS

LOG OF TEST BORING

Himalayan Consultants, L.L.C.

Project: Fleet Maintenance Transit Center
Milwaukee County, Wisconsin
Location: See Attached Map

Boring No. B-1
Surface Elevation
Job No.
Sheet 1 of 1

P.O. Box 693 Germantown, WI 53022 Tel.: (262) 502-0066 Fax: (262) 502-0077

SAMPLE No.	Type	Recov.	Moist.	N-Value	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES q_{est} (q_u) tsf	W %	LL	PL	DD pcf	PID ppm
					0	9-inch concrete						
						Blind drilled to 7 feet						
					2							
					4							
					6							
1	SS	18"	M	9		SILTY CLAY (CL): Stiff to very stiff, brown, dry to moist						0.1
					8	End of Boring = 8.5 Feet						
						Backfilled with bentonite chips						
					10							
					12							

WATER LEVEL OBSERVATIONS

While Drilling: None
Upon Completion of Drilling: None
Time After Drilling:
Depth to Water: None
Depth to Cave-in:

GENERAL NOTES

Start 11/30/06 Complete 11/30/06
Crew Chief TE Rig
Drilling Method: HSA

NOTE: Soil stratification lines represent approximate boundaries between soil types and transitions may be gradual.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295 and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295 and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
N/A	N/A	Milwaukee

Common Well Name B-1 Gov't Lot (If applicable) _____

Grid Location: SE 1/4 of NE 1/4 of Sec. 19 ; T. 7 N; R. 22 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. _____ Long. _____ or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
No longer needed	N/A

(2) FACILITY / OWNER NAME

Facility Name: Fleet Maintenance Facility

Facility ID	License/Permit/Monitoring No.
N/A	N/A

Street Address of Well: N/A

City, Village or Town: Milwaukee County

Present Well Owner	Original Owner
Milwaukee County	Milwaukee County

Street Address or Route of Owner: 2711 W. Wells Street

City, State, Zip Code: Milwaukee, WI 53208

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 11/30/06

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) (From groundsurface) _____ Casing Diameter (in.) _____

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet

Depth to Water (Feet) None Feet

(4) PUMP, LINER, SCREEN, CASING & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☐ Yes	☒ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain) Gravity

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry
☒ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
Bentonite Chips	Surface	Bottom	20 lbs	

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work: Wisconsin Soil/Himalayan

Date of Abandonment: 11/30/06

Signature of Person Doing Work

Date Signed: 12/15/06

Street or Route: P.O. Box 352

Telephone Number: 262-783-7645

City, State, Zip Code: Ashippun, WI 53003

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By
Comments	

LOG OF TEST BORING

Himalayan Consultants, L.L.C.

Project: Fleet Maintenance Transit Center
Milwaukee County, Wisconsin
Location: See Attached Map

Boring No. B-2
Surface Elevation
Job No.
Sheet 1 of 1

P.O. Box 693 Germantown, WI 53022 Tel.: (262) 502-0066 Fax: (262) 502-0077

SAMPLE No.	Type	Recov.	Moist.	N-Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES q_{est} (q_u) tsf	W %	LL	PL	DD pcf	PID ppm
					0	9-inch concrete						
						Blind drilled to 7 feet						
					2							
					4							
					6							
1	SS	18"	D	14								
						SILTY CLAY (CL): Stiff to very stiff, brown, dry						0.0
					8							
						End of Boring = 8.5 Feet						
						Backfilled with bentonite chips						
					10							
					12							

WATER LEVEL OBSERVATIONS

While Drilling: None
Upon Completion of Drilling: None
Time After Drilling:
Depth to Water: None
Depth to Cave-in:

GENERAL NOTES

Start: 11/30/06 Complete: 11/30/06
Crew Chief: TE Rig:
Drilling Method: HSA

NOTE: Soil stratification lines represent approximate boundaries between soil types and transitions may be gradual.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295 and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295 and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
N/A	N/A	Milwaukee

Common Well Name B-2 Gov't Lot (If applicable)

Grid Location: SE 1/4 of NE 1/4 of Sec. 19 ; T. 7 N; R. 22 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. _____ Long. _____ or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
No longer needed	N/A

