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09-16-528000

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SITE ASSESSMENT FOR UNDERGROUND STORAGE TANK SYSTEM DWP RAILROAD -POKEGAMA YARD 3192 SOUTH POKEGAMA ROAD SUPERIOR TOWNSHIP, WI 54880

SEPTEMBER 1996

Prepared By:
MJ ENVIRONMENTAL CONSULTANTS INC.
101 W. 2ND ST., SUITE 205
DULUTH, MN 55802
(218) 722-5880

MJ# 96.601

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101 W. 2ND ST., SUITE 205, CARNEGIE BLDG.
DULUTH, MN 55802

(218) 722-5880 (800) 424-9821 FAX: (218) 722-5764

September 4, 1996

Tank Response Unit - SW/3
Wisconsin Department of Natural Resources
P. O. Box 7921
Madison, WI 53707

RE: Site Assessment Report
Duluth, Winnipeg & Pacific Railroad
Pokegama Yard
Superior Township, Wisconsin
MJ #96.601

Dear Tank Response Unit:

A site assessment was conducted for an underground storage tank (UST) system at the Duluth, Winnipeg & Pacific Railroad, Pokegama Yard in Superior Township, Wisconsin. A background review, sample collection, excavation, and report preparation were completed as part of the site assessment.

The results of the site assessment indicate that a release had not occurred from the UST system. MJ Environmental Consultants Inc. has prepared the attached report to address DILHR requirements for a site assessment report per ILHR 10.734.

If you have any questions or require further information, please contact me at (218) 722-5880.

Sincerely,

Irvin G. Mossberger
Project Manager

Attachments

c: Mr. Gary Carlson, Duluth, Winnipeg & Pacific Railroad

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1.0 SITE BACKGROUND INFORMATION

MJ Environmental Consultants Inc. has performed site assessment activities on behalf of the Duluth, Winnipeg & Pacific (DWP) Railway Company at its Pokegama Yard. The Pokegema Yard is located in the NE¼, Sec. 17, T48N, R14W (Figure 1), on Pokegama Road off of State Highway 105 in Superior Township, WI 54880 (Figure 2).

The certified site assessor was Irvin G. Mossberger of MJ Environmental Consultants Inc., 101 W. 2nd St., Suite 205, Duluth, MN 55802, (218) 722-5880, Certification #06663. The certified tank remover was Rick Hogland of Superior Engineering and Technical Services, 1225 Tower Ave., Superior, WI 54880, (715) 392-2236. The tank removal contractor was Lakehead Blacktop and Materials of Superior Inc., 6327 Tower Avenue, Superior, WI 54880, (715) 392-3844.

The Pokegama Yard is a locomotive and railcar maintenance facility. The underground storage tank (UST) system consisted of one 2,000-gallon fiberglass waste oil tank and associated piping. The UST system was installed in January 1984. Groundwater was encountered during excavation at a depth of 4 feet below ground surface (BGS).

2.0 TANK ACTIVITIES AND EXCAVATION

Tank closure was performed by removing the UST system. The atmosphere in the UST was inerted before the UST was removed. The lower explosive limit was measured using an explosion meter. Soil and pea gravel removed during the excavation was returned to the pit. Sand obtained from an off-site location was added to the excavation pit bringing it to grade.

A 1,000-gallon UST system containing heating oil remains on site. The tank inventory form for the 2,000-gallon tank is located in Appendix B.

3.0 TANK CLEANING AND DISPOSAL

Approximately 10 gallons of waste oil was transferred from the UST to a 55-gallon steel drum. The UST was cut open and cleaned. The empty, clean tank was transported off-site by Lakehead Blacktop and Materials of Superior Inc.

4.0 SURPLUS PRODUCT MANAGEMENT

The approximately ten gallons of waste oil was treated at DWP's on-site industrial wastewater treatment facility.

5.0 TANK SLUDGE MANAGEMENT

There was no tank sludge generated at the site.

6.0 SITE LOCATION MAP

Refer to Figure 1 for Site Location Map

7.0 SITE LAYOUT PLAN

Refer to Figure 2 for Site Layout Plan

8.0 VISUAL INSPECTION

Weather at the site during tank closure was partly cloudy, approximately 75^{0}F with a light wind. There was no known precipitation at the site on the day of the assessment or the previous day. There was no evidence of surface staining at the UST site. There was no evidence of stressed or dead vegetation. A 1,000-gallon heating oil UST system remains at the site (Figure 2).

The excavation reached a maximum depth of approximately 6.5 feet. The UST floated as a result of groundwater in the excavation pit. The excavation profile consisted of 2 feet of well graded gravel, underlain by approximately 2 feet of fill sand. Below the fill sand, a homogeneous unit of clay extended to the bottom of the excavation pit. Free product was not encountered in the excavation.

The tanks and piping appeared to be in good condition. Based on the visual inspection and field-screening, no petroleum contamination was detected.

9.0 SOIL SAMPLING

Field-screening for volatile organic compounds (VOCs) was performed during excavation activities. Sample locations are shown in Figure 2. Field-screening was conducted using a Thermo Instruments 580B OVM 10.6 eV photoionization detector (PID) in accordance with WDNR guidance *Field Screening Procedures* (PUBL-SW-176-92) and according to MJ Environmental Consultants Inc.'s standard operating procedures for headspace analysis. Table 1 summarizes the field-screening results. Appendix D contains the *Laboratory Analytical Results Report.*

Table 1: Field-screening Summary (PID results in ppm as isobutylene equivalents)

Sample# **Depth**	**R-1** 2'	**B-1** 3.5'	**B-2** 3.5'	**P-1** 2.5'
PID Results	0	0	0	0
Soil Type	sand	clay	clay	sand

Sample code: R = Removed, **B** = Bottom, **P** = Piping

Soil sampling was conducted in accordance with WDNR's *LUST and Petroleum Analytical and Quality Assurance Guidance* (PUBL-SW-130-93) and according to MJ Environmental Consultants Inc.'s standard operating procedures for soil sample collection (Appendix B). Bottom samples B-1 and B-2 were collected near the ends of the tank, approximately 0.5 feet above the water table. Piping sample P-1 was collected approximately 0.5 feet beneath a joint in the piping run. Table 2 presents the laboratory analytical results summary for the samples submitted from the site. The laboratory analytical report is located in Appendix D.

Table 2: Soil Laboratory Analytical Summary

Parameter	Sample #			Detection Limit (soil)	Site Investigation Soil Standard[1]
	B-1	B-2	P-1		
Date Sampled	07/31/96	07/31/96	07/31/96		
Sample Depth (ft)	3.5	3.5	2.5		
Matrix	soil	soil	soil		
Diesel Range Organics (DRO) (mg/kg)	ND	ND	ND	*	10 ppm

Site investigation standard represents the site investigation trigger value for DRO compounds detected in soil - obtained from the WDNR - Release News, April 1994, Vol. 4, #2, p. 7. **mg/kg** = milligrams per kilogram = parts per million. **ND** = Not Detected. * = Detection limits vary, see laboratory analytical report.