(2) FACILITY / OWNER NAME

Facility Name: Fleet Maintenance Facility

Facility ID	License/Permit/Monitoring No.
N/A	N/A

Street Address of Well: N/A

City, Village or Town: Milwaukee County

Present Well Owner	Original Owner
Milwaukee County	Milwaukee County

Street Address or Route of Owner: 2711 W. Wells Street

City, State, Zip Code: Milwaukee, WI 53208

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 11/30/06

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) (From groundsurface) _____ Casing Diameter (in.) _____

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet

Depth to Water (Feet) None Feet

(4) PUMP, LINER, SCREEN, CASING & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☐ Yes	☒ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain) Gravity

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry
☒ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
Bentonite Chips	Surface	Bottom	20 lbs	

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work: Wisconsin Soil/Himalayan

Date of Abandonment: 11/30/06

Signature of Person Doing Work

Date Signed: 12/15/06

Street or Route: P.O. Box 352

Telephone Number: 262-783-7645

City, State, Zip Code: Ashippun, WI 53003

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By
Comments	

APPENDIX E

SAMPLING AND FIELD SCREENING PROCEDURES

1. Collection of Soil Samples

The subsurface soil samples were collected using hollow stem augers in general accordance with the Standard Penetration Test (SPT) Procedure [ASTM D-1586]. This procedure involves driving a 2-inch outside diameter split barrel sampler using a 140-pound weight falling freely through a distance of 30 inches. The split barrel sampler is used to obtain samples of up to 24 inches in length within the hollow stem auger flights. The relationship between hammer weight, drop, and number of blows required to advance the barrel in 6-inch increments is an indication of density or consistency of subsurface soils. After driving the sampler to prescribed depths, the sampler was removed carefully from the casing and detached from the drill rod to allow for visual inspection of the sample. Soil samples were immediately placed and sealed in 7-inch by 8-inch Ziploc bags after visual inspection. Soil type, color, odor, texture, consistency, and depth were noted, including any non-native sediments [fill material] encountered. These observations were used to classify the soil(s) according to Unified Soil Classification System (USCS) and to prepare a log of soil boring.

2. Field-Screening of Soil Samples

A portion of each sample was field-screened for the presence of Volatile Range Organic Compounds (VOCs) using a Photo-Ionization Detector (PID) [MiniRAE 2000] equipped with a 10.6 eV lamp. Each sample was tested by filling 7-inch by 8-inch Ziploc bag one third to half full with soil and then sealing the bag securely to prevent the escape of any VOCs. The bags were set aside for about 5 to 10 minutes to allow the VOCs present within the soil to volatilize and equilibrate within headspace in the bag. The VOC concentration in the bag headspace was measured by gently opening the seal with the tip of the PID probe followed by firmly pressing the bag around the probe and recording the highest PID response. A background measurement of ambient VOCs was also made immediately prior to each sample screening and recorded on the PID forms. The PID was field calibrated at the beginning using a standard of 100 parts per million (ppm)-isobutylene gas and with the manufacturer-recommended calibration procedures.

3. Laboratory Analysis of Soil Samples

In addition to the soil used for PID testing, a separate portion of each soil sample was preserved for possible laboratory analyses. Each sample was preserved by placing the soil in a labeled Ziplock bag and then placing the bag into a cooler with ice. The samples were collected in the laboratory provided jars as required by WDNR guidance documents and maintained at a temperature of approximately 4^0 C until delivered under chain of custody procedures to laboratory personnel.

APPENDIX F

LABORATORY ANALYTICAL REPORT – SITE ASSESSMENT SAMPLES

APL INC.
8222 W. Calumet Rd., Milwaukee, WI 53223
Phone: (414) 355-5800 Fax: (414) 355-3099

ORGANIC REPORT

Gopal Adhikary
Himalayan Consultants
P.O. Box 693
Germantown , WI 53022

BATCH NUMBER: **20061276**
DATE REPORTED: 08-Dec-06
DATE RECEIVED: 30-Nov-06
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: Milwaukee Coun

Sample Number: 52217
Sample ID: B-1 (7-8.5)
QC Prep Batch Number: 1020642
% Solid = 83.5 %
Collection: 11/30/2006 Time: 9:55
Sample Description:

Compound	Result	Units	LOD	LOQ	Dil	RQ	Method	Analyst	Date Extract/Analyzed
Diesel Range Organics	13	mg/kg	1.198	3.810	1		WI DRO	2403	11/30/2006 ; 12/7/2006

Sample Number: 52218
Sample ID: B-2 (7-8.5)
QC Prep Batch Number: 1020642
% Solid = 83 %
Collection: 11/30/2006 Time: 10:15
Sample Description:

Compound	Result	Units	LOD	LOQ	Dil	RQ	Method	Analyst	Date Extract/Analyzed
Diesel Range Organics	3.518	mg/kg	1.205	3.833	1	J	WI DRO	2403	11/30/2006 12/7/2006

Department of Natural Resources State Certified Laboratory #241340550

APL warrants the test results to be of a precision normal for the sample type and methdology employed for each sample submitted. APL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. APL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by this terms and conditions set forth herein.

APL INC.
8222 W. Calumet Rd., Milwaukee, WI 53223
Phone: (414) 355-5800 Fax: (414) 355-3099

ORGANIC REPORT

BATCH NUMBER:	**20061276**
DATE REPORTED:	08-Dec-06
DATE RECEIVED:	30-Nov-06
SAMPLE TEMP (C):	Rec On Ice
PROJECT ID:	
PROJECT NAME:	Milwaukee Coun

Gopal Adhikary
Himalayan Consultants
P.O. Box 693
Germantown , WI 53022

Approved By: _____ **Date** 12/8/2006
Project Manager

LOQ = Limit of Quantitation *LOD = Limit of Detection*

RQ : Run Qualifier; *2 - A high blank recovery is associated with this batch QC.*
3 - The associated batch QC is outside the control limits for precision.
4 - The associated batch QC is outside the control limits for accuracy.
5 - The internal standard associated with this batch QC is outside control limits.
6 - The surrogate associated with this batch QC is outside control limits.
7 - The duplicate analysis associated with this batch QC is outside control limits.
8 - The internal standard associated with this sample is outside control limits.
9 - The surrogate associated with this sample is outside control limits.
E - Concentration of this compound exceeds the calibration range; the value is an estimate.
O - Presence of significant peaks outside the DRO or GRO chromatographic window.
M - Matrix Spike and/or Matrix Spike Duplicate recovery is outside control limits.
C - Recovery of check standard is outside control limits.
A - The result is an average. *# - No LOD or LOQ required.*
J - The result is between the LOD and LOQ. *S - See attachment for QC qualifiers.*

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.

Department of Natural Resources State Certified Laboratory #241340550

APL warrants the test results to be of a precision normal for the sample type and methdology employed for each sample submitted. APL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. APL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by this terms and conditions set forth herein.

8222 W. Calumet Road • Milwaukee, WI 53223
800.236.3909 414.355.5800 Fax 414.355.3099
www.apl-inc.net
aplenvironmental@sbcglobal.net

APL INC.
Environmental Division

CHAIN OF CUSTODY
#20061276 Page: 1 of 1
(for APL Laboratory use only)

CLIENT INFORMATION		REPORTING INFORMATION	
Project Manager: GOPAL K. ADHIKARY		Project Name: MILWAUKEE COUNTY TRANSIT CENTER	
Company: HIMALAYAN CONSULTANTS, LLC		Project ID:	
Mailing Address: P.O BOX 693		**Send Report Via:**	**Notice:**
City, State, Zip: GERMANTOWN, WI 53022		☐ Fax	• A hard copy of the report will be mailed •
Tel: 262-502-0066 Fax: 262-502-0077 E-mail:		☒ E-mail	• Results will be posted on our website •

TURNAROUND TIME
☒ Normal (10 working days)
☐ RUSH Date report needed:_____
*Note: **Call to confirm** that we can provide the desired RUSH processing **before shipping your samples!***

Enter Preservation Code*:

ANALYSIS NEEDED:

TRD

SAMPLE ID	SAMPLE DESCRIPTION (optional)	COLLECTION DATE	COLLECTION TIME	MATRIX **											APL LAB ID
B-1(7-8.5)		11/30/06	9:55	SOIL	X										52217
B-2(7-8.5)		〃	10:15	〃	X										52218