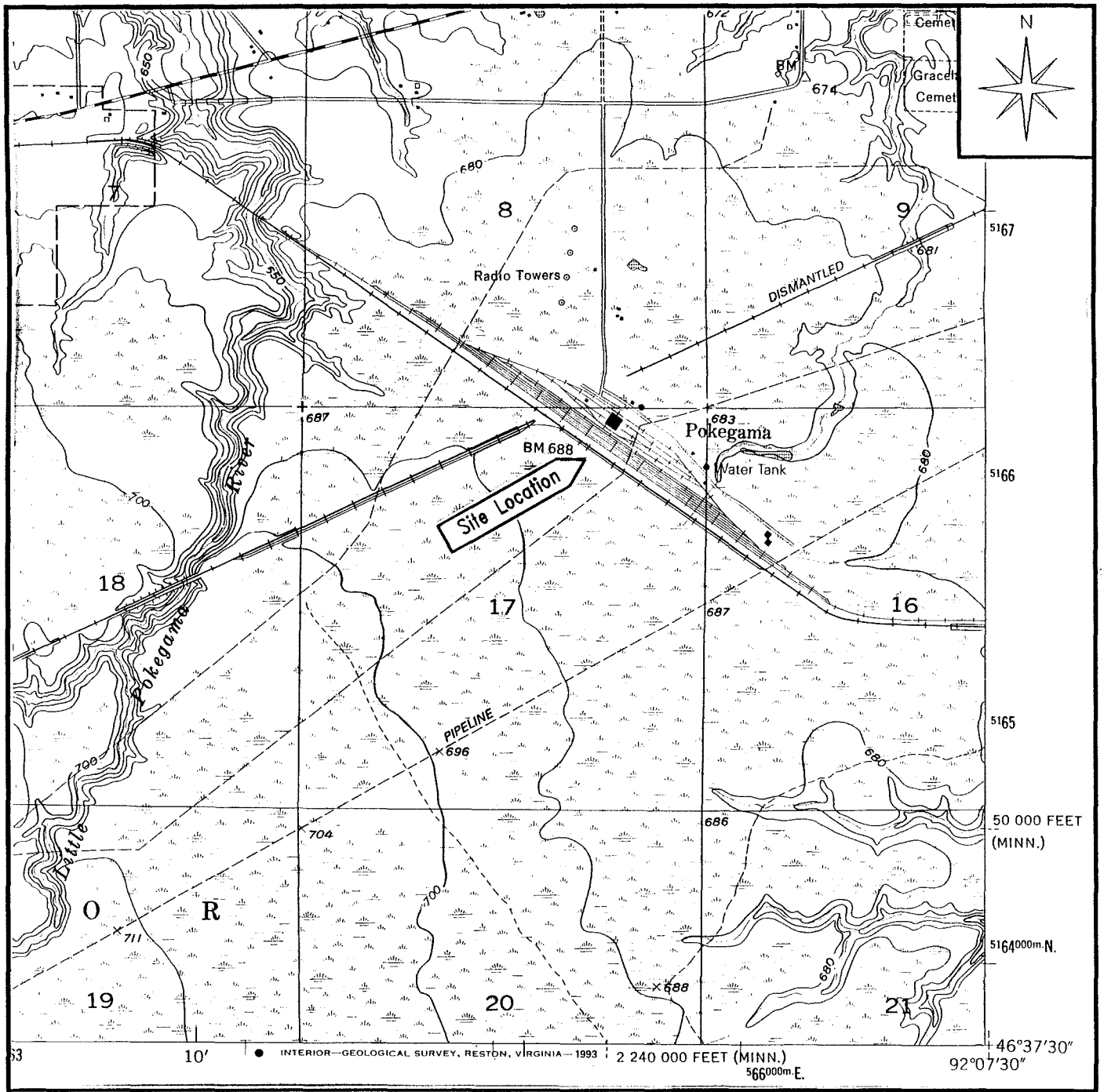
10. DISCUSSION

One soil sample was collected at each of three locations within the excavation basin and sent to an independent laboratory for analysis of diesel range organics (DRO). Analytical results indicated no detections of DRO in any of the three samples.

The site assessment indicates that there has not been a release associated with the UST system. Visual inspection, field-screening and laboratory analytical results indicate that on-site soil has not been impacted by petroleum hydrocarbons. It is recommended that no further investigation is necessary and the site should be closed.

FIGURES

Figure 1 Site Location Map
Figure 2 Site Map



MINN.

QUADRANGLE LOCATION

SCALE 1:24000

1 1/2 0 MILE

1000 0 1000 2000 3000 FEET

CONTOUR INTERVAL 10 FEET

SOURCE: PART OF THE NW/4 SUPERIOR 15' QUAD.
U.S.G.S. 7.5 MINUTE SERIES (TOPOGRAPHIC)
AERIAL PHOTO DATE: 1991
FIELD CHECKED: NOT CHECKED
MAP EDITED: 1993

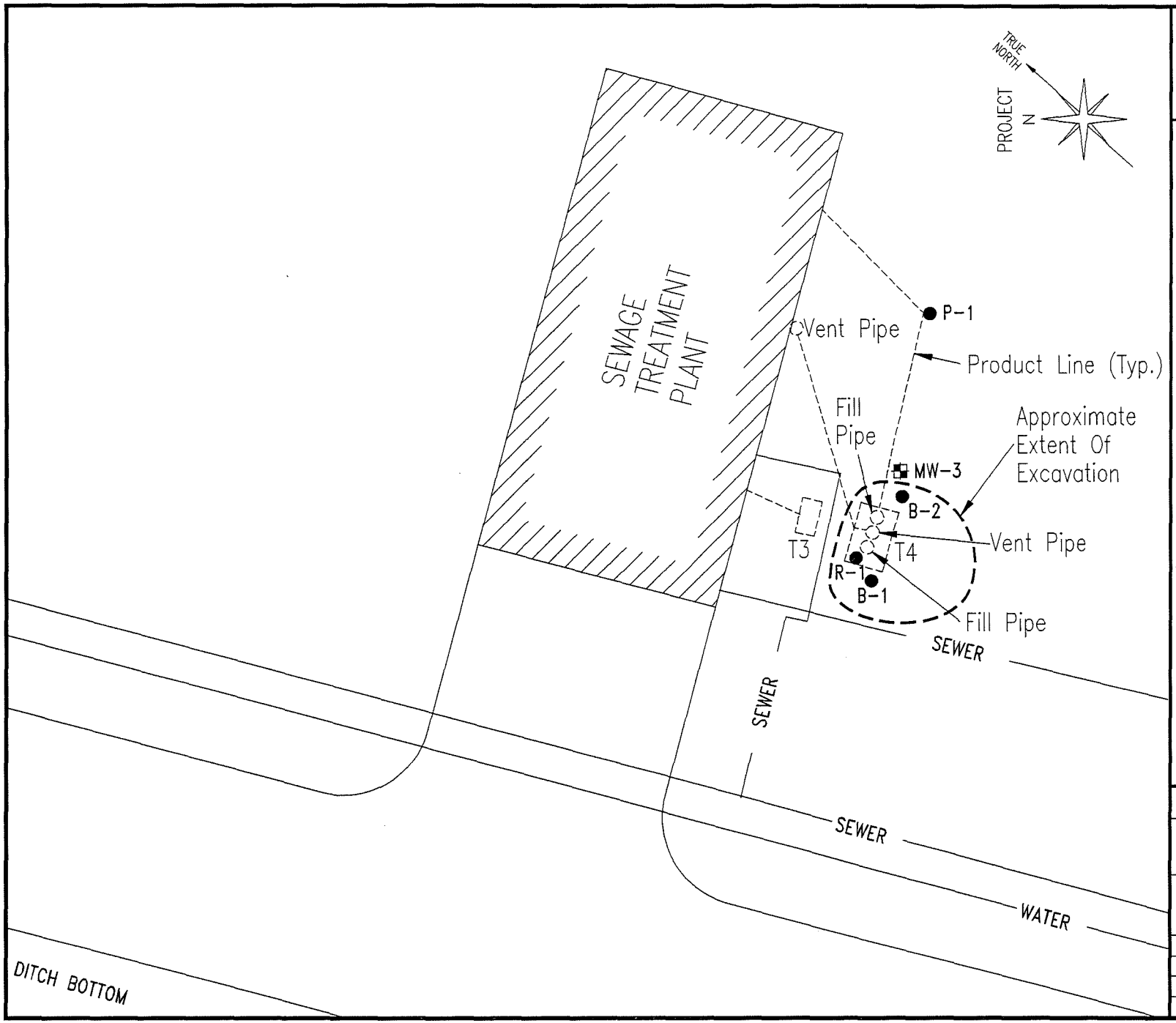
FIGURE 1

DWP UST COMPLIANCE
SUPERIOR, WISCONSIN

SITE LOCATION MAP

DATE: 3/21/96 JOB NO. 96.601

MJ
MJ ENVIRONMENTAL CONSULTANTS INC. 1-800-424-9821
101 W. 2ND STREET, SUITE 205, CARNEGIE BLDG. FAX: (218) 722-5764
DULUTH, MINNESOTA 55802



MJ ENVIRONMENTAL CONSULTANTS INC.
101 W. 2ND ST., SUITE 205, CARNEGIE BLDG.
DULUTH, MN 55802
1-800-424-9821
FAX: (218) 722-5764

LEGEND:

- T4 — 2000 GALLON WASTE OIL TANK
- T3 — 1000 GALLON HEATING OIL TANK
- MW-3 — MONITORING WELL LOCATION AND NUMBER
- B-2 — SAMPLE LOCATION AND NUMBER
- SEWER — UNDERGROUND SEWER LINE
- WATER — UNDERGROUND WATER LINE

SOME MEASUREMENTS APPROXIMATE

0 10 20

SCALE

FIGURE 2

DWP UST COMPLIANCE
DULUTH, WINNIPEG, & PACIFIC RR. CO.
POKEGAMA, WISCONSIN

SITE LAYOUT MAP

CREATED BY: IGM	DRAWN BY: PJB
CHK'D BY: RJP	
FILE NAME: C:\PROJECTS\1996\96601\SITE2.DWG	
DATE: 8/7/96	JOB NO. 96.601

APPENDICES

Appendix A	UST Closure Checklist
Appendix B	Underground Petroleum Product Tank Inventory
Appendix C	Standard Operating Procedures for Soil Sampling and Headspace Analysis
Appendix D	Analytical Results

APPENDIX A

UST Closure Checklist

Wisconsin Department of Industry, Labor and Human Relations

Complete one form for each site closure.

CHECKLIST FOR UNDERGROUND TANK CLOSURE

The information you provide may be used by other government agency programs [Privacy Law, s. 15.04 (1) (m)].

RETURN COMPLETED CHECKLIST TO:
Safety & Buildings Division
Fire Prevention & Underground Storage Tank Section
P. O. Box 7969, Madison, WI 53707

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

1. Site Name	2. Owner Name
DWP RR Pokegema Yard	Duluth Winnipeg & Pacific RR
Site Street Address (not P.O. Box)	Owner Street Address
3172 S. Pokegema Road	3192 S. Pokegema Road
☑ City ☐ Village ☐ Town of: Superior	☐ City ☐ Village ☐ Town of: Superior; State: WI; Zip Code: 54880
State: Wisconsin; Zip Code: 54880; County: Douglas	County: Douglas; Telephone No. (include area code): (218) 726-9297

3. Closure Company Name (Print)	Closure Company Street Address
Superior Engineering, Inc	1725 Tower Ave
Closure Company Telephone No. (include area code)	Closure Company City, State, Zip Code
(715) 392-2236	Superior WI 54880
4. Name of Company Performing Closure Assessment	Assessment Company Street Address, City, State, Zip Code
MJ Environmental	101 W. 2nd St. Suite 205 Duluth, MN 55802
Telephone # (include area code) / Certified Assessor Name (Print)	Assessor Signature / Assessor Certification No.
(218) 722-5880 Irving G. Mossberger	[redacted] 06663

Tank ID #	Closure	Temp. Closure	Closure In Place	Tank Capacity	Contents *	Closure Assessment
1. 1600-0825	☑	☐	☐	2,000	11	☐ Y ☐ N
	☐	☐	☐			☐ Y ☐ N
3.	☐	☐	☐			☐ Y ☐ N
4.	☐	☐	☐			☐ Y ☐ N
	☐	☐	☐			☐ Y ☐ N
6.	☐	☐	☐			☐ Y ☐ N

* Indicate which product by numeric code: 01-Diesel; 02-Leaded; 03-Unleaded; 04-Fuel Oil; 05-Gasohol; 06-Other; 09-Unknown; 10-Premix; 11-Waste oil; 13-Chemical (indicate the chemical name(s) or numbers(s) _____ _____ _____; 14-Kerosene; 15-Aviation.

Written notification was provided to the local agent 15 days in advance of closure date. ☑ Y ☐ N ☐ NA
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.

B. TEMPORARILY OUT OF SERVICE	Remover Verified	Inspector Verified	NA
Written inspector approval of temporary closure obtained, which is effective until (provide date) _____	☐ Y ☐ N	☐	☐
1. Product Removed			
a. Product lines drained into tank (or other container) and resulting 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 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 F. 17% LEL	☑ 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 being removed from site.	☑ Y ☐ N	☑	☐

SBD-8051 (R. 06/94)

- CONTINUE ON NEXT PAGE -

C. CLOSURE BY REMOVAL (continued)

	Remover Verified	Inspector Verified	NA
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 th " in uppermost part of tank) installed prior to moving the tank from site.	☐ Y ☐ N	☑	☐
13. Inventory form filed by owner with Safety and Buildings Division indicating closure by removal.	☑ Y ☐ N	☑	☐
14. 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 INDUSTRY, LABOR AND HUMAN RELATIONS OR LOCAL AGENT.