Samples Received on Ice ☐
Temp if not on Ice ____ °C
Samples Intact and Not Leaking ☐

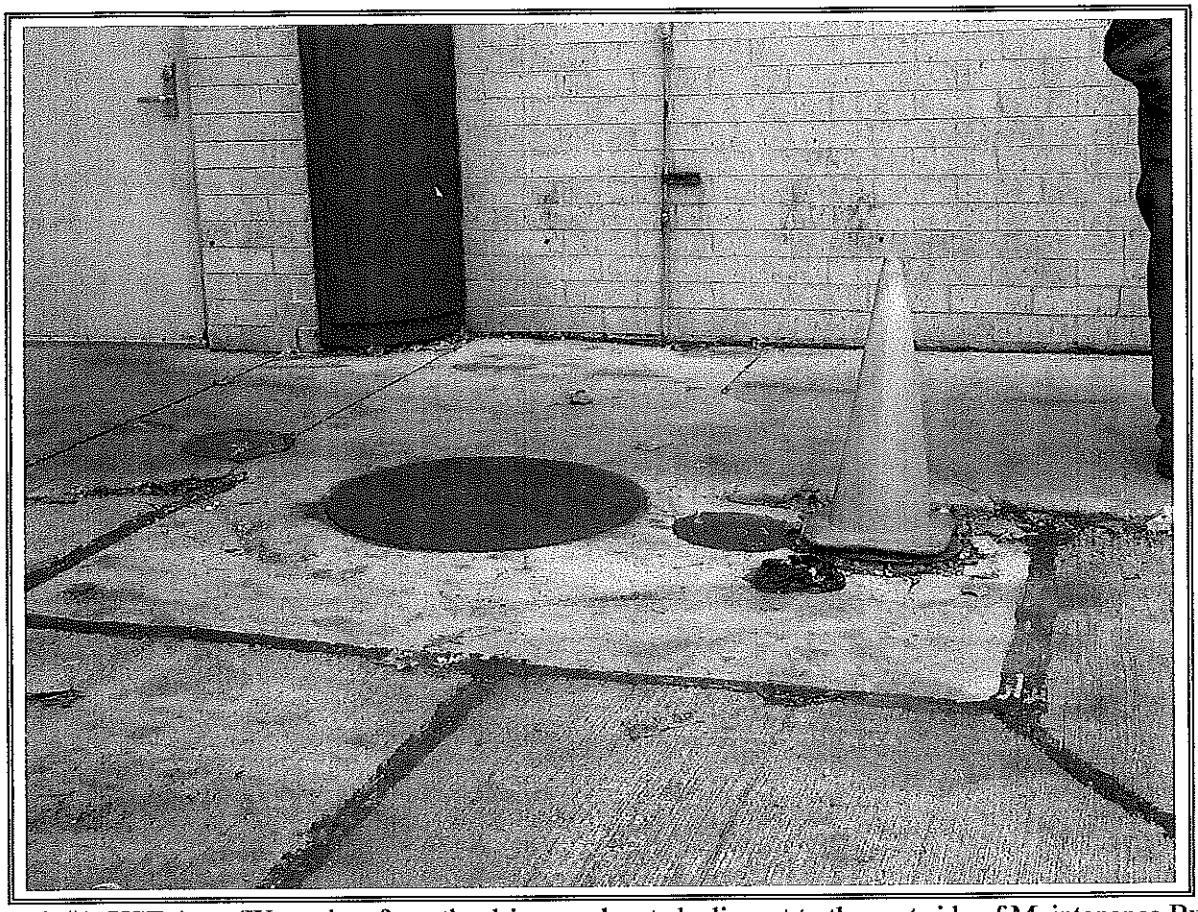
* Preservation Codes: A. HCl B. HNO_3 C. NaOH D. H_2SO_4 E. Methanol F. Field Filtered G. None H. Other:_____
** Matrix Soil (S), Solid (SD), Surface Water (Water), Groundwater (GW), Wastes (Waste), Oil (O), TCLP (TCLP), SPLP (SPLP)