1. Product from piping drained into tank (or other container).			
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 - EDUCTOR OUTPUT 12 FT ABOVE GRADE.			
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 Safety and Buildings Division indicating closure in place.	☐ Y ☐ N	☐	☐

E. CLOSURE ASSESSMENTS

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

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	☑	☐
2. Do points of obvious contamination exist?	☐ Y ☑ N	☑	☐
3. Are there strong odors in the soils?	☐ Y ☑ N	☑	☐
4. Was a field screening instrument used to pre-screen soil sample locations? 580 B.00M. 10.6 V	☑ Y ☐ N	☑	☐
5. Was a closure assessment omitted because of obvious contamination?	☐ Y ☑ N	☑	☐
6. Was the DNR notified of suspected or obvious contamination?	☐ Y ☑ N	☑	☐

Agency, office and person contacted: _____

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

F. METHOD OF ACHIEVING 10% LEVEL DESCRIPTION

☐ Educator 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.

☐ Dry Ice

Dry ice introduced at 1.5 pounds per 100 gallons of tank capacity. Dry ice crushed and distributed over the greatest possible tank area. Dry ice evaporated before proceeding.

☐ Inert Gas (CO/2 or N/2) **NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. 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.

☒ Tank atmosphere monitored for flammable or combustible vapor levels.

Calibrate combustible gas indicator. Drop tube removed prior to checking atmosphere. Tank space monitored at bottom, middle and upper portion of tank. Readings of 10% or less of the lower flammable range (LEL) obtained before removing tank from ground.

G. NOTE SPECIFIC PROBLEMS OR NONCOMPLIANCE ISSUES BELOW

REMOVER/CLEANER INFORMATION

Remover Name (print)	Remover Signature	Remover Certification No.	Date Signed
Richard M Hoglund	Richard M Hoglund	#00106	07/31/96

INSPECTOR INFORMATION

Inspector Name (print)	Inspector Signature	Inspector Certification No.
Richard Rugg	Richard Rugg	07219

FDID # For Location Where Inspection Performed	Inspector Telephone Number	Date Signed
1617	715 3440227	07/31/96

APPENDIX B

Underground Petroleum Product Tank Inventory

Wisconsin Department of Industry, Labor and Human Relations

For Office Use Only:
Tank ID # 16010 0825

UNDERGROUND PETROLEUM PRODUCT TANK INVENTORY

Information Required By Sec. 102.142, Wis. Stats.

Send Completed Form To:
Safety & Buildings Division
P.O. Box 7969
Madison, WI 53707
Telephone: (608) 267-5280

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. 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

The information you provide may be used by other government agency programs [Privacy Law, s. 15.04 (1) (m)].

This registration applies to a tank that is (check one):
1A. ☐ In Use or 1B. ☐ Newly Installed
2. ☐ Abandoned With Product
3. ☐ Abandoned No Product (empty) or With Water
4. ☒ Closed - Tank Removed
6. ☐ Closed - Filled With Inert Material
7. ☐ Out of Service - Provide Date: _____
8. ☐ Changed Ownership (Indicate new owner below)

Fire Department Providing Fire Coverage Where Tank Located: Superior FD #1601

A. IDENTIFICATION: (Please Print)

1. Tank Site Name: DWD RR Pokegama Yard | Site Address: 3192 South Pokegama Rd | Site Telephone No.: (218) 726-9297
☒ City: Superior ☐ Village ☐ Town of: | State: Wisconsin | Zip Code: 54880 | County: Douglas

2. Owner Name (mail sent here unless indicated otherwise in #3 below): Duluth Winnipeg & Pacific Railway | Owner Mailing Address (mail sent here unless indicated otherwise in #3): 3192 South Pokegama Road
☒ City: Superior ☐ Village ☐ Town of: | State: Wisconsin | Zip Code: 54880 | County: Douglas

3. Alternate Mailing Name If Different Than #2 | Alternate Mailing Street Address If Different From #2
☐ City ☐ Village ☐ Town of: | State | Zip Code | County

4. Tank Age (date installed, if known: or years old): New 1984 | 5. Tank Capacity (gallons): 2,000 | 6. Tank Manufacturer's Name (if known): Owens Corning

B. TYPE OF USER (check one):
1. ☐ Gas Station 2. ☐ Bulk Storage 3. ☐ Utility 4. ☐ Mercantile
5. ☐ Industrial 6. ☐ Government 7. ☐ School 8. ☐ Residential
9. ☐ Agricultural 10. ☒ Other (specify): Rail Road

C. TANK CONSTRUCTION:
1. ☐ Bare Steel 2. ☐ Cathodically Protected and Coated Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current)
3. ☐ Coated Steel 4. ☒ Fiberglass 5. ☐ Other (specify): _____
6. ☐ Relined - Date _____ 7. ☐ Steel - Fiberglass Reinforced Plastic Composite 9. ☐ Unknown