Relinquished by (Signature):	Date/Time	Received by (Signature):	Comments / Further Instructions
	11/30/06 11:40	Jaime Rosenthal	
Relinquished by (Signature):	**Date/Time**	**Received by (Signature):**	
Jaime Rosenthal	11/30/06 1540	W Hall	

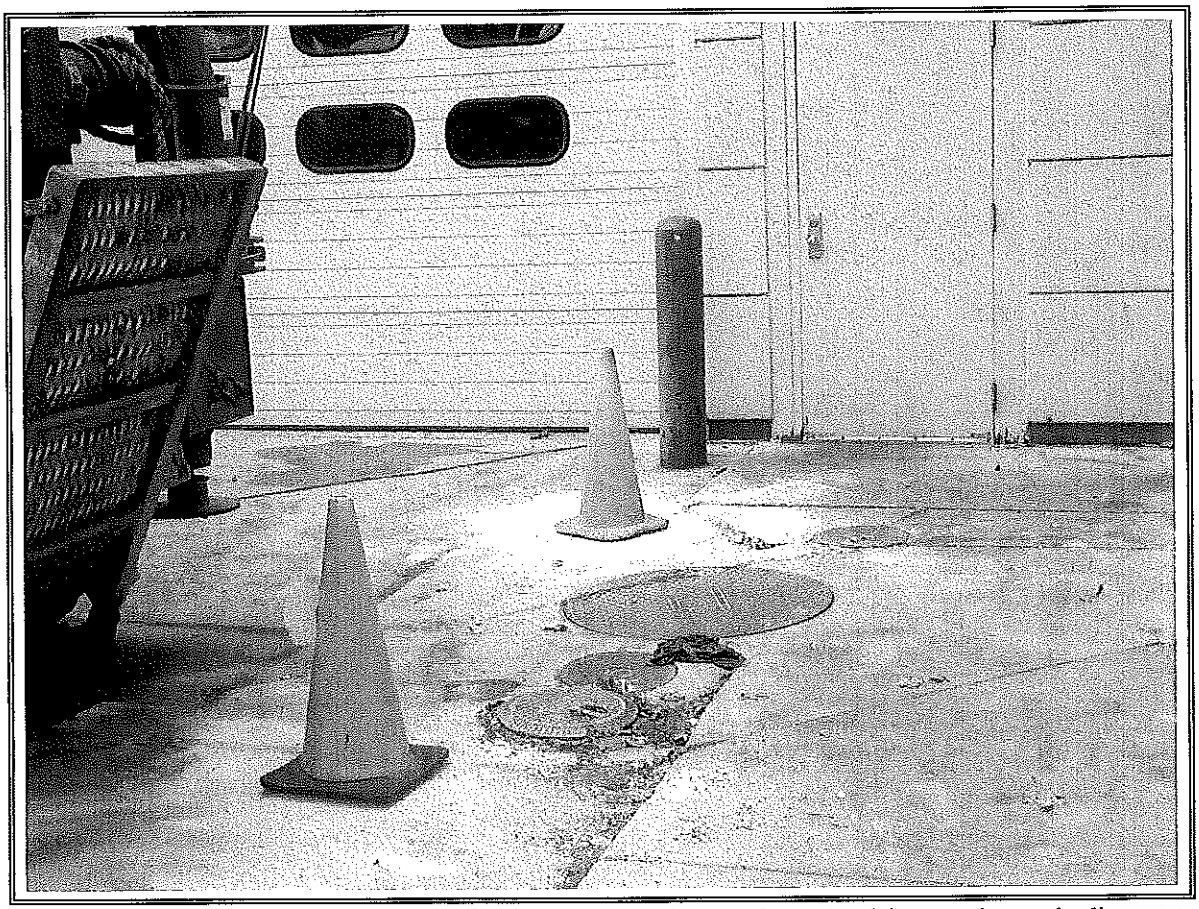
CLIENT COPY: Pink LAB COPY: Yellow COPY FOR REPORT: White

APPENDIX G

PHOTOGRAPHS



Photograph #1: UST Area (West view from the driveway located adjacent to the east side of Maintenance Building)



Photograph #2: Boring locations indicated by traffic cones (South view from the driveway located adjacent to the east side of Maintenance Building)