Approval: 1. ☐ Nat'l Std. 2. ☒ UL 3. ☐ Other: | Is Tank Double Walled? ☐ Yes ☒ No
Overfill Protection Provided? ☐ Yes ☒ No If yes, identify type: | Spill Containment? ☐ Yes ☒ No

Tank leak detection method: 1. ☐ Automatic tank gauging 2. ☐ Vapor monitoring 3. ☐ Groundwater monitoring 4. ☐ Inventory control and tightness testing 5. ☐ Interstitial monitoring 6. ☐ Not required at present 7. ☐ Manual Tank Gauging (only for tanks of 1,000 gallons or less) N/A

D. PIPING CONSTRUCTION
1. ☐ Bare Steel 2. ☐ Cathodically Protected and Coated or Wrapped Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current) 3. ☒ Coated Steel
4. ☐ Fiberglass 5. ☐ Other (specify): _____ 9. ☐ Unknown

Piping System Type: 1. ☐ Pressurized piping with: A. ☐ auto shutoff; B. ☐ alarm; or C. ☐ flow restrictor 2. ☐ Suction piping with check valve at tank
3. ☐ Suction piping with check valve at pump and inspectable Gravity Feed

Piping leak detection method: used if pressurized or check valve at tank: 1. ☐ Vapor monitoring 2. ☐ Interstitial monitoring
3. ☐ Groundwater monitoring 4. ☐ Tightness testing 5. ☐ Line Leak Detector 6. ☐ Not Required N/A

Approval: 1. ☐ Nat'l Std 2. ☐ UL 3. ☐ Other: Unknown | Double Walled: ☐ Yes ☒ No

E. TANK CONTENTS
1. ☐ Diesel 2. ☐ Leaded 3. ☐ Unleaded 4. ☐ Fuel Oil
5. ☐ Gasohol 6. ☐ Other 7. ☐ Empty 8. ☐ Sand/Gravel/Slurry
9. ☐ Unknown 10. ☐ Premix 11. ☒ Waste Oil 12. ☐ Propane
13. ☐ Chemical * _____ _____ _____ 14. ☐ Kerosene 15. ☐ Aviation

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

If Tank Closed, Give Date (mo/day/yr): 07-31-96 | Has a site assessment been completed? (see reverse side for details) ☒ Yes ☐ No

If installation of a new tank is being reported, indicate who performed the installation inspection:
1. ☐ Fire Department 2. ☐ DILHR 3. ☐ Other (identify) _____

Name of Owner or Operator (please print): John D. Caple | Indicate Whether: ☐ Owner or ☒ Operator

Signature of Owner or Operator: John D. Caple | Date Signed: 07-31-96

SBD-7437 (R. 05/94)

IMPORTANT: Complete as many items on this form as possible. Failure to provide sufficient information may cause you to fall under additional regulations.

BACKGROUND FOR TANK INVENTORY

On May 4, 1984, legislation commonly known as the Ground Water Protection Act was signed into law. This legislation required the creation of an inventory of underground petroleum product storage tanks. A record of this information was necessitated by numerous reported incidents of ground water contamination by petroleum products. Many tanks have been installed, used and forgotten. These installations can threaten the ground water.

This underground tank inventory is being established to help identify the need for future actions required to clear up potential problems before they occur. Your help in identifying abandoned, "in use" and "new use" tank locations will greatly assist this effort to protect Wisconsin's ground water.

SITE ASSESSMENT INFORMATION

Requirements for a site assessment at the closure or change in service for a federally regulated underground storage tank were outlined in federal rules published in the September 23,1988 Federal Register, 40 CFR 280 and 281.

The requirements in § 280.72 state:

> (a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release. The requirements of this section are satisfied if one of the external release detection methods allowed in § 280.43 (e) and (f) is operating in accordance with the requirements in § 280.43 at the time of closure, and indicates no release has occurred.

The external release detection methods in § 280.43 (e) and (f) are summarized below:

> "(e) *Vapor monitoring.*" This sub section refers to the testing or monitoring for vapors within the soil gas of the tank's excavation zone. It further requires seven (7) conditions to be met to qualify the testing program as a valid vapor monitoring system.

> "*(f) Ground-water monitoring.*" This sub section refers to the testing or monitoring for liquids on the ground water below the tank. It establishes the requirements for an acceptable system that effectively monitors the ground water for the presence of regulated substances and insures the integrity of the monitoring wells so the wells themselves do not become conduits for ground water contamination.

Complete written guidelines on the conduct of a site assessment can be obtained from the DILHR Bureau of Petroleum Inspection & Fire Protection at the following address:

Bureau of Petroleum Inspection and Fire Protection
P.O. Box 7969
Madison, WI 53707

Site assessments are to be submitted to <u>both</u> the DILHR office and to the DNR at the following addresses:

Bureau of Petroleum Inspection & Fire Protection
P.O. Box 7969
Madison, WI 53707

Bureau of Solid and Hazardous Waste Management
P.O. Box 7921
Madison, WI 53707

APPENDIX C

Standard Operating Procedures
for Soil Sampling and Headspace Analysis

SOIL SAMPLING

EQUIPMENT

Sampling Trowel (excavation sampling)
Sampling Auger (stockpile sampling)
Sample Containers and Labels
Sampling Gloves
Decontamination Equipment

PREPARATION

1. Determine the analysis or analyses required for the particular sample site.
2. Determine sample locations.
3. Determine appropriate depth for sample collection.
4. Label sample containers.

PROCEDURE

1. Obtain sample from appropriate location and depth.
2. Wear fresh latex examination gloves and fill the appropriate sample container with the appropriate quantity of soil according to the following analysis-specific procedures:

    a. Petroleum Volatile Organic Compounds (PVOC): soil samples are measured using a disposable 30 ml graduated plastic syringe with the tip sliced off. The modified syringe is used to obtain a small soil core with an approximate mass of 25 g (15 to 20 ml by volume). The plunger is depressed to extract the soil core into a clean, pre-weighed, graduated 60 ml glass sample jar that contains 25 ml of methanol. The cap must not be removed until the sample is ready to be placed in the jar. The syringe cannot be re-used.
    The sample jar cap contains a small opening where the Teflon septum is exposed. This opening will be used by the analytical laboratory to withdraw the liquid for analysis.

    b. Diesel Range Organics (DRO): soil samples are measured using a disposable 30 ml graduated plastic syringe with the tip sliced off. The modified syringe is used to obtain a small soil core with an approximate mass of 25 g (15 to 20 ml by volume). The plunger is depressed to extract the soil core into a clean, pre-weighed, graduated 60 ml glass sample jar. The cap must not be removed until the sample is ready to be placed in the jar. The syringe cannot be re-used.
    The sample jar cap contains a small opening where the Teflon septum is exposed. This opening will be used by the analytical laboratory to inject hexane into the sample jar. The liquid is later withdrawn for analysis.

c. Polynuclear Aromatic Hydrocarbons (PAH): soil samples are placed into a clean 4 oz. glass sample jar. The jars are filled so that no headspace remains.

d. Dry Weight: dry weight samples are collected to coincide with each DRO/PVOC sample location. Soil samples are placed in 4 oz. Whirl-pak plastic sample bags. No specific headspace or temperature criteria apply to sample transport and handling.

e. Nutrient Analysis: samples collected for nutrient analyses are placed in 1 gallon plastic zip-locking bags. No specific headspace or temperature criteria apply to sample transport and handling. The samples are stored at room temperature for a minimum of 3 days prior to shipment to an analytical laboratory.

3. Close the sample container tightly, making certain that soil does not prevent the sample container from sealing properly.

4. Complete the Analytical Sampling Form and Chain of Custody Form as described in Documentation (1.2).

HEADSPACE ANALYSIS OF SOILS WITH THE PID

The method described below conforms to jar headspace procedure requirements stated in the Wisconsin Department of Labor, Industry and Human Relations (DILHR) Administrative Code ILHR 10. The instrument used in the field was an OVM Model 580B portable photoionization detector (PAD), an organic vapor detector using a 10.6 eV lamp with a minimum detection limit of 0.1 instrument units equivalent to parts per million (ppm). The instrument is calibrated daily to a benzene standard (isobutylene).

EQUIPMENT

Photoionization Detector
Disposable Latex Examination Gloves
8 oz. Wide Mouth Glass Jars
Aluminum Foil
Sampling Kit
Analytical Sampling Form

PROCEDURE

1. Use clean disposable latex gloves and decontaminated sampling equipment to handle the soil sample. Half-fill one clean 8 oz. glass jar with the soil sample to be analyzed. Immediately cover the open mouth with aluminum foil and screw the cap on tightly to seal the jar.
2. Allow headspace to develop for 10 minutes. Vigorously shake the jar for 15 seconds both at the beginning and end of the headspace development period. Headspace development should be done within a heated vehicle or building if ambient outdoor temperatures are below 32° F (0° C).
3. After allowing headspace to develop, remove screw lid to expose the foil seal. Quickly puncture the foil seal with the instrument probe, to a point about one-half of the headspace depth. Exercise care to avoid intake of water droplets or soil particles.
4. Following probe insertion through foil seal, record the highest meter response on the Analytical Sampling Form. Headspace data may have to be discounted in samples with a high moisture content, as elevated levels of water vapor may produce erroneously high readings on the PAD.

Additionally, samples were visually examined by an environmental professional for staining or other signs of contamination.

APPENDIX D

Analytical Results

Company N[illegible] Environmental

Branch or Location: Duluth, MN

Project Contact: Irvin Mossberger

Telephone: (218) 722-5880

Project Number: 96,601

Project Name:

Project Location: Superior, WI

Sampled By (Print): Irvin G. Mossberger

Regulatory Program *(circle)*: (UST) RCRA CLP SDWA

NPDES/WPDES CAA NR_____ Other_____

EN CHEM INC.

AUG - 9 1996

☐ 1241 Bellevue St., Suite 9
Green Bay, WI 54302
414-469-2436 • 1-800-736-2436
FAX 414-469-8827

☒ 2231 Catlin Ave., Suite 420
Superior, WI 54880
715-392-5844 • 1-800-837-8238
FAX 715-392-5843

CHAIN OF CUSTODY

NR720 Confirmation Analysis Required? Yes

(En Chem will confirm unless otherwise instructed.)

Mail Report To: Irvin Mossberger
Company: MJ Environmental
Address: 101 W. 2nd St. Suite 205
Duluth, MN 55802

Invoice To: Pam Snitgen
Company: MJ Environmental
Address: 1009 W. Ridge St.
Marquette, MI 49855

P.O. No.: 40067 Quote No.:

Field ID	Sample Description	Collection Date	Collection Time	Field Screen	Matrix	Filt'd Y/N	Preserv*	Analysis Requested	SHADED AREA FOR LABORATORY USE ONLY: Good Cond.	Total Bottles	Comments	Laboratory Number
B-1		7/31/96	11:20	0 ppm	Soil	N/A	E	DRO EnCore # 4226		1- 5oz 1- EnCore		502243
B-2		7/31/96	11:35	0	Soil	N/A	E	DRO 2770		↓		502244
P-1		7/31/96	1:45	0	Soil	N/A	E	DRO 2615		↓		502245

**Preservation Code*

A=None B=HCL C=H2SO4
D=HN03 E=EnCore F=Methanol**
G=NaOH O=Other (Indicate)

**If not using En Chem's methanol, indicate volume of methanol added and mark the appropriate samples.

Relinquished By:	Date/Time:	Received By:	En Chem Project No.
Irvin G. Mossberger	7/31/96 3:24		07960744
Relinquished By:	Date/Time:	Received By:	Sample Receipt Temp. *(Must be rec'd at 4°C)*
Relinquished By:	Date/Time:	Received By (En Chem): Cynthia Coady	KAI

EN CHEM INC.

. . . chemistry for the environment

Superior Laboratory
2231 Catlin Ave., Suite 420
Superior, WI 54880
715-392-5844
1-800-837-8238
Fax: 715-392-5843

Lab Certification No. 405132750
Location : 96.601
Your Sample ID: B-1
Sample Desc. :
Sample Matrix : SOIL — Date Collected: 07/31/1996
En Chem Proj# : 0796074 — Date Received : 07/31/1996
En Chem Lab # : 502243 — Date Reported : 08/08/1996

Report to: MJ ENVIRONMENTAL CONSULTANTS INC
CARNEGIE BLDG, SUITE 205
101 W 2ND ST
DULUTH, MN 55802

Bill to: MJ ENVIRONMENTAL CONSULTANTS INC

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyz By
TOTSOLID	Total Solids	73	percent	0.0			EPA 160.3	08/01/1996	CLC
DRO-S	Diesel Range Organics(DRO)-Soil	ND	mg/kg	5.3		07/31/1996	WDNR MOD DRO	08/06/1996	DLF
	Soil spike	88	% RECOV	50					
	Soil spike duplicate	92	% RECOV	50					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

EN CHEM INC.

. . . chemistry for the environment

Superior Laboratory
2231 Catlin Ave., Suite 420
Superior, WI 54880
715-392-5844
1-800-837-8238
Fax: 715-392-5843

Lab Certification No. 405132750
Location : 96.601
Your Sample ID: B-2
Sample Desc. :
Sample Matrix : SOIL — Date Collected: 07/31/1996
En Chem Proj# : 0796074 — Date Received : 07/31/1996
En Chem Lab # : 502244 — Date Reported : 08/08/1996

Report to: MJ ENVIRONMENTAL CONSULTANTS INC
CARNEGIE BLDG, SUITE 205
101 W 2ND ST
DULUTH, MN 55802

Bill to: MJ ENVIRONMENTAL CONSULTANTS INC

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyze By
TOTSOLID	Total Solids	76	percent	0.0			EPA 160.3	08/01/1996	CLC
DRO-S	Diesel Range Organics(DRO)-Soil	ND	mg/kg	5.4		07/31/1996	WDNR MOD DRO	08/06/1996	DLP
	Soil spike	88	% RECOV	50					
	Soil spike duplicate	92	% RECOV	50					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

EN CHEM INC.

. . . chemistry for the environment

Superior Laboratory
2231 Catlin Ave., Suite 420
Superior, WI 54880
715-392-5844
1-800-837-8238
Fax: 715-392-5843

Lab Certification No. 405132750
Location : 96.601
Your Sample ID: P-1
Sample Desc. :
Sample Matrix : SOIL — Date Collected: 07/31/1996
En Chem Proj# : 0796074 — Date Received : 07/31/1996
En Chem Lab # : 502245 — Date Reported : 08/08/1996

Report to: MJ ENVIRONMENTAL CONSULTANTS INC
CARNEGIE BLDG, SUITE 205
101 W 2ND ST
DULUTH, MN 55802

Bill to: MJ ENVIRONMENTAL CONSULTANTS INC

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analy By
TOTSOLID	Total Solids	91	percent	0.0			EPA 160.3	08/01/1996	CL
DRO-S	Diesel Range Organics(DRO)-Soil	ND	mg/kg	4.4		07/31/1996	WDNR MOD DRO	08/06/1996	DL
	Soil spike	88	% RECOV	50					
	Soil spike duplicate	92	% RECOV	50					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by: