ENVIRONMENTAL & REGULATORY SERVICES
BUREAU OF PECFA
2129 Jackson Street
Oshkosh, Wisconsin 54901-1805
TDD #: (608) 264-8777
Fax #: (920) 424-0217
http://www.commerce.state.wi.us
http://www.wisconsin.gov
Scott McCallum, Governor
Philip Edw. Albert, Secretary

Wisconsin
Department of Commerce

April 23, 2002

Mr. Douglas Deaton
Mirro Company
PO Box 1330
Manitowoc, WI 54220

RE: **Final Closure**

Commerce # 54220-6744-01 WDNR BRRTS # 03-36-280532
Mirro Company Plant #2, 2401 Mirro Drive, Manitowoc

Two 20,000-gallon fuel oil USTs

Dear Mr. Deaton:

This letter acknowledges receipt of the information requested in the Wisconsin Department of Commerce's (Commerce) PECFA Site Review Section February 25, 2002 conditional closure letter. On April 23, 2002, Commerce received the monitoring well abandonment forms for the sump.

This site is now listed as "closed" on the Commerce database. It is in your best interest to keep all documentation related to the investigation and remediation of your site.

If future site conditions indicate that any remaining contamination poses a threat, and subsequent information indicates a need to reopen this case, any original claim under the PECFA fund would also reopen and you may apply for assistance to the extent of remaining eligibility. If contamination is encountered, appropriate measures must be implemented to assure any residual contamination is managed following all applicable State of Wisconsin regulations and standards.

Thank you for your efforts to protect Wisconsin's environment. If you have any questions, please contact me in writing at the letterhead address or by telephone at (920) 424-0046.

Sincerely,

Robert H. Klauk, PG
Hydrogeologist
Site Review Section

cc: Lynelle Caine – Northern Environmental
Case File

File Ref: C:\my documents\bob\542\54220\674401mirro#2\CLOSEFINALSPECIFIC.doc

LETTER OF TRANSMITTAL

Northern EnvironmentalSM
Hydrologists • Engineers • Geologists

954 Circle Drive
Green Bay, Wisconsin 54304

414-592-8400
1-800-854-0606
Fax 414-592-8444

DATE 4/22/02	PROJECT NO. E-SP03-2200-1267
ATTENTION Bob Klauk	
RE Mirro Plant #02, Manitowoc, WI	
BRRTS # 03-36-280532	
Commerce # 54220-6744-02	
Sump Abandonment Form	

TO: WI Dept. Of Commerce
2129 Jackson Street
Oshkosh, WI 54901

WE ARE SENDING YOU

- [x] Attached
- [ ] Under separate cover
- [ ] Shop Drawings
- [ ] Specifications
- [ ] Plans
- [ ] Copy of letter
- [ ] Samples
- [ ] Change order
- [ ] _____

COPIES	DESCRIPTION
1	Sump Abandonment Form

RECEIVED
APR 23 2002
ERS DIVISION
OSHKOSH

THESE ARE TRANSMITTED (see code)

A. For Approval
B. For Your Use
C. As Requested
D. For Review and Comment
E. For Bids Due _____ 19 ____
F. No Exceptions Taken
G. Make Noted Corrections
H. Amend & Resubmit
I. _____
J. Resubmit _____ Copies for Review
K. Submit _____ Copies for Distribution
L. Return _____ Corrected Prints
M. Review and Sign _____

REMARKS: Enclosed please find a copy of the abandonment form for the sump at Mirro Plant #02. Upon receipt of this documentation the requirements of the conditional closure letter dated Feb 25, 2002 should be met & final closure granted. If you have any question or need additional information, please call.

Thank You,

COPY TO: Doug Deaton, Mirro Co.

SIGNED:

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 appropiate 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 forteiture 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: Manitowoc

Common Well Name: Sump | Gov't Lot (If applicable): _____

Grid Location: NW 1/4 of SE 1/4 of Sec. 9 ; T. 19 N; R. 24 ■ 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: Site Closure

WI Unique Well No. of Replacement Well: _ _ _ _ _

(2) FACILITY / OWNER INFORMATION

Facility Name: Mirro Plant #2

Facility ID | License/Permit/Monitoring No.

Street Address of Well: 2401 Mirro Drive

City, Village, or Town: Manitowoc

Present Well Owner: Mirro Company | Original Owner

Street Address or Route of Owner: 1512 Washington Street

City, State, Zip Code: Manitowoc, WI 54221

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 8-14-01

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): 11.5 Casing Diameter (in.): 6.0

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): 2

(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)

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 Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole

Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
Bentonite	Surface	11.5	3 ½		

(6) Comments: _____

(7) Name of Person or Firm Doing Sealing Work: Northern Environmental | Date of Abandonment: 4-19-02

Signature of Person Doing Work: [signature] | Date Signed: 4-19-02

Street or Route: 954 Circle Drive | Telephone Number: (920) 592-8400

City, State, Zip Code: Green Bay, WI 54304

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

ENVIRONMENTAL & REGULATORY SERVICES
BUREAU OF PECFA
2129 Jackson Street
Oshkosh, Wisconsin 54901-1805
TDD #: (608) 264-8777
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http://www.commerce.state.wi.us
http://www.wisconsin.gov
Scott McCallum, Governor
Philip Edw. Albert, Secretary

Wisconsin
Department of Commerce

February 25, 2002

Mr. Douglas Deaton
Mirro Company
PO Box 1330
Manitowoc, WI 54220

RE: **Conditional Case Closure**

Commerce # 54220-6744-01 WDNR BRRTS # 03-36-280532
Mirro Company Plant #2, 2401 Mirro Drive, Manitowoc

Two 20,000-gallon fuel oil USTs

Dear Mr. Deaton:

On January 30, 2002, the Wisconsin Department of Commerce (Commerce) PECFA Site Review Section received a request for case closure, dated January, from Northern Environmental. It is understood that residual soil and/or groundwater contamination remains on-site. Using the standards established in the NR 700 series, Wisconsin Administrative Code (Wis. Adm. Code), Commerce has determined that this site does not pose a significant threat to the environment and human health. No further investigation or remedial action is necessary. In making this determination, the following documents prepared by Northern Environmental, as well as correspondence in the case file, were reviewed:

- *Disposal of Stockpiles of Soil* – January 8, 2002
- *Status Update and Request for Case Closure* – January 25, 2002

The following condition must be satisfied to obtain final closure:

- Documentation of the abandonment of the sump (WDNR Abandonment Form 3300-5B).

Thank you for your efforts to protect Wisconsin's environment. If you have any questions, please contact me in writing at the letterhead address or by telephone at (920) 424-0046.

Sincerely,

Robert H. Klauk, PG
Hydrogeologist
Site Review Section

cc: Lynelle Caine – Northern Environmental
Case File

File Ref: C:\my documents\bob\542\54220\674401mirro#2\CONDITIONAL_CLOSURE.doc

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary
Ronald W. Kazmierczak, Regional Director

Northeast Region Headquarters
1125 N. Military Ave., P.O. Box 10448
Green Bay, Wisconsin 54307-0448
Telephone 920-492-5800
FAX 920-492-5913
TTY 920-492-5912

January 28, 2002

Mr. Douglas Deaton
Mirro Co
P.O. Box 1330
Manitowoc, WI 54220

SUBJECT: Transfer of Project Management to Department of Commerce
MIRRO CO; 2401 MIRRO DR;
MANITOWOC, WI;
WDNR BRRTS ID # 03-36-280532

Dear Mr. Deaton:

The State of Wisconsin divides the jurisdiction for sites contaminated by petroleum storage tank systems between the DNR and the Department of Commerce (Commerce), based on statutory definitions of high, medium and low risk sites. Under this statute, oversight of sites falling under the definition of "low or medium risk" is the responsibility of Commerce rather than the Wisconsin DNR.

Per the Tank Closure/Site Assessment Report submitted on January 23, 2002 by Susan Knabe of Northern Environmental Technologies, Inc., this site falls under the definition of "low or medium risk". As such, staff at Commerce will provide further reviews of submittals and all technical assistance related to this case. Accordingly, DNR will transfer the above referenced file to Commerce at the following address:

ATTN: Bob Klauk
Wisconsin Department of Commerce
2129 Jackson St.
Oshkosh, WI 54901-1805
(920) 424-0046 FAX: (920) 424-0217

If you have questions or concerns regarding this site, or would like to review any of the pertinent file documents, please direct them to the Commerce contact listed above.

Sincerely,

Veronica Lorenz
Program Assistant
Bureau for Remediation and Redevelopment

cc: Bob Klauk, WI Dept. of Commerce, 2129 Jackson Street, Oshkosh, WI 54901-1805
Susan Knabe, Northern Environmental Technologies, Inc., 954 Circle Drive, Green Bay, WI 54304

Northern Environmental℠
Hydrologists • Engineers • Geologists

954 Circle Drive
Green Bay, WI 54304
920-592-8400
1-800-854-0606
Fax • 920-592-8444
E-mail • netigb@admin.itol.com

January 25, 2002
(ESP03-2200-1267)

Mr. Keld Lauridsen
Wisconsin Department of Natural Resources
P O Box 10448
Green Bay WI 54307-0448

Re: Status Update and Recommendation for Site Transfer to WDCOMM,
Mirro Company Plant #02, 2401 Mirro Drive, Manitowoc, Wisconsin;
WDNR LUST ID #03-36-280532

Dear Mr. Lauridsen:

Northern Environmental Technologies, Incorporated has completed a status update and request for case closure for a petroleum release at Mirro Company Plant #02, 2401 Mirro Drive, Manitowoc, Wisconsin (the Site). Currently, the Site is under the jurisdiction of the Wisconsin Department of Natural Resources (WDNR).

The WDNR has jurisdiction over sites that may be classified as high-risk and the Wisconsin Department of Commerce (WDCOMM) has jurisdiction over sites that may be classified as medium or low risk sites. Based on data collected at the Site, we believe the Site meets the classification of a medium risk site, and as a result, the site falls under the administrative authority of the WDCOMM. **By copy of this letter, it is requested this Site be transferred from the WDNR to the WDCOMM to be reviewed for case closure.**

If you have any questions regarding this submittal, please contact us at 920-592-8400.

Sincerely,
Northern Environmental
Technologies, Incorporated

Susan Knabe

Susan T. Knabe
Hydrogeologist

Lynelle P. Caine
Project Manager

STK/hmo

c: Mr. Robert Klauk, WDCOMM
Mr. Douglas Deaton, Mirro Company

Northern Environmental℠
Hydrologists • Engineers • Geologists

954 Circle Drive
Green Bay, WI 54304
920-592-8400
1-800-854-0606
Fax • 920-592-8444
E-mail • netigb@admin.itol.com

January 25, 2002
(ESP03-2200-1267)

Mr. Robert Klauk
Wisconsin Department of Commerce
2129 Jackson Street
Oshkosh, Wisconsin 54901-1805

RE: Status Update and Request for Case Closure, Mirro Company Plant #02, 2401 Mirro Drive, Manitowoc, Wisconsin; WDNR LUST ID #03-36-280532

Dear Mr. Klauk:

Northern Environmental Technologies, Incorporated (Northern Environmental) has completed a status update in association with a petroleum release at Mirro Company Plant #02, 2401 Mirro Drive, Manitowoc, Wisconsin (the Site). The Site is located in the northeast quarter of the southeast quarter of Section 9, Township 19 North, Range 24 East (44 degrees, 7 minutes, 24 seconds north latitude and 87 degrees, 37 minutes, 19 seconds west longitude) in the city of Manitowoc, Manitowoc County, Wisconsin. The Site location is shown in Figure 1. This letter summarizes the investigative and remedial activities and requests case closure.

BACKGROUND INFORMATION

The Site has been the location of Mirro Company Plant #02, a plastics manufacturing company. Mirro Company was recently purchased by Newell Rubbermaid. Two 20,000-gallon fuel oil underground storage tanks (USTs) were located at the Site and were used to store fuel oil for the backup generator at the Site. On August 14, 2001, Northern Environmental documented the removal of the two USTs. Petroleum odors and elevated field screening results were observed in the soil beneath the USTs. One soil sample (S13) was submitted for laboratory analysis for diesel range organics (DRO), petroleum volatile organic compounds (PVOCs), and polynuclear aromatic hydrocarbons (PAHs) to confirm the release. The results of laboratory analysis detected DRO concentrations of 120 milligrams per kilogram (mg/kg). Several PVOCs and PAHs were also detected in the sample. The site layout and former UST locations are shown in Figure 2.

Based on the UST closure assessment results, a release was reported to the Wisconsin Department of Natural Resources (WDNR) on August 20, 2001. Subsequently, the WDNR assigned a Bureau of Remediation and Redevelopment Tracking System (BRRTS) number of 03-36-280532 and issued a release notification letter and required that an investigation be performed to further define the extent of the release and that appropriate remedial activities be initiated to remediate the Site. Following the UST removal, an excavation was completed in the vicinity of the former USTs. The goal of the of the excavation was to collect soil samples to define the extent of petroleum-impacted soil and to remove potentially impacted soil from the area surrounding the USTs. Approximately 4,700 gallons of groundwater were also pumped from the excavation to facilitate backfilling. The water was hauled to Heart of the Valley Metro Sewage District in Kaukauna, Wisconsin for treatment and disposal.

CASE SUMMARY

Soil

On August 14, 2001, Northern Environmental personnel oversaw the excavation of approximately 100 cubic yards of impacted soil by Gene Frederickson Trucking, Inc. The soil was temporarily stockpiled on-site, placed on, and covered with plastic. The lateral and vertical extent of the excavation was guided by field screening results. The excavation extended to a maximum depth of 17 feet below grade (fbg). Saturated soil was observed in the excavation between 7 and 9 fbg. The excavated area was subsequently backfilled with clean fill. The lateral extent of the excavation is shown in Figure 3.

During completion of the excavation, Northern Environmental personnel collected, described, and field-screened 22 soil samples (S1 through S19 and S24 through S26) from the excavated soil and excavation sidewalls to evaluate the vertical and lateral extent of the petroleum-impacted soil. In addition, four soil samples (S20 through S23) were collected beneath the former piping run to document the presence or absence of petroleum compounds. The samples were field-screened with a photoionization detector (PID). Sixteen soil samples were submitted to U.S. Analytical Laboratory in Kimberly, Wisconsin to be analyzed for a combination of DRO and PVOCs. Soil samples S10, S13, and S25 were also submitted for analysis of PAHs. Soil sample locations are shown in Figure 3. Soil field screening results are summarized in Table 1. Soil analytical results are listed in Table 2. Copies of soil analytical reports are included in Attachment A.

Six soil samples (S8, S10, S15, S19, S25, and S26) were collected from the excavation sidewalls above the apparent water table. None of these samples contained concentrations of DRO, PVOCs, or PAHs above laboratory detection limits. In addition, the 4 soil samples collected beneath the former piping run did not detect concentrations of DRO in excess of detection limits.

Five soil samples (S1, S5, S12, S14, and S24) were collected below the apparent water table from the sidewalls and base of the excavation and submitted for laboratory analysis of DRO and PVOCs. Results of these samples are more representative of ground-water conditions at the Site and therefore generic residual contaminant levels (RCLs) do not apply. Results of sample S1, collected below UST1, detected low level concentrations of benzene, and sample S14, collected below UST2, detected low level concentrations of ethylbenzene and 1,2,4-trimethylbenzene. Samples S5 and S24, collected from the base of the excavation, and S12, collected from beneath UST2, did not detect concentrations of DRO or PVOCs in excess of laboratory detection limits.

Soil sample S13 exhibited the highest PID reading of the samples collected during the excavation. Laboratory results of this sample detected concentrations of DRO, trimethylbenzenes, and several PAHs. Based on results of previous investigations completed at Mirro Plant #02, the native soil consists predominantly of silty clay and is considered a less permeable soil. Under Section NR 720, Wisconsin Administrative Code (Wis. Adm. Code), generic RCLs for less permeable soil have been established for DRO at 250 mg/kg. Based on this standard, the DRO concentration detected in S13 (120 mg/kg) was below the generic RCL. The concentrations of trimethylbenzenes and PAHs detected in S13 were compared to the Table 1 and 2 values established in NR 746, Wis. Adm. Code and the levels listed in the WDNR Interim Guidance for Soil Cleanup Levels for PAHs. None of the petroleum constituents detected in S13 were above these values.

On November 28, 2001, a second sample was collected from the stockpiled soil to confirm the laboratory results. Soil sample SP1 was collected and submitted for laboratory analysis of DRO and PVOCs. DRO and PVOCs were not detected above laboratory detection limits in SP1. Based on the laboratory results of the stockpiled soil, Northern Environmental requested permission from the WDNR to thinspread the soil on site on January 8, 2002. Approval to thinspread the soil on-site was granted on January 23, 2002. Given that all petroleum concentrations detected in the excavated soil are below generic RCLs and Table 1 and 2 values, additional soil sampling of the thinspread soil should not be necessary. A copy of the WDNR letter granting permission to thinspread the soil is included in Attachment B.

Ground water

Prior to backfilling, a sump was installed in the excavation near the former UST locations. The sump was developed and sampled on November 28, 2001. The ground-water sample was submitted to CT Laboratories for PVOC and PAH analysis. Several PVOCs and PAHs were detected in this sample but none in excess of the ES or PAL. Ground-water analytical results are listed in Table 3. Copies of the laboratory reports are included in Attachment C. Documentation of ground-water disposal is included in Attachment D.

RECOMMENDATIONS AND CONCLUSIONS

Results of the excavation indicate that the majority of the petroleum impacted soil was removed during the excavation. Low levels of DRO, PVOCs, and PAHs were detected the excavated soil stockpiled on site; however, the petroleum concentrations detected were below the generic RCLs and WDNR Interim Guidance Soil Cleanup Levels for PAHs for exposure via direct contact. None of the sidewall samples contained petroleum compounds in excess of generic RCLs. Saturated soil samples collected from the bottom of the excavation also indicated the majority of petroleum-impacted soil was removed. Based on the results of the ground-water sampling, it appears that remaining petroleum contamination is not impacting ground-water quality. As a result, we believe the Site meets the requirements to be reviewed for case closure. On behalf of Mirro Company, Northern Environmental recommends that no further action be required in association with the fuel oil release at the Site.

The results of this study are based on professional interpretation of the information available to Northern Environmental. Northern Environmental does not warrant that this report represents an exhaustive study of all possible environmental concerns associated with the Site. However, the items addressed as part of this study do represent the most likely sources of environmental concerns associated with the fuel oil release and are, consequently, believed to adequately address the clients needs at this time.

If you have any questions or require additional information, please contact us at 920-592-8400.

Sincerely,
Northern Environmental Technologies, Incorporated

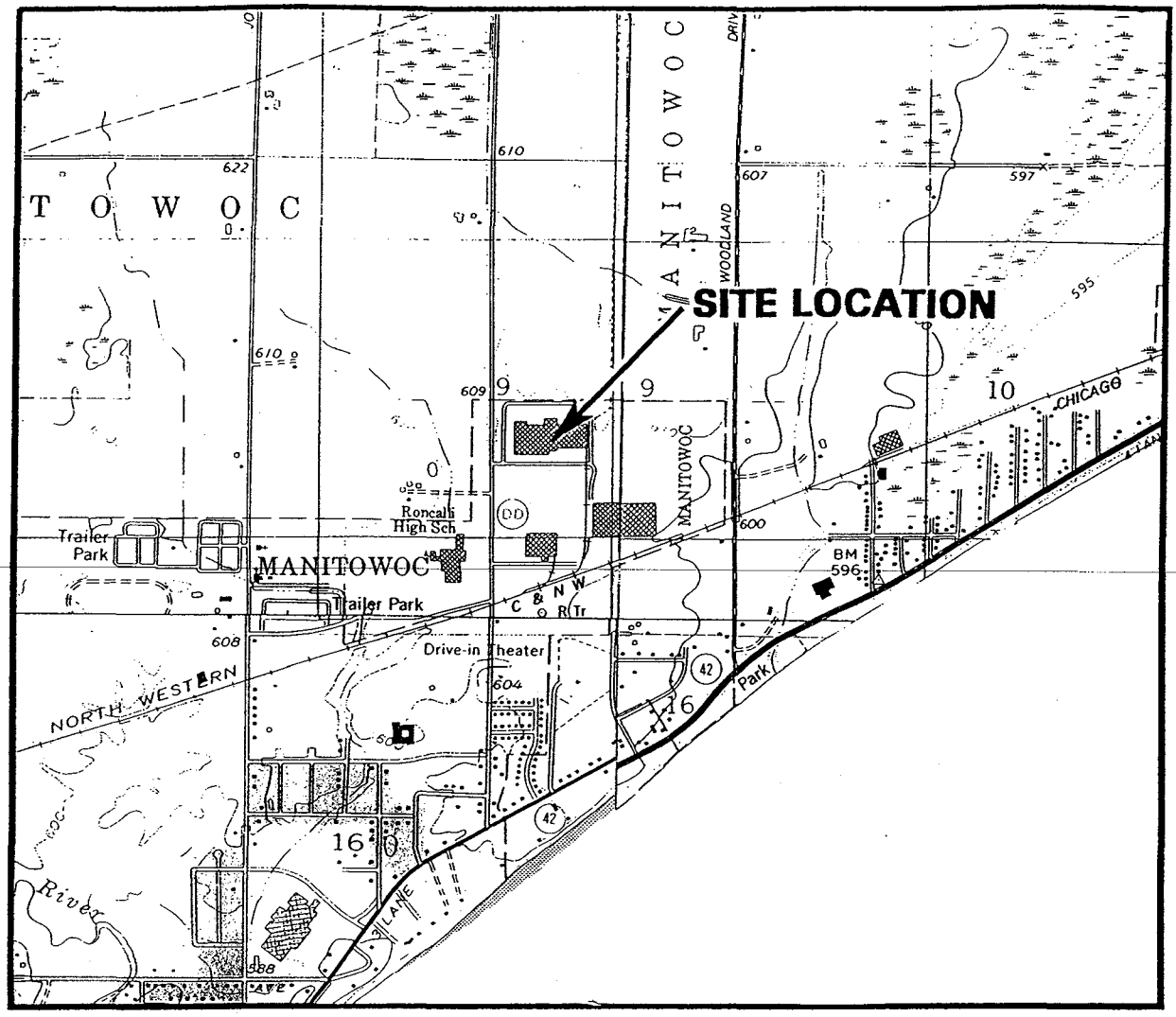
Susan Knabe

Susan T. Knabe
Hydrogeologist

Lynelle P. Caine
Project Manager

STK/hmo
Attachments

c: Mr. Douglas Deaton, Mirro Company



SCALE IN FEET

1" = 2000'

0 1000 2000 3000 4000 5000 6000 7000 8000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

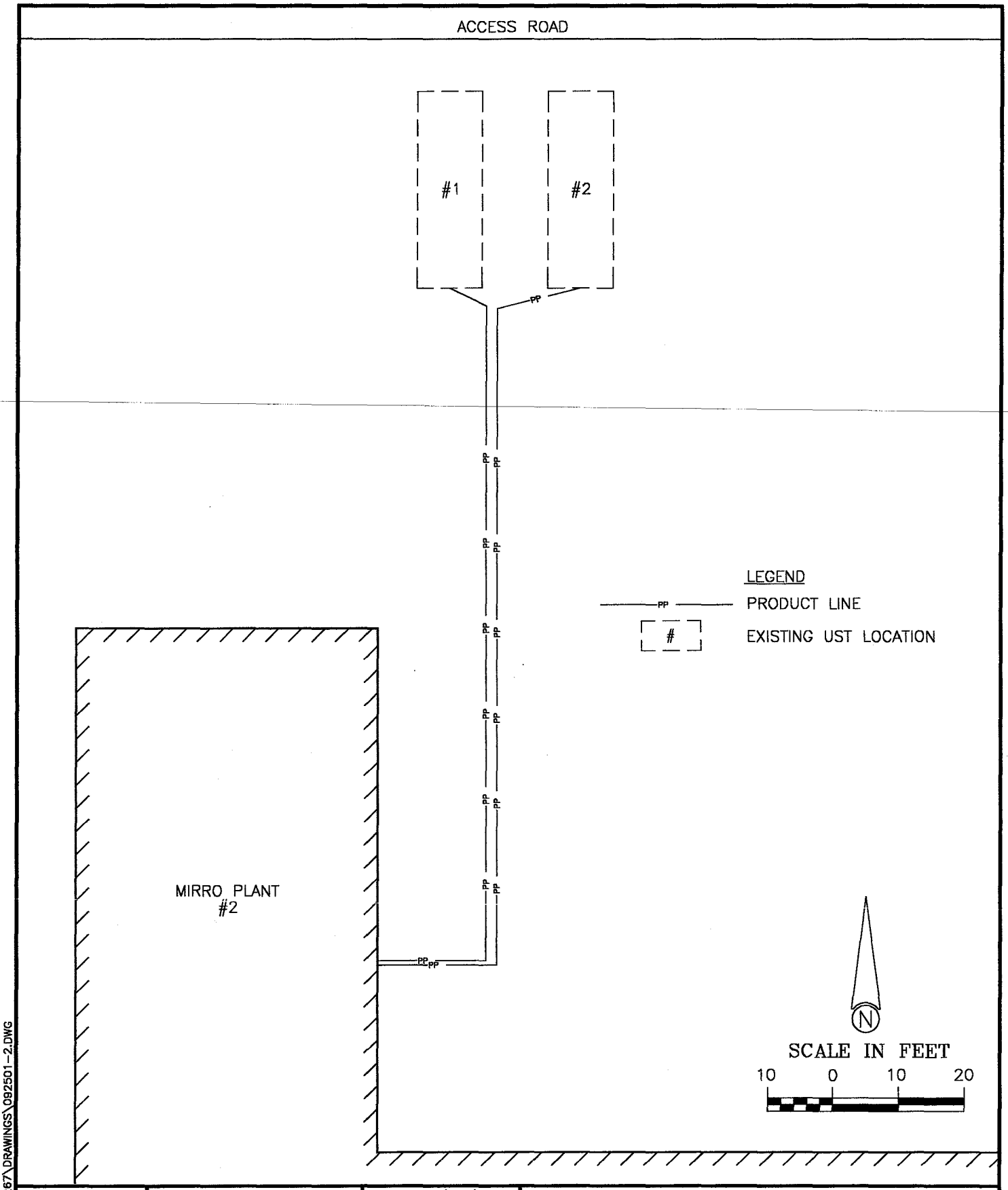
QUADRANGLE LOCATION

BASE MAP SOURCE: USGS MISHICOT, AND TWO RIVERS, WISCONSIN 7.5 MINUTE QUADRANGLE (REVISED 1978)
BASE MAP SOURCE: USGS MANITOWOC, WISCONSIN 7.5 MINUTE QUADRANGLE (REVISED 1973)

DRAWN BY: JJK	PROJECT: MIR-0919	DATE: 8/11/99	MIRO PLANT #2 MANITOWOC, WISCONSIN
REV. DATE			SITE LOCATION AND LOCAL TOPOGRAPHY
	Northern Environmental℠ Hydrologists · Engineers · Geologists		

S:\PROJ\MIR\14080919\081199--1.DWG

FIGURE 1



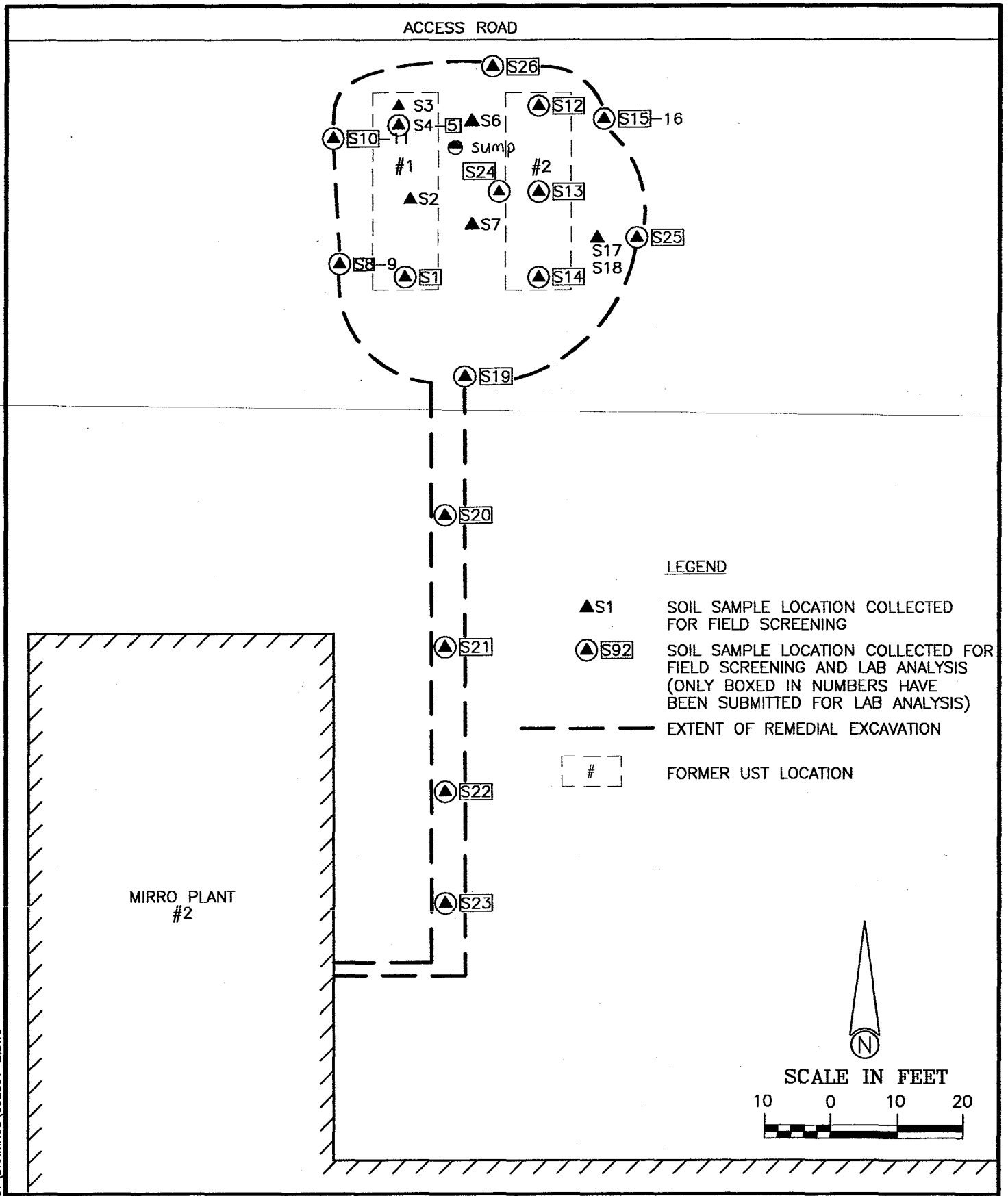
DRAWN BY: JRB	PROJECT: ESP-1267	DATE: 09/25/01
REV. DATE	THIS DRAWING AND ALL INFORMATION CONTAINED THEREON IS THE PROPERTY OF NORTHERN ENVIRONMENTAL INCORPORATED AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH IT IS EXPRESSLY FURNISHED.	MIRRO COMPANY MANITOWOC, WISCONSIN

Northern Environmental SM
Hydrologists · Engineers · Geologists

SITE LAYOUT

S:\PROJ\ESP\22001267\DRAWINGS\092501-2.DWG

FIGURE 2



DRAWN BY: JRB | PROJECT: ESP-1267 | DATE: 09/25/01

REV. DATE

Northern Environmental℠
Hydrologists · Engineers · Geologists

MIRRO COMPANY
MANITOWOC, WISCONSIN

EXTENT OF EXCAVATION WITH SOIL SAMPLE LOCATIONS

S:\PROJ\ESP\22001267\DRAWINGS\092501-2.DWG

FIGURE 3

Table 1 Soil Field Screening Results, Mirro Plant #02, Manitowoc, Wisconsin

Sample Label	Depth (feet)	Sample Petroleum Odor	Sample Description	Sample Location	Date Collected	PID Headspace Analysis		
						Time Collected	Time Analyzed	PID Response (iui)
S1 *	11	None	Silty sand, wet	South end of UST1	8/14/01	910	924	0
S2	11	Slight	Silty sand, wet	Middle end of UST1	8/14/01	912	925	10
S3	11	Strong	Silty sand, wet	North end of UST1	8/14/01	913	925	28
S4	14	None	Silty sand, wet	North end of UST1	8/14/01	942	1000	0
S5 *	17	None	Silty sand, wet	Bottom	8/14/01	943	1001	0
S6	---	None	Silty sand, wet	Soil stockpile	8/14/01	940	1001	1
S7	---	None	Silty sand, wet	Soil stockpile	8/14/01	941	1002	1
S8*	4	None	Clay	Southwest sidewall	8/14/01	944	1002	0
S9	8	None	Clay, moist	Southwest sidewall	8/14/01	945	1003	0
S10 *	4	None	Clay	Northwest sidewall	8/14/01	946	1003	0
S11	8	None	Clay, moist	Northwest sidewall	8/14/01	947	1003	0
S12 *	12	None	Silty sand, wet	North end of UST2	8/14/01	1213	1231	0
S13 *	5	Strong	Silty sand, wet	Middle of UST2	8/14/01	1214	1231	71
S14 *	12	Slight	Silty sand, wet	South end of UST2	8/14/01	1215	1232	7
S15 *	4	Slight	Clay, moist	Northeast sidewall	8/14/01	1216	1232	5
S16	8	Slight	Clay, moist	Northeast sidewall	8/14/01	1217	1233	4
S17	4	Slight	Clay, moist	Southeast	8/14/01	1218	1233	12
S18	8	Slight	Clay, moist	Southeast	8/14/01	1219	1234	5
S19 *	5	None	Clay, moist	South sidewall	8/14/01	1220	1234	2
S20 *	4	None	Clay, moist	Piping run	8/14/01	1405	1425	0
S21 *	4	None	Clay, moist	Piping run	8/14/01	1406	1425	0
S22 *	4	None	Clay, moist	Piping run	8/14/01	1450	1505	0
S23 *	4	None	Clay, moist	Piping run	8/14/01	1451	1505	0
S24 *	16	None	Silty sand, wet	Bottom	8/14/01	1527	1538	0
S25 *	5	None	Clay, moist	Southeast sidewall	8/14/01	1540	1554	0
S26 *	8	None	Clay, moist	North sidewall	8/14/01	1604	1615	2

Key:
PID = Photoionization Detector
iui = instrument units as isobutylene
* = Submitted for laboratory analysis
--- = Depth not available

Table 2 Soil Analytical Results, Mirro Plant #02, Manitowoc, Wisconsin

Sample Number	Sample Depth (feet)	PID Response (iui)	Date Sampled	DRO (mg/kg)	Relevant and Significant Analytical Results (µg/kg)														
					Benzene	Ethylbenzene	MTBE	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes	Anthracene	Fluoranthene	Fluorene	1-Methyl Naphthalene	2-Methyl Naphthalene	Phenanthrene	Pyrene
WAC Residual Contaminant Level				250	5.5	2900	NE	1500	NE	NE	4100	NE	NE	NE	NE	NE	NE	NE
S1 *	11	0	08/14/01	<10	60	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S5 *	17	0	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S8	4	0	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S10	4	0	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	<11	<10	<11	<10	<17	<12	<13
S12 *	12	0	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S13	5	71	08/14/01	120	<25	<25	<25	<25	140	110	<75	200	23 J	350	340	89	410	87
S14 *	12	7	08/14/01	<10	<25	46	<25	<25	41	<25	<75	---	---	---	---	---	---	---
S15	4	5	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S19	5	2	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S20	4	0	08/14/01	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S21	4	0	08/14/01	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S22	4	0	08/14/01	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S23	4	0	08/14/01	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S24 *	16	0	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---
S25	5	0	08/14/01	<10	<25	<25	<25	<25	<25	<25	<75	<11	<10	<11	<10	<17	<12	<13
S26	8	2	08/14/01	12	<25	<25	<25	<25	<25	<25	<75	---	---	---	---	---	---	---

Key:

DRO = Diesel Range Organics
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
NA = Not Analyzed
J = Analyte detected between the Limit of Detection and the Limit of Quantitation
WAC = Wisconsin Administrative Code
NE = Not Established by WAC
50 = Exceeds Chapter NR 720 WAC RCL
* = soil sample collected below apparent water table

Table 3 Ground-Water Analytical Results, Mirro Plant #02, Manitowoc, Wisconsin

Well ID	Date Sampled	Relevant and Significant Analytical Results (µg/l)																	
		Benzene	Ethylbenzene	MTBE	Toluene	Trimethylbenzene	Xylenes	Acenapthene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(K)Fluoranthene	Fluoranthene	Fluorene	1-Methyl Naphthalene	2-Methyl Naphthalene	Naphthalene	Phenanthrene	Pyrene
WAC PAL (µg/l)		0.5	140	12	200	96	1000	NE	600	NE	0.02	0.02	NE	80	80	NE	NE	8	NE	50
WAC ES (µg/l)		5	700	60	1000	480	10000	NE	3000	NE	0.2	0.2	NE	400	400	NE	NE	40	NE	250
Sump	11/28/01	<0.40	1.1 J	<0.40	0.95 J	<0.90	<1.40	<0.19	<0.036	<0.0030	<0.0064	<0.002	0.019	<0.086	<0.091	2	2.1	0.77	0.26	0.45

Key:

MTBE = Methyl-Tertiary-Butyl-Ether
PAH = Polynuclear Aromatic Hydrocarbons
µg/l = micrograms per liter
WAC = Wisconsin Administrative Code
PAL = Preventive Action Limit
ES = Enforcement Standard
NE = Not established by WAC
"J" = Analyte detected between Limit of Detection and Limit of Quantification
--- = Not analyzed
32 = WAC Preventive Action Limit Exceeded
32 = WAC Enforcement Standard Exceeded

ATTACHMENT A

SOIL LABORATORY ANALYTICAL REPORTS

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385A						**Sample Type** Soil			
Sample ID S13						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	79	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	120	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PAH's									
Acenaphthene	< 35	ug/kg	13	43	1	9/12/01	M8270	DJM	1
Acenaphthylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Anthracene	200	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Benzo(a)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(a)pyrene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	1
Benzo(b)fluoranthene	< 24	ug/kg	24	80	1	9/12/01	M8270	DJM	1
Benzo(g,h,i)perylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(k)fluoranthene	< 37	ug/kg	37	120	1	9/12/01	M8270	DJM	1
Chrysene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Dibenzo(a,h)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluoranthene	23 "J"	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluorene	350	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Indeno(1,2,3-cd)pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
1-Methyl naphthalene	340	ug/kg	10	33	1	9/12/01	M8270	DJM	1
2-Methyl naphthalene	89	ug/kg	17	57	1	9/12/01	M8270	DJM	2
Naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	2
Phenanthrene	410	ug/kg	12	40	1	9/12/01	M8270	DJM	1
Pyrene	87	ug/kg	13	43	1	9/12/01	M8270	DJM	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	GRO95	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	GRO95	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	GRO95	CJR	1
1,2,4-Trimethylbenzene	140	ug/kg	24	77	1	8/29/01	GRO95	CJR	1
1,3,5-Trimethylbenzene	110	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Xylene's	< 75	ug/kg	18	60	1	8/29/01	GRO95	CJR	1

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385B						**Sample Type** Soil			
Sample ID S10						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	83.2	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PAH's									
Acenaphthene	< 35	ug/kg	13	43	1	9/12/01	M8270	DJM	1
Acenaphthylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Anthracene	< 11	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Benzo(a)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(a)pyrene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	1
Benzo(b)fluoranthene	< 24	ug/kg	24	80	1	9/12/01	M8270	DJM	1
Benzo(g,h,i)perylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(k)fluoranthene	< 37	ug/kg	37	120	1	9/12/01	M8270	DJM	1
Chrysene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Dibenzo(a,h)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluoranthene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluorene	< 11	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Indeno(1,2,3-cd)pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
1-Methyl naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
2-Methyl naphthalene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	2
Naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	2
Phenanthrene	< 12	ug/kg	12	40	1	9/12/01	M8270	DJM	1
Pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	GRO95	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	GRO95	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	GRO95	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/29/01	GRO95	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Xylene's	< 75	ug/kg	18	60	1	8/29/01	GRO95	CJR	1

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385C						**Sample Type** Soil			
Sample ID S25						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	81.3	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PAH's									
Acenaphthene	< 35	ug/kg	13	43	1	9/12/01	M8270	DJM	1
Acenaphthylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Anthracene	< 11	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Benzo(a)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(a)pyrene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	1
Benzo(b)fluoranthene	< 24	ug/kg	24	80	1	9/12/01	M8270	DJM	1
Benzo(g,h,i)perylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(k)fluoranthene	< 37	ug/kg	37	120	1	9/12/01	M8270	DJM	1
Chrysene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Dibenzo(a,h)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluoranthene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluorene	< 11	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Indeno(1,2,3-cd)pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
1-Methyl naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
2-Methyl naphthalene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	2
Naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	2
Phenanthrene	< 12	ug/kg	12	40	1	9/12/01	M8270	DJM	1
Pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/28/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/28/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/28/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/28/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/28/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/28/01	8021A	CJR	1

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385D						**Sample Type** Soil			
Sample ID S8						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	84.1	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/28/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/28/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/28/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/28/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/28/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/28/01	8021A	CJR	1
Lab Code 5034385E						**Sample Type** Soil			
Sample ID S26						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	82.7	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	12	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1 44
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/28/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/28/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/28/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/28/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/28/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/28/01	8021A	CJR	1

U.S. Analytical Lab

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NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385F						**Sample Type** Soil			
Sample ID S15						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	80.9	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/28/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/28/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/28/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/28/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/28/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/28/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/28/01	8021A	CJR	1
Lab Code 5034385G						**Sample Type** Soil			
Sample ID S19						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	80.7	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/29/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/29/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/29/01	8021A	CJR	1

U.S. Analytical Lab

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NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
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Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385H						**Sample Type** Soil			
Sample ID S1						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	82	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	60	ug/kg	15	48	1	8/29/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/29/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/29/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/29/01	8021A	CJR	1
Lab Code 5034385I						**Sample Type** Soil			
Sample ID S5						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	78.2	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/29/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/29/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/29/01	8021A	CJR	1

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
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Project # ESP 03-220-1267
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Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385J						**Sample Type** Soil			
Sample ID S24						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	77.9	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/29/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/29/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/29/01	8021A	CJR	1
Lab Code 5034385K						**Sample Type** Soil			
Sample ID S14						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	80.3	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
Ethylbenzene	46	ug/kg	7	22	1	8/29/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	8021A	CJR	1
1,2,4-Trimethylbenzene	41	ug/kg	24	77	1	8/29/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/29/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/29/01	8021A	CJR	1

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385L						**Sample Type** Soil			
Sample ID S12						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	77.9	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	8021A	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	8021A	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	8021A	CJR	1
1,2,4-Trimethylbenzene	< 25	ug/kg	24	77	1	8/29/01	8021A	CJR	1
1,3,5-Trimethylbenzene	< 25	ug/kg	15	48	1	8/29/01	8021A	CJR	1
m&p-Xylene	< 50	ug/kg	12	39	1	8/29/01	8021A	CJR	1
o-Xylene	< 25	ug/kg	6.4	20	1	8/29/01	8021A	CJR	1
Lab Code 5034385M						**Sample Type** Soil			
Sample ID S20						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	74.4	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1
Lab Code 5034385N						**Sample Type** Soil			
Sample ID S21						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	83.4	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385O						**Sample Type** Soil			
Sample ID S22						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	82.6	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1
Lab Code 5034385P						**Sample Type** Soil			
Sample ID S23						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	83.9	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1
Lab Code 5034385Q						**Sample Type** Water			
Sample ID TANKER						**Sample Date** 8/14/01			
Organic									
PAH's									
Acenaphthene	6.5	ug/l	1.7	5.5	10	8/24/01	8310	DJM	2
Acenaphthylene	< 10	ug/l	10	32	10	8/24/01	8310	DJM	2
Anthracene	1.7	ug/l	0.1	0.33	10	8/24/01	8310	DJM	1
Benzo(a)anthracene	3.1	ug/l	0.74	2.5	10	8/24/01	8310	DJM	1
Benzo(a)pyrene	3.2 "J"	ug/l	1	3.4	10	8/24/01	8310	DJM	1
Benzo(b)fluoranthene	2.8	ug/l	0.65	2.2	10	8/24/01	8310	DJM	1
Benzo(g,h,i)perylene	< 5.2	ug/l	5.2	17	10	8/24/01	8310	DJM	2
Benzo(k)fluoranthene	1.3	ug/l	0.1	0.33	10	8/24/01	8310	DJM	1
Chrysene	< 7	ug/l	7	24	10	8/24/01	8310	DJM	1
Dibenzo(a,h)anthracene	< 4.2	ug/l	4.2	14	10	8/24/01	8310	DJM	2
Fluoranthene	110 "J"	ug/l	36	120	100	8/30/01	8310	DJM	1
Fluorene	7.1 "J"	ug/l	3.3	11	10	8/24/01	8310	DJM	2
Indeno(1,2,3-cd)pyrene	< 5.9	ug/l	5.9	20	10	8/24/01	8310	DJM	1
1-Methyl naphthalene	72	ug/l	2.1	7	10	8/24/01	8310	DJM	2
2-Methyl naphthalene	74	ug/l	2	6.7	10	8/24/01	8310	DJM	2

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

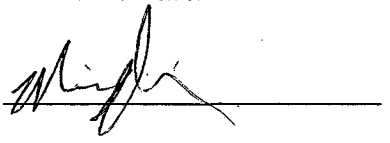
Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385Q						**Sample Type** Water			
Sample ID TANKER						**Sample Date** 8/14/01			
Naphthalene	17	ug/l	2.2	7.4	10	8/24/01	8310	DJM	2
Phenanthrene	34	ug/l	0.37	1.2	10	8/24/01	8310	DJM	1
Pyrene	7.5	ug/l	0.59	2	10	8/24/01	8310	DJM	2
PVOC									
Benzene	0.41 "J"	ug/l	0.21	0.67	1	8/20/01	8021A	CAH	1
Ethylbenzene	7.2	ug/l	0.22	0.7	1	8/20/01	8021A	CAH	1
MTBE	< 0.46	ug/l	0.46	1.5	1	8/20/01	8021A	CAH	1
Toluene	3.4	ug/l	0.41	1.3	1	8/20/01	8021A	CAH	1
1,2,4-Trimethylbenzene	42	ug/l	0.26	0.84	1	8/20/01	8021A	CAH	1
1,3,5-Trimethylbenzene	14	ug/l	0.34	1.1	1	8/20/01	8021A	CAH	1
m&p-Xylene	21	ug/l	0.43	1.4	1	8/20/01	8021A	CAH	1
o-Xylene	11	ug/l	0.26	0.82	1	8/20/01	8021A	CAH	1

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

Code	*Comment*
1	All laboratory QC requirements were met for this sample.
2	The duplicate RPD failed to meet acceptable QC limits.
44	Chromatogram indicates possible lube oil contamination.

Authorized Signature



Page 1 of 2

Northern Environmental℠
Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

No. 16555

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222	☐ 372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643	☒ 954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444	☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844
☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023	☐ 3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552	☐ 112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100	☐ 31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: 50

Project Location (city): Manitowoc

Project Manager: Lynelle Caine

Sampler (name): Susan Knabe

Sampler (Signature): Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricker

Price Quote:

RUSH

TURNAROUND TIME REQUIRED: [soil] Normal [X] Rush (water only)

Date Needed: 8-20-01

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt [X] yes ☐ no
Method of shipment: Courier
Contents Temperature: 4 °C Refrigerator No. 1

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Water	Soil	Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385A	S13	8-14-01	1214	2-40ml, 1-2oz		X		Ice	X			X		X	
B	S10	↓	946	↓		X		↓	X			X		X	
C	S25		1540			X			X			X		X	
D	S8		944			X			X			X			
E	S26		1604			X			X			X			
F	S15		1216			X			X			X			
G	S19		1220			X			X			X			
H	S1		910			X			X			X			
I	S5		943			X			X			X			
J	S24		1527			X			X			X			

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments: Called to confirm jar labelled S24 but in S25 bag was for S25 sample. CSM 8/17/01 CSM

Relinquished By: MB Roquel	Date: 8-16-01	Relinquished By: Clay Poquelle	Date: 8/16/01	Relinquished By:	Date:
Company: Northern Environmental	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:
Received By: Clay Poquelle	Date: 8-16-01	Received By: Katie Asman	Date: 8-16-01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

Northern Environmental℠ CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Hydrologists • Engineers • Geologists

No: 16556

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222

☐ 372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643

☒ 954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444

☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844

☐ _____

☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023

☐ 3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552

☐ 112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100

☐ 31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~002~~ 50

Project Location: (city) Manitowoc

Project Manager: Lynelle Caine

Sampler: (name) Susan Knabe

Sampler: (Signature) Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricker

Price Quote:

TURNAROUND TIME REQUIRED

☒ Normal soil ☒ Rush water only

RUSH

Date Needed _____

Sample Integrity - To be completed by receiving lab

Seal intact upon receipt ☐ Yes ☐ No

Method of shipment Gruner

Contents Temperature _____ °C Refrigerator No: _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385 K	S14	8-14-01	1215	2-40mℓ, 1-2oz		X		ice	X			X			
L	S12		1213			X			X			X			
M	S20 *		1405			X			X						
N	S21 *		1406			X			X						
O	S22 *		1450			X			X						
P	S23 *		1451			X			X						
Q	Tanker sample	8-14-01	1648	3-40mℓ, 1-1L	X			HCl, ice				X		X	

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments: * If DRO detected at greater than 100ppm, then run PVOCs.

Relinquished By: MB Pagano	Date: 8-16-01	Relinquished By: Clay Pagnotta	Date: 8/16/01	Relinquished By:	Date:
Company: Northern Environmental	Time: 0740	Company: U.S. Oil	Time: 18:45	Company:	Time:
Received By: Clay Pagnotta	Date: 8-16-01	Received By: Eric Asman	Date: 8/16/01	Received By:	Date:
Company: US OIL	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

CTLaboratories

1230 Lange Court
Baraboo, WI 53913-3109
Phone: (800) 228-3012
Fax: (608) 356-2766
www.ctlaboratories.com

ORIGINAL

ANALYTICAL REPORT

NORTHERN ENVIRONMENTAL
ANN KRZYZEWSKI
954 CIRCLE DRIVE
GREEN BAY, WI 54304

Project Name: MANITOWOC
Contract #: 1595
Project #: ESP-1267
Folder #: 22187
Purchase Order #: INV 22148
Arrival Temperature: See COC
Report Date: 12/4/01
Date Received: 11/29/01
Reprint Date:

CTI LAB#: 99008 Sample Description: SP1 Sampled: 11/28/01 1125

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Solids, Percent	84.1	%	N/A	N/A	1			12/3/01	SET	EPA 5030A
Organic Results										
Diesel Range Organics	<3.2	mg/kg	3.2	10	1		12/3/01	12/4/01	KJJ	WDNR DRO
Benzene	<25	ug/kg	10	34	1		11/30/01	12/1/01	PRH	EPA 8020
Ethylbenzene	<25	ug/kg	13	44	1		11/30/01	12/1/01	PRH	EPA 8020
Methyl tert-butyl ether	<25	ug/kg	12	39	1		11/30/01	12/1/01	PRH	EPA 8020
Toluene	<25	ug/kg	11	38	1		11/30/01	12/1/01	PRH	EPA 8020
1,2,4-Trimethylbenzene	<25	ug/kg	12	39	1		11/30/01	12/1/01	PRH	EPA 8020
1,3,5-Trimethylbenzene	<25	ug/kg	13	42	1		11/30/01	12/1/01	PRH	EPA 8020
m & p-Xylene	<25	ug/kg	24	79	1		11/30/01	12/1/01	PRH	EPA 8020
o-Xylene	<25	ug/kg	14	46	1		11/30/01	12/1/01	PRH	EPA 8020

Notes: * Indicates Value in between LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: _____

Record Reviewer

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

Northern Environmental℠
Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Page 1 of 1

No: 16415

Check office originating request

- ☐ *1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222*
- ☐ *372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643*
- ☒ *954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444*
- ☐ *330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844*
- ☐ _____
- ☐ *1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023*
- ☐ *3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552*
- ☐ *112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100*
- ☐ *31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530*

Project No: ESP-1267 Task No:

Project Location: (city) Manitowoc

Project Manager: Cynelle Caine

Sampler: (name) Kevin Eibenholz

Sampler: (Signature) K E

Sampling Date(s): 11-28-01

Reports to be Sent to: A Krzyzewski

Laboratory: C. T. Labs

Wisconsin DNR Certification #: 157066030

Laboratory Contact: Eric Korthals

Price Quote:

TURNAROUND TIME REQUIRED

☐ Normal ☒ Rush

Date Needed 12-5-01

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt ☐ yes ☐ no
Method of shipment _____
Contents Temperature _____ °C Refrigerator No. _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method	Pb (EPA Method
	SP1	11-28-01	1125	2-60mL, 1-H2O3		X		MeOH	X			X			

Folder #: 22187
Company: NORTHERN ENVIRON.
Project: MANITOWOC
Logged By: DAB PM: ETK

ICE PRESENT: (YES) NO
TEMPERATURE 2.7 °C
INITIALS DAB
DATE 29-Nov-01 TIME 15:55

Packed for Shipping by:

Shipment Date:

Comments:

Relinquished By:	Date:	Relinquished By:	Date:	Relinquished By:	Date:
K E	11-28-01				
Company: NETI	Time: 1628	Company:	Time:	Company:	Time:
Received By: DAB	Date: 29-Nov-01	Received By:	Date:	Received By:	Date:
Company: CT LABS	Time: 16:22	Company:	Time:	Company:	Time:

Lauridsen, Keld B

From: Lynelle P. Caine(SMTP:lcaine@northern-env.com)
Reply To: lcaine@northernenvironmental.com
Sent: Wednesday, January 23, 2002 11:47 AM
To: Lauridsen, Keld B
Subject: Mirro Plant #02, BRRTs ID #03-36-280532

Hi Keld,

Per your request, I am providing the following information regarding the collection of soil sample SP1. We collected soil from 6 locations on the stockpiled soil and augered down 2 to 3 feet to the center of the pile and collected the samples. Soil was placed in a bucket and mixed up. A composite sample (SP1) was then collected from the bucket.

FYI- We are in the process of preparing the case closure request for this site and will be requesting the site to be transferred to Commerce. Should be submitted later this week or early next week.

Thanks,

Lynelle P. Caine
Northern Environmental
954 Circle Drive, Green Bay, WI 54304
lcaine@northern-env.com
(920)592-8400
Fax (920)592-8444

Northern Environmental℠
Hydrologists • Engineers • Geologists

954 Circle Drive
Green Bay, WI 54304
920-592-8400
1-800-854-0606
Fax • 920-592-8444
E-mail • netgb@admin.itol.com

January 21, 2002
(ESP-03-2200-1267)

Mr. Doug Deaton, PE
Mirro Company
Post Office Box 1330
Manitowoc, Wisconsin 54220

RE: Underground Storage Tank Site Assessment, Mirro Corporation Plant #2, 2401 Mirro Drive, Manitowoc, Wisconsin; BRRTS Case #03-36-280532

Dear Mr. Deaton:

Northern Environmental Technologies, Incorporated (Northern Environmental) completed an underground storage tank (UST) site assessment on August 14, 2001, at the Mirro Corporation Plant #2, 2401 Mirro Drive, Manitowoc, Wisconsin (the Site). Two 20,000-gallon fuel oil USTs and associated piping were removed from the Site. The Site is in the northeast quarter of the southeast quarter of Section 9, Township 19 North, Range 24 East (44 degrees, 7 minutes, 24 seconds north latitude and 87 degrees, 37 minutes, 19 seconds west longitude) in the city of Manitowoc, Manitowoc County, Wisconsin. The Site location is shown in Figure 1.

This UST closure assessment conforms to Chapter COMM 10, Wisconsin Administrative Code (Wis. Adm. Code) and the Wisconsin Department of Natural Resources (WDNR) site assessment guidelines (WDNR, *Site Assessments for Underground Storage Tanks Technical Guidance*, June, 1993).

Specific information regarding the Site, UST system, UST removal, and site assessment are attached. Information obtained from the UST removal contractor (Environmental Services Plus, 2001) and the site representative, Mr. Doug Deaton, about the UST system is listed in Tables 1 and 2. The UST system layout is illustrated in Figure 2.

As part of the UST closure assessment, soil samples were collected to document whether or not a petroleum release had occurred from the USTs. Field-screening results indicated petroleum vapors were present in several soil samples. Soil sample S13, collected from 5 feet below grade (fbg) exhibited the highest photoionization detector (PID) reading and was therefore submitted for laboratory analysis of diesel range organics (DRO), petroleum volatile organic compounds (PVOCs), and polynuclear aromatic hydrocarbons (PAHs) to confirm the release. DRO was detected in soil sample S13 at a concentration of 120 milligrams per kilogram (mg/kg). Several PVOCs and PAHs were also detected in sample S13. The WDNR currently uses a concentration of 10 mg/kg DRO (WDNR, *Release News*, Volume 5, Number 1, January 1995) to define a release and hence require additional investigation. Based on the information collected during the UST site assessment, petroleum was released near the former fuel oil USTs. The soil sample locations are shown in Figure 2. The field-screening and laboratory results for S13 are summarized in Table 3. Copies of laboratory analytical reports and chain of custody, a copy of the checklist for UST closure, and copies of the UST inventory forms are included in Attachment A.

For discharges of hazardous substances into the environment from UST systems, NR 706, Wis. Adm. Code requires that the owner or operator of the UST system immediately notify the WDNR of the release. If required or necessary, the responsible party shall complete interim actions to halt, contain,

and/or stabilize the discharged hazardous substance (NR 708, Wis. Adm. Code); complete a site investigation to define the nature, degree, and extent of the contamination (NR 716, Wis. Adm. Code); and remediate the released substance to restore the environment. In accordance with WDNR requirements, the following actions have been taken:

- The released petroleum was reported to the WDNR by Mirro Corporation on August 20, 2001.
- The suspected source of the released petroleum (the fuel oil USTs) was removed.
- Soil sample laboratory analysis confirmed that petroleum was released.

State law requires that the extent of the released petroleum be investigated, and information necessary to evaluate remedial options be gathered and examined. Following removal of the USTs, approximately 100 cubic yards of soil was excavated and stockpiled on site. To facilitate backfilling, approximately 4,700 gallons of water was also pumped from the excavation into a tanker truck. Groundwater disposal documentation is included in Attachment B. A sump was also installed in the excavation prior to backfilling. The results of the soil excavation and ground-water sample collected from the sump will be submitted under a separate letter report.

The findings and results of the UST closure assessment are based on interpretation of the information available to Northern Environmental. Northern Environmental does not warrant that this report represents an exhaustive study of all possible environmental concerns at the Site. The items investigated as part of this study represent likely sources of environmental concern associated with the described UST system and are, consequently, believed to adequately address the needs of the responsible party at the present time.

Please feel free to contact Northern Environmental at 800-854-0606 if you have any questions.

Sincerely,
Northern Environmental Technologies, Incorporated

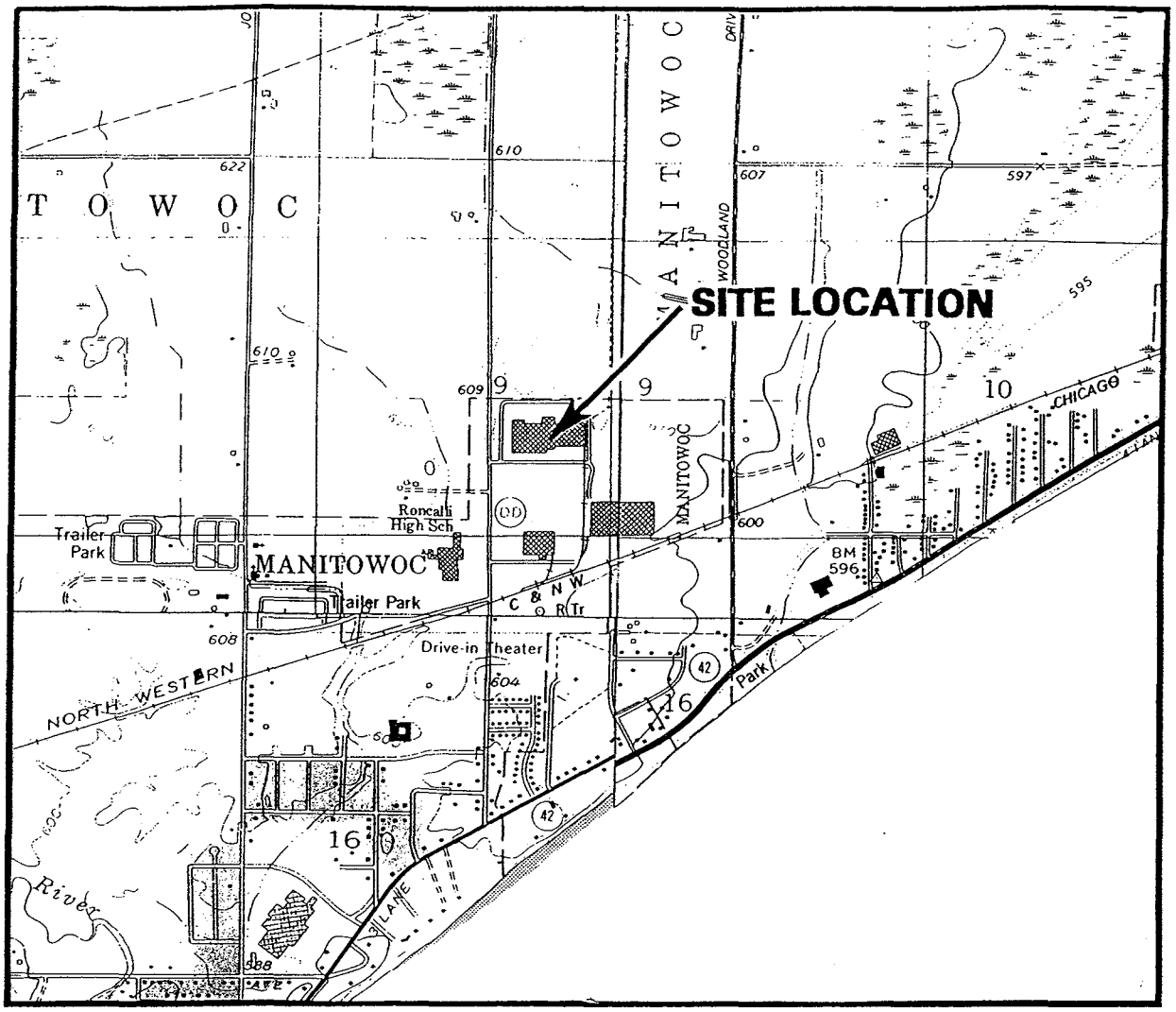
Susan Knabe

Susan T. Knabe
Hydrogeologist

Lynelle P. Caine
Project Manager

STK/amk
Attachments

c: Mr. Keld Lauridsen, WDNR



SCALE IN FEET

1" = 2000'

0 1000 2000 3000 4000 5000 6000 7000 8000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

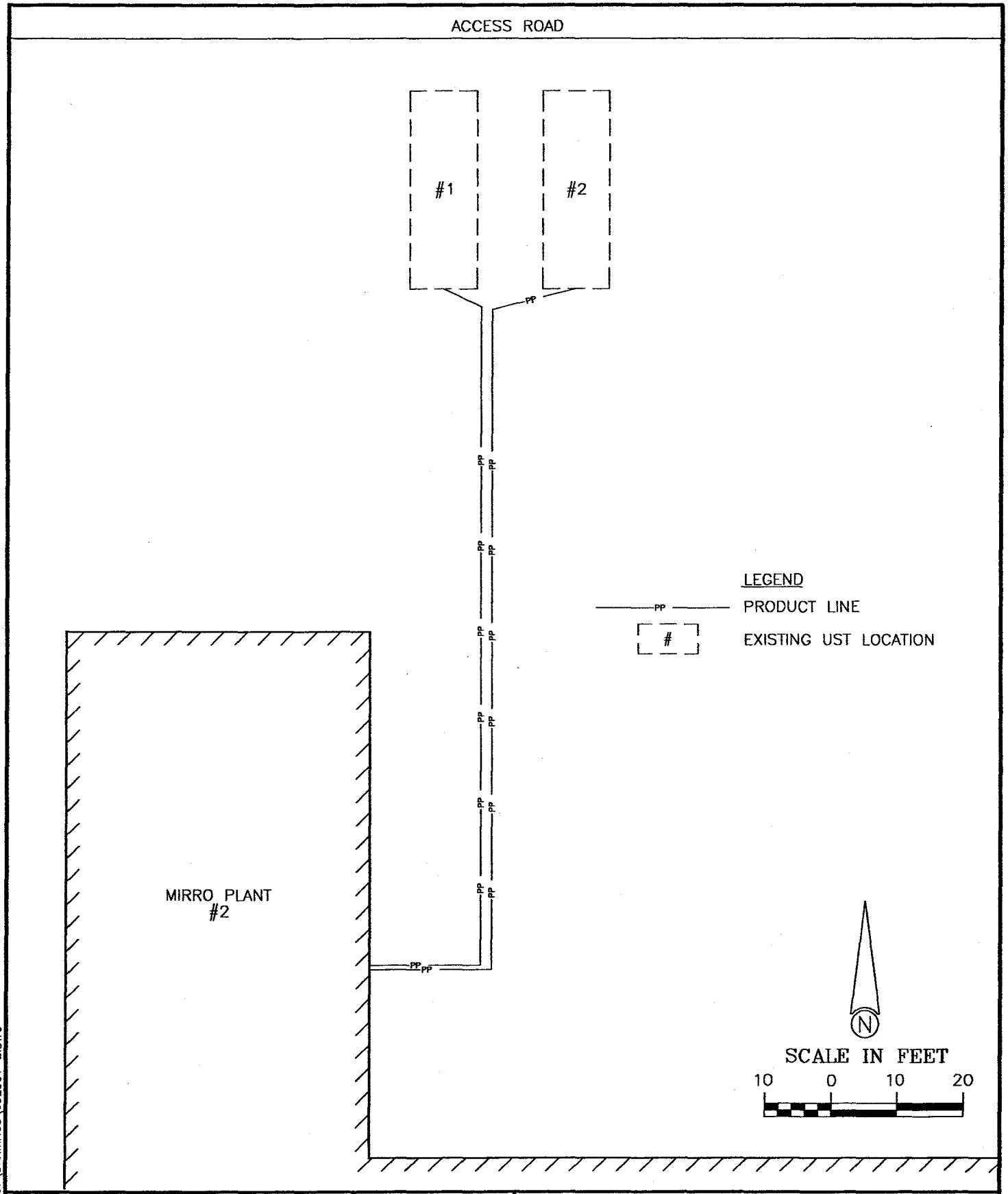
QUADRANGLE LOCATION

BASE MAP SOURCE: USGS MISHICOT, AND TWO RIVERS, WISCONSIN 7.5 MINUTE QUADRANGLE (REVISED 1978)
BASE MAP SOURCE: USGS MANITOWOC, WISCONSIN 7.5 MINUTE QUADRANGLE (REVISED 1973)

DRAWN BY: JJK	PROJECT: MIR-0919	DATE: 8/11/99
REV. DATE	THIS DRAWING AND ALL INFORMATION CONTAINED THEREON IS THE PROPERTY OF NORTHERN ENVIRONMENTAL INCORPORATED AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH IT IS EXPRESSLY FURNISHED.	MIRO PLANT #2 MANITOWOC, WISCONSIN
	Northern Environmental℠ Hydrologists · Engineers · Geologists	SITE LOCATION AND LOCAL TOPOGRAPHY

S:\PROJ\MIR\14080919\081199-1.DWG

FIGURE 1

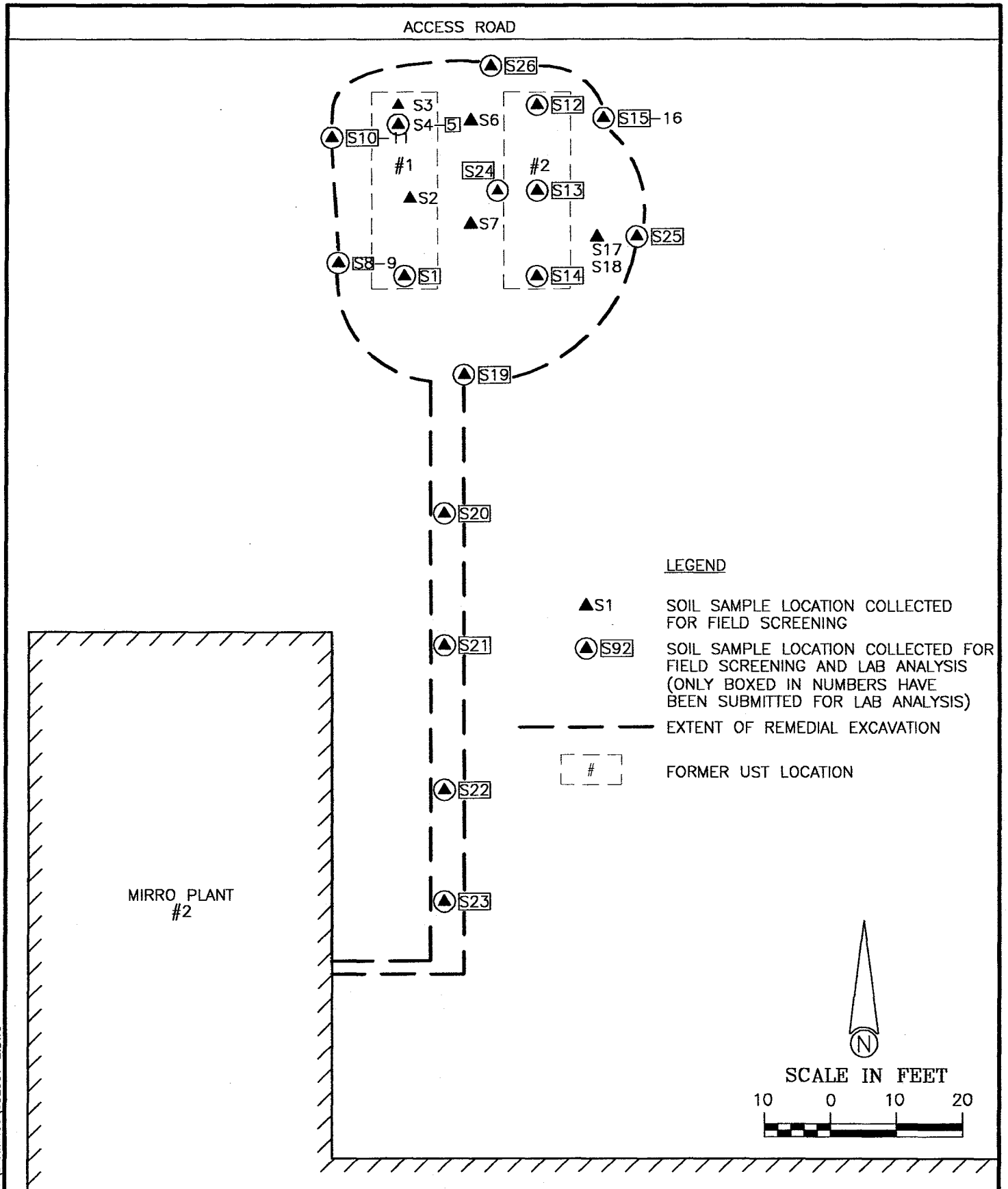


S:\PROJ\ESP\22001267\DRAWINGS\092501-2.DWG

DRAWN BY: JRB	PROJECT: ESP-1267	DATE: 09/25/01	MIRRO COMPANY MANITOWOC, WISCONSIN
REV. DATE	THIS DRAWING AND ALL INFORMATION CONTAINED THEREON IS THE PROPERTY OF NORTHERN ENVIRONMENTAL INCORPORATED AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH IT IS EXPRESSLY FURNISHED.		SITE LAYOUT

Northern Environmental ℠
Hydrologists · Engineers · Geologists

FIGURE 2



S:\PROJ\ESP\22001267\DRAWINGS\092501-2.DWG

DRAWN BY: JRB	PROJECT: ESP-1267	DATE: 09/25/01
REV. DATE	THIS DRAWING AND ALL INFORMATION CONTAINED THEREON IS THE PROPERTY OF NORTHERN ENVIRONMENTAL INCORPORATED AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH IT IS EXPRESSLY FURNISHED.	MIRRO COMPANY MANITOWOC, WISCONSIN

Northern Environmental℠
Hydrologists · Engineers · Geologists

EXTENT OF EXCAVATION
WITH SOIL SAMPLE LOCATIONS

FIGURE 3

Table 1 Summary of UST System Information, Mirro Corporation Plant #2, Manitowoc, Wisconsin

UST Number	Registration Number	UST Construction	Volume (gallons)	Contents	Status	Date Installed	Type of Delivery System	Piping Construction	Location of Check Valves
UST 1	414576	Coated Steel	20,000	Fuel Oil	Removed	1958	Non-safe Suction	Unknown	Unknown
UST 2	414577	Coated Steel	20,000	Fuel Oil	Removed	1958	Non-safe Suction	Unknown	Unknown

Table 2 Summary of UST System Inspection, Mirro Corporation Plant #2, Manitowoc, Wisconsin

UST Number	UST Condition	Piping Condition	Piping Joint Integrity	Dispenser Condition	Apparent Releases
UST 1	Good	Good	Good	Unknown	Yes
UST 2	Good	Good	Good	Unknown	Yes

Table 3 Summary of Soil Sample Field Screening And Laboratory Analysis, Mirro Corporation Plant #2, Manitowoc, Wisconsin

Sample Number	Associated UST System	Location	Depth (fbg)	Date Collected	Time Screened	PID Response (iui)	Odor	Soil Description	Soil Type (USCS)	Laboratory Analytical Results (mg/kg) *
S13	Fuel Oil	Between USTs	5	8/14/01	1231	71	Fuel Oil	Silty sand	SM	DRO 120

Key:

UST = underground storage tank
fbg = feet below grade
DRO = diesel range organics
iui = instrument units as isobutylene
USCS = Unified Soil Classification System
mg/kg = milligram per kilogram
* = Concentrations of PVOCs and PAHs are not listed, please see lab reports.

BACKGROUND INFORMATION

Site Address

2401 Mirro Drive
Manitowoc, Wisconsin

Site Legal Description:

NE 1/4, SE 1/4, Section 9, Township 19 N, Range 24 E

County Manitowoc

UST System Owner

Name: Mirro Corporation
Address: 2401 Mirro Drive, Manitowoc, Wisconsin 54221-1330
Telephone No: (920) 684-3479

Site Owner (if different from above)

Name: Mirro Corporation
Address: 2401 Mirro Drive, Manitowoc, Wisconsin 54221-1330
Telephone No: (920) 684-3479

Past and Present Property Use

The Site is currently the location of Mirro Plant #2, a plastics manufacturing company.

Description of Any USTs Previously Removed from the Site

According to Wisconsin Division of Workforce and Development on line database, one 5,000-gallon chemical UST was previously removed from the Site.

Has the Current System Ever Been Lined or Repaired?

Yes	No	Unknown
		X

Are Other USTs or LUSTs Present on Adjacent Properties?

Yes	No	Unknown
	X	

Are Any of the UST Systems Described in this UST Site Assessment Believed to Have Released Product?

Yes ___X___ No _____ Unknown _____

If so, describe UST and method of determining release:

Laboratory results of a soil sample collected during the UST site assessment detected a DRO concentration of 120 mg/kg. Several PVOCs and PAHs were also detected in the sample.

Has the Party Responsible for the UST System Been Notified of the Release and of Their Responsibilities under Chapter NR 158, Wisconsin Administrative Code?

Yes ___X___ No _____

TANK EXCAVATION(S) AND REMOVAL(S) AND CLEANING PROCEDURES

UST Closed By

Removal ___X___ Abandonment In-Place _____

Date of Closure

August 14, 2001

Site Assessor

Company Name:	Northern Environmental Technologies, Incorporated
Company Address:	954 Circle Drive, Green Bay, Wisconsin 54304
Company Telephone No:	(920) 592-8400
Certified Individual:	Susan Knabe
Certification Number:	248630

UST Removal Contractor

Company Name:	Environmental Services Plus
Company Address:	W1732 County Road KK, Kaukauna, WI 54130
Company Telephone No:	(920) 766-6756
Certified Individual:	Jesse Rose
Certification Number:	41240

Excavator Contractor

Company Name:	Environmental Services Plus
Company Address:	W1732 County Road KK, Kaukauna, WI 54130
Company Telephone No:	(920) 766-6756

Descriptions of tank system(s) removed from and known tanks remaining on the site are provided in Tables 1 and 2.

TANK CLEANING AND DISPOSAL DOCUMENTATION

Location of Cleaning

On Site ___X___ Off Site_____ Other _____

Method Used to Clean the Tank

Holes were cut in the sides of the USTs and the walls were scraped to remove remaining product or sludge.

Final Disposal (Include copies of disposal documents in Attachment A)

Recycled ___X___ Scrapped _____ Disposed _____

Handling of Cleaning Waste Water (Include copies of disposal documents in Attachment A)

Not applicable. Water was not used to clean the USTs.

Method of Tank Transport

The USTs were cut apart and hauled off-site to be recycled.

Documentation of Emergency Waiver to Transport Tank (Include copies of disposal documents in Attachment A, if applicable)

Not applicable.

Contractor Cleaning Tank

Company Name:	Clearwater Technologies, Inc.
Company Address:	432 Bishop Avenue, Plymouth., WI 53073
Company Telephone No:	(920) 892-8823

Contractor Dismantling Tank

Company Name:	Environmental Services Plus
Company Address:	W1732 County Road KK, Kaukauna, WI 54130
Company Telephone No:	(920) 766-6756

Contractor Transporting Tank

Company Name:	Environmental Services Plus
Company Address:	W1732 County Road KK, Kaukauna, WI 54130
Company Telephone No:	(920) 766-6756

Contractor Disposing of Tank

Company Name:
Company Name: Mid-State Welding
Company Address: Stockbridge, Wisconsin

SECSI
Schroeder Environmental Cleaning Services, Inc.

August 21, 2001

Environmental Services Plus
W1732 County Road KK
Kaukauna, WI 54130
Attn: Mr. Jesse Rose

RE: Invoice #21134

Dear Jesse:

On August 14, 2001, Clearwater Technologies on behalf of Schroeder Environmental Cleaning Services, Inc., cleaned and rendered "VAPOR-FREE" two (2) 20,000 gallon #2 fuel oil tanks located at Mirro, Manitowoc, WI.

The tanks were cleaned and tested "vapor-free". I understand that you arranged for tank removal.

There were eighteen (18) drums of waste tank bottoms left on site. I will contact you regarding waste disposal.

Thank you for the opportunity to be of service. We look forward to working with you again.

Sincerely,

Nancy Schroeder

Nancy Schroeder
Business Manager

P.O. Box 045 · De Pere, WI 54115-0045 · 920-339-9970 · Fax 920-339-8887

DANGER!

HOT WORK PERMIT

THIS PERMIT MUST BE USED FOR:

- [X] Portable Gas or Electric Cutting or Welding
- [ ] Burning
- [ ] Abrasive Grinding or Blasting
- [ ] Brazing or Torch Soldering
- [ ] Other Processes Generating Heat, Sparks or Flames that are Potential Ignition Sources: _____

Date of Issue: 8/17/01 Time of Issue: 09:30

Permit Expires: 8/18/01 Time Expires: 09:30

HOT WORK LOCATION: 02 (Plant) North End outside boiler room (Department or Area)

TASK DESCRIPTION: Cutting apart old fuel oil tanks
MIRRO COMPANY PLANT NO# 2
2401 MIRRO DRIVE

PRE-WORK INSPECTION & ARRANGEMENTS - *Before Starting Hot Work:*

I verify the location where this hot work will be done has been evaluated and personnally inspected. Precautions are identified on the Hot Work Checklist (located on Page 2).

Initials		*Print Name*
SK	Person Performing Hot Work:	STEVE - MIDSTATE WELDING
DD	Person Authorizing Hot Work:	Doug Deaton stockbridge WI
	Designated Fire Watch:	

FINAL CHECK - *After Hot Work Is Completed:*

Work Area and Adjacent Areas to Which Sparks and Heat May Have Spread (inc. floor above/below) & On Opposite Side of Walls Were Inspected After Hot Work Completed and Found To Be Firesafe.

Initials		*Print Name*	*Time Completed*
	Person Doing Hot Work:	STEVE - MIDSTATE WELDING	8/17/01 18
	Designated Fire Watch:		:

HOT WORK CHECKLIST

Check One:

REQUIRED PRECAUTIONS:

Yes	N/A	
☐	☑	Sprinklers or Fire Suppression Systems In Service/Operable.
☐	☑	Alternative Fire Protection (If Sprinklers Are Out Of Service). Describe:
☑	☐	Fire Hoses and/or Portable Fire Extinguishers Are Available.
☐	☑	Welding Flash Screens in Place When Potential Exposure To Adjacent Workers.
☐	☑	Ventilation Adequate to Control Exposure to Airborne Fumes, Gases or Particulates.
☐	☑	Paint or Coating Containing Heavy Metals (Lead or Cadmium), Epoxy or Urethanes Have Been Removed At Least 4 Inches Back From Area Where Heat Is To Be Applied.

WITHIN 35 FEET OF HOT WORK:

☑	☐	Flammable Liquids, Dusts and Chemical Containers Removed.
☑	☐	Flammable or Explosive Atmosphere in Area Eliminated. Check Area With Meter When There is Potential For Presence of Flammable Gas or Liquid. NO HOT WORK PERMITTED IF METER READS ABOVE 10% LEL
☑	☐	All Combustibles Removed Where Possible. Otherwise Protect with Fire-Resistant Tarps, Metal Shields, Wetting or Other Appropriate Means.
☐	☑	All Wall and Floor Openings Covered (Includes Conveyors, Ducts, Pipes, Cracks).
☐	☑	Fire-Resistant Tarps Suspended Beneath Elevated Work.

ENCLOSED EQUIPMENT - *Tanks, Containers or Dust Collectors:*

☑	☐	Emptied, Cleaned, Purged or Otherwise Safeguarded.
☐	☑	Confined Space Entry Identified & Entry Permit Issued.

DESIGNATED FIRE WATCH / HOT WORK AREA MONITORING:

☑	☐	Fire Watch Provided During and For 30 Minutes After Hot Work (Including Breaks).
☑	☑	Fire Watch Is Trained on Use of Fire Fighting Equipment and Emergency Notification.
☑	☐	Fire Watch To Monitor Adjoining Areas Above and Below (If Applicable).

SURPLUS PRODUCT AND TANK SLUDGE MANAGEMENT

Eighteen drums of sludge and water were transported to the U.S. Oil Waste to Energy Plant in Kimberly, Wisconsin for treatment and disposal.

Contractor Storing Liquids/Sludges

Company Name:	Mirro Corporation
Company Address:	2401 Mirro Drive, Manitowoc, Wisconsin 54221-1330
Company Telephone No:	(920) 684-3479

Contractor Transporting Liquids/Sludges

Company Name:	Environmental Services Plus
Company Address:	W1732 County Road KK, Kaukauna, WI 54130
Company Telephone No:	(920) 766-6756

THIS SHIPPING ORDER must be legibly filled in, in Ink, in Indelible Pencil, or in Carbon, and retained by the Agent.

Shipper's No. ____________

(Name of Carrier) Environmental Services Plus SCAC ____________ Carrier's No. ____________

Received, subject to the classifications and tariffs in effect on the date of this Bill of Lading:

at ____________ date ____________ from ____________

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to (Mail or street address of consignee – For purposes of notification only.)

U.S. Oil - Waste Oil to Energy

Destination Kimberly State WI County Outagamie Zip 54136 Delivery Address* 552 Carter Ct.

Route (*To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Delivering Carrier ____________ Car or Vehicle Initials ____________ No. ____________

Number of Packages	Description of articles, special marks, and exceptions	*Weight (Sub. to correction)	Class or rate	Check column
18x55	fuel oil sludge			
	flash >140°, halogens <30 ppm			
	Profile AB1666			

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of consignor)

If charges are to be prepaid, write or stamp here, "To be Prepaid".

Received $ ____________ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per ____________
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$ ____________

Collect On Delivery $ ____________ and remit to ____________ C.O.D. Charge to be paid by Shipper ☐ Consignee ☐

If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight".
Note. – where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ____________ per ____________

HM EMERGENCY RESPONSE TELEPHONE NUMBER (§172.604)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

Shipper: Mirro Co. Agent: [illegible signature]

Per: 2401 Mirro Dr. Date: ____________ Per: Mirro - DOUS [illegible] Date: 12/5/01

Mantowoc, WI

Permanent post-office address of shipper

FORM NO. 1 BLS (Rev. 8/95)

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

2

COPY

WASTE PROFILE

Expiration Date: _____

_____ Check here if this is a recertification Location of Original U.S. Oil Co. Inc.

Site Approved U.S. COOTE

GENERAL INFORMATION:

1. Generator Name Mirro Co-Plt 2 Generator USEPA ID: Non-regulated
2. Generator Address 2401 Mirro Dr. Manitowoc, WI Billing Address (__) same ESP Attn. Jesse Rose
3. Technical Contact Phone: Jesse Rose 920-766-6756
4. Alternate Contact Phone: _____ Billing Contact Phone: _____

PROPERTIES AND COMPOSITION

5. Process Generating Waste: tank closure
6. Waste Name: fuel oil sludge
7a. Is this a USEPA hazardous waste (40 CFR Part 261) ____ Yes ✓ No
7b. Identify ALL USEPA listed and characteristic waste code numbers (D,F,P,U): _____ State waste codes: _____
8. Physical State @ 70°F: A. Solid ( ) Liquid ( ) Both (X) B. Single Layer ( ) Multilayer (X)
   C. Free liquid range ___ to ___ %
9. pH: range ____ to ____ or Not applicable ( ) B. Strong Odor ( ), describe _____
10. Liquid Flash Point: <73°F ( ) 73-99°F ( ) 100-139°F ( ) 140-199°F (✓) ≥200°F ( ) N.A.
    ( ) Closed Cup ( ) Open Cup ( )
11. CHEMICAL COMPOSITION: List ALL constituents (including halgenated organics) present in any concentration and forward available analysis.

CONSTITUENTS	RANGE	UNITS	CONSTITUENTS	RANGE	UNITS
fuel	40	%			
solids	50	%			
water	10	%			

COPY

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

12. Benzene is yes, concentration ____ppm. Shock Sensitive ( ) Oxidizer ( ) Carcinogen ( ) Infectious ( ) Other ____
13. If the waste is subject to the land ban and meets the treatment standards, check here ____, and supply analytical results where applicable _____

SHIPPING INFORMATION:

14. Packaging: Bulk Solid ( ) Bulk Liquid ( ) Drum (X) Type/Size 55 gal Other _____
15. ANTICIPATED ANNUAL VOLUME: 990 Units: gal Shipping Frequency: one time

SAMPLE INFORMATION:

16a. Sample source (drum, lagoon, pond, tank, vat, etc.) drums
Date Sampled: Samplers Name/Company ESP 8/17/01
16b. GENERATOR'S Agent Supervising Sampling: _____
17. ( ) No sample required (See Instructions)

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40CFR 261-Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize U.S. Oil Co., Inc. to obtain a sample from any waste shipment for purposes of recertification.

Jesse Rose for Mirro-Process Coatings Jesse Rose / Mirro 12/5/01

Signature Printed (or typed) name and title Date

WEATHER, SOIL, AND GROUND-WATER CONDITIONS

Weather Conditions

Temperature: 75°
Precipitation: none
Wind: 0-10 mph

Surface Conditions

Material UST area overlain by (e.g., concrete) gravel and grass

Is the area around the fill pipe, pump, etc. visibly stained? If yes, describe
The area around the UST was not visibly stained.

Is stressed or dead vegetation evident?: No

Are there previously undiscovered or unregistered USTs? If yes, describe
Northern Environmental is unaware of any unregistered USTs at the Site.

Excavation and Soil

Depth of UST Excavation: 13 feet below grade
Depth of Piping Excavation: 4 feet below grade

Free Product Present: No Obvious Odors: Yes
Soil Discoloration: Yes

Oil Sheen on Water in Excavation: No

Soil Description:
Native: Sand
Backfill: Clay

Free Standing Water: No
Type (runoff, perched, ground water): N/A
Depth to Water (feet below grade): N/A

Depth to Ground-Water Level

8 feet below grade (measured from site monitoring wells)

Local Ground-Water Use

Local residents receive water from the city of Manitowoc's municipal distribution system.

ATTACHMENT A

LABORTORY ANALYTICAL REPORTS, CHECKLIST AND INVENTORY FORMS

File by:

Reg Obj #: 414577

UNDERGROUND FLAMMABLE/COMBUSTIBLE LIQUID STORAGE TANK INVENTORY

Information Required By Section 101.142, Wis. Stats.

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 that is (check one):
☐ In Use ■ Closed - Tank Removed ☐ Ownership Change (Indicate new owner name in block 2)
☐ Newly Installed ☐ Closed - Filled with Inert Materials
☐ Abandoned with Product ☐ Temporarily Out of Service - Provide Date:
☐ Abandoned without Product (empty) ☐ Abandon with Water

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

A. IDENTIFICATION (Please Print)

1. Tank Site Name	Site Address	Site Telephone Number
MIRRO COMPANY	2401 MIRRO DRIVE	(920) 684-4421
■ City ☐ Village ☐ Town of: MANITOWOC	State: WISCONSIN	Zip Code: 54220	County: MANITOWOC
2. Tank Owner Name	Mailing Address	Telephone Number
NEWELL RUBBERMAID	4833 STALTER	815-381-8121
■ City ☐ Village ☐ Town of: ROCKFORD	State: IL	Zip Code: 61108	County:
3. Previous Name	Previous site address if different than #1	

B. Site ID #: 112102 **Facility ID #:** **Customer ID #:** 332634

C. Tank Capacity (gallons): 20,000 **Tank Age (age or date installed):** 1958 installed

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

E. OCCUPANCY TYPE (check one)
☐ Gas/Retail Sales ☐ Bulk Storage ■ Industrial ☐ Mercantile/Commercial ☐ Utility ☐ Residential ☐ School
☐ Agricultural (crop or livestock production) ☐ Backup or Emergency Generator ☐ Other (specify:)

F. Tank Construction:
☐ Bare Steel ■ Coated Steel ☐ Unknown
☐ Fiberglass ☐ Steel – Fiberglass Reinforced Plastic Composite
☐ Lined (date): ☐ Other (specify):

Cathodic Protection
☐ Sacrificial Anodes
☐ Impressed Current
■ N/A

Overfill Protection? ☐ Yes ■ No
Spill Containment? ☐ Yes ■ No
Tank Double Walled? ☐ Yes ■ No

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

H. Piping Construction:
☐ Bare Steel ■ Coated Steel ☐ Unknown
☐ Fiberglass ☐ Flexible ☐ N/A
☐ Copper ☐ Other (specify)

Cathodic Protection
☐ Sacrificial Anodes
☐ Impressed Current
■ N/A

Pipe Double Walled? ☐ Yes ■ No

I. 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

J. 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

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

L. TANK CONTENTS (Current, or previous product if tank now empty)
☐ Diesel ☐ Leaded ☐ Unleaded ■ Fuel Oil ☐ Gasohol
☐ Other (specify): ☐ Empty* ☐ Sand/Gravel/Slurry* ☐ Unknown* ☐ Premix
☐ Waste/Used Motor Oil ☐ Chemical ☐ Kerosene ☐ Aviation ☐ Hazardous Waste*
(Indicate chemical name and number)

* If chosen, this tank is NOT PECFA eligible.

Geo Latitude: **Geo Longitude:**

M. If Tank Closed, Abandoned or Out of Service, give date (mo/day/yr): AUG 15 2001

Has a site assessment been completed? (see reverse side for details)
■ Yes ☐ No

Owner or Operator Name (please print): Douglas E. Deaton

Indicate whether: ☐ Owner or ☒ Operator

Owner or Operator Signature: Douglas Deaton

Date Signed 8/15/01

Note: Refer to comments on reverse side of form.

ERS-7437 (R. 5/99)

File by:

Reg Obj #: 414576

UNDERGROUND FLAMMABLE/COMBUSTIBLE LIQUID STORAGE TANK INVENTORY

Information Required By Section 101.142, Wis. Stats.

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 that is (check one):
☐ In Use ■ Closed - Tank Removed ☐ Ownership Change (Indicate new owner name in block 2)
☐ Newly Installed ☐ Closed - Filled with Inert Materials
☐ Abandoned with Product ☐ Temporarily Out of Service - Provide Date:
☐ Abandoned without Product (empty) ☐ Abandon with Water

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

A. IDENTIFICATION (Please Print)

1. Tank Site Name: MIRRO COMPANY
Site Address: 2401 MIRRO DRIVE
Site Telephone Number: 920)684-4421
■ City ☐ Village ☐ Town of: MANITOWOC
State: WISCONSIN Zip Code: 54220 County: MANITOWOC

2. Tank Owner Name: RUBBERMAID NEWELL COMPANY
Mailing Address: 6833 STALTER DRIVE
Telephone Number: 815-381-8121
■ City ☐ Village ☐ Town of: ROCKFORD
State: IL Zip Code: 61108 County:

3. Previous Name:
Previous site address if different than #1:

B. Site ID #: 112102 Facility ID #: Customer ID #: 332634

C. Tank Capacity (gallons): 20,000 gals Tank Age (age or date installed): 1958 INSTALLED

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

E. OCCUPANCY TYPE (check one)
☐ Gas/Retail Sales ☐ Bulk Storage ■ Industrial ☐ Mercantile/Commercial ☐ Utility ☐ Residential ☐ School
☐ Agricultural (crop or livestock production) ☐ Backup or Emergency Generator ☐ Other (specify)

F. Tank Construction:
☐ Bare Steel ■ Coated Steel ☐ Unknown
☐ Fiberglass ☐ Steel – Fiberglass Reinforced Plastic Composite
☐ Lined (date): ☐ Other (specify):

Cathodic Protection
☐ Sacrificial Anodes
☐ Impressed Current
■ N/A

Overfill Protection? ☐ Yes ■ No
Spill Containment? ☐ Yes ■ No
Tank Double Walled? ☐ Yes ■ No

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

H. Piping Construction:
☐ Bare Steel ■ Coated Steel ☐ Unknown
☐ Fiberglass ☐ Flexible ☐ N/A
☐ Copper ☐ Other (specify)

Cathodic Protection
☐ Sacrificial Anodes
☐ Impressed Current
■ N/A

Pipe Double Walled? ☐ Yes ■ No

I. 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

J. 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

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

L. TANK CONTENTS (Current, or previous product if tank now empty)
☐ Diesel ☐ Leaded ☐ Unleaded ■ Fuel Oil ☐ Gasohol
☐ Other (specify): ☐ Empty* ☐ Sand/Gravel/Slurry* ☐ Unknown* ☐ Premix
☐ Waste/Used Motor Oil ☐ Chemical* ☐ Kerosene ☐ Aviation ☐ Hazardous Waste*
(Indicate chemical name and number)

* If chosen, this tank is NOT PECFA eligible.

Geo Latitude: Geo Longitude:

M. If Tank Closed, Abandoned or Out of Service, give date (mo/day/yr): AUG 15 2001

Has a site assessment been completed? (see reverse side for details)
■ Yes ☐ No

Owner or Operator Name (please print): Douglas E. Degton
Indicate whether: ☐ Owner or ☒ Operator

Owner or Operator Signature: Douglas E Degton
Date Signed: 8/15/01

Note: Refer to comments on reverse side of form.

ERS-7437 (R. 5/99)

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

CHECK ONE: ■ UNDERGROUND ☐ ABOVEGROUND

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

RETURN COMPLETED CHECKLIST TO:
Wisconsin Department of Commerce
ERS Division
Bureau of Storage Tank Regulation
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
MIRRO COMPANY PLANT 02	NEWELL RUBBERMAID
Site Street Address (not P.O. Box)	Owner Street Address
2401 MIRRO DRIVE	6833 STALTER DRIVE
■ City ☐ Village ☐ Town of: MANITOWOC	■ City ☐ Village ☐ Town of: ROCKFORD; State: IL; Zip Code: 61108
State: WISCONSIN; Zip Code: 54220; County: MANITOWOC	County: ; Telephone No. (include area code): (815) 381-8121
3. Closure Company Name (print): ENVIRONMENTAL SERVICES PLUS	Closure Company Street Address: W1732 County RD KK
Closure Company Telephone No. (include area code): (920) 766-6756	Closure Company City, State, Zip Code: KAUKAUNA WI 54130
4. Name of Company Performing Closure Assessment: Northern Environmental	Assessment Company Street Address, City, State, Zip Code: 954 Circle Drive Green Bay WI 54304
Telephone No. (include area code): (920) 592-8400	Certified Assessor Name (print): Susan Knabe
Assessor Signature: Sue Knabe	Assessor Certification No.: 248630

Tank ID #	Closure	Temp. Closure	Closure in Place	Tank Capacity	Contents*	Closure Assessment
1. 414576	■	☐	☐	20,000	No#2 F.O	■ Y ☐ N
2. 414577	■	☐	☐	20,000	No#2 F.O	■ 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 ☐ 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.	Remover Verified	Inspector Verified	NA
B. TEMPORARILY OUT OF SERVICE			
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.	■ 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 -

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" in uppermost part of tank) installed prior to moving the tank from site.	■Y	☐N	☐	☐
13. **Form ERS-7437 or ERS-8731 filed by owner with the Dept. of Commerce 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 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: 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 the Department of Commerce indicating closure in place.	☐Y	☐N	☐	☐

E. CLOSURE ASSESSMENTS

NOTE: DETERMINE IF A CLOSURE ASSESSMENT IS REQUIRED BY REFERRING TO COMM 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?	☒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: DNR, Cathy Gadwedt

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

F. METHOD OF ACHIEVING 10% LEVEL DESCRIPTION

☐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.

☐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

No Inspector @ site.

H. REMOVER/CLEANER INFORMATION

Remover Name (print)	Remover Signature	Remover Certification No.	Date Signed
JESSE F ROSE	Jesse F Rose	4240	8-15-0

I. INSPECTOR INFORMATION

Inspector Name (print)	Inspector Signature	Inspector Certification No.

FDID # For Location Where Inspection Performed	Inspector Telephone Number	Date Signed

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

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385A						**Sample Type** Soil			
Sample ID S13						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	79	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	120	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PAH's									
Acenaphthene	< 35	ug/kg	13	43	1	9/12/01	M8270	DJM	1
Acenaphthylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Anthracene	200	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Benzo(a)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(a)pyrene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	1
Benzo(b)fluoranthene	< 24	ug/kg	24	80	1	9/12/01	M8270	DJM	1
Benzo(g,h,i)perylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(k)fluoranthene	< 37	ug/kg	37	120	1	9/12/01	M8270	DJM	1
Chrysene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Dibenzo(a,h)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluoranthene	23 "J"	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluorene	350	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Indeno(1,2,3-cd)pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
1-Methyl naphthalene	340	ug/kg	10	33	1	9/12/01	M8270	DJM	1
2-Methyl naphthalene	89	ug/kg	17	57	1	9/12/01	M8270	DJM	2
Naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	2
Phenanthrene	410	ug/kg	12	40	1	9/12/01	M8270	DJM	1
Pyrene	87	ug/kg	13	43	1	9/12/01	M8270	DJM	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	GRO95	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	GRO95	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	GRO95	CJR	1
1,2,4-Trimethylbenzene	140	ug/kg	24	77	1	8/29/01	GRO95	CJR	1
1,3,5-Trimethylbenzene	110	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Xylene's	< 75	ug/kg	18	60	1	8/29/01	GRO95	CJR	1

No: 16555

Northern Environmental℠
Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Check office originating request

Lab ID#5034385

- [ ] 1214 W. Venture Ct., Mequon, WI 53092, 262-241-3133, FAX 262-241-8222
- [ ] 372 West County Road D, New Brighton, MN 55112, 651-635-9100, FAX 651-635-0643
- [X] 954 Circle Drive, Green Bay, WI 54304, 920-592-8400, FAX 920-592-8444
- [ ] 330 South 4th Avenue, Park Falls, WI 54552, 715-762-1544, FAX 715-762-1844
- [ ] 1203 Storbeck Drive, Waupun, WI 53963, 920-324-8600, FAX 920-324-3023
- [ ] 3211 Arnold Lane, Northbrook, IL 60062, 847-562-8577, FAX 847-562-8552
- [ ] 112 7th Street NE, Rochester, MN 55906, 507-282-3800, FAX 507-282-3100
- [ ] 31628 Glendale Ave., Ste 100, Livonia, MI 48150, 734-422-2624, FAX 734-422-3530
- [ ]

Project No: ESP 03-2200-1267 Task No: ~~00~~ 50
Project Location: (city) Manitowoc
Project Manager: Lynelle Caine
Sampler: (name) Susan Knabe
Sampler: (Signature) Sue Knabe
Sampling Date(s): 8-14-01
Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil
Wisconsin DNR Certification #: 445027660
Laboratory Contact: Mike Ricker
Price Quote:

RUSH

TURNAROUND TIME REQUIRED
Soil Normal [X] Rush → water only
Date Needed 8-20-01

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt [X] yes [ ] no
Method of shipment Courier
Contents Temperature 4 °C Refrigerator No. 1

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Water	Soil	Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385A	S13	8-14-01	1214	2-40ml, 1-2oz		X		Ice	X			X		X	
B	S10	↓	946	↓		X		↓	X			X		X	
C	S25	↓	1540	↓		X		↓	X			X		X	
D	S8	↓	944	↓		X		↓	X			X			
E	S26	↓	1604	↓		X		↓	X			X			
F	S15	↓	1216	↓		X		↓	X			X			
G	S19	↓	1220	↓		X		↓	X			X			
H	S1	↓	910	↓		X		↓	X			X			
I	S5	↓	943	↓		X		↓	X			X			
J	S24	↓	1527	↓		X		↓	X			X			

Packed for Shipping by: Sue Knabe
Shipment Date: 8-16-01

Comments: Called to confirm jar labelled S24 but in S25 bag was for S25 sample. CSM 8/17/01 CSM

Relinquished By: MB Rogers	Date: 8-16-01	Relinquished By: Clay Paquette	Date: 8/16/01	Relinquished By:	Date:
Company: Northern Environmental	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:
Received By: Clay Paquette	Date: 8-16-01	Received By: Katie Asman	Date: 8-16-01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

No: 16556

Northern Environmental℠ CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Hydrologists • Engineers • Geologists

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222

☐ 372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643

☒ 954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444

☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844

☐ _____

☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023

☐ 3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552

☐ 112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100

☐ 31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~100~~ 50

Project Location: (city) Manitowoc

Project Manager: Lynelle Caine

Sampler: (name) Susan Knabe

Sampler: (Signature) Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricker

Price Quote:

TURNAROUND TIME REQUIRED

☒ Normal soil ☒ Rush water only

Date Needed _____

RUSH

Sample Integrity - To be completed by receiving lab

Seal intact upon receipt ☐ Yes ☐ No

Method of shipment Courier

Contents Temperature 4 °C Refrigerator No: _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385K	S14	8-14-01	1215	2-40ml, 1-2oz		X		ice	X			X			
L	S12	↓	1213	↓		X		↓	X			X			
M	S20*		1405			X			X						
N	S21*		1406			X			X						
O	S22*		1450			X			X						
P	S23*	↓	1451	↓		X		↓	X						
Q	Tanker sample	8-14-01	1648	3-40ml, 1-1L	X			HCl, ice				X		X	

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments: * If DRO detected at greater than 100ppm, then run PVOCs.

Relinquished By:	Date:	Relinquished By:	Date:	Relinquished By:	Date:
MB Thyssen	8-16-01	Clay Paquette	8/16/01		
Company: Northern Environmental	Time: 0740	Company: U.S. Oil	Time: 18:45	Company:	Time:
Received By: Clay Paquette	Date: 8-16-01	Received By: Mike Asman	Date: 8/16/01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

ATTACHMENT B

GROUNDWATER DISPOSAL DOCUMENTATION
AND
LABORATORY ANALYTICAL REPORTS

STRAIGHT BILL OF LADING – SHORT FORM – Original – Not Negotiable

Shipper's No. _____

(Carrier) GENE FREDERICKSON TRK SCAC. _____ Carrier's No. _____

Received, subject to the classifications and tariffs in effect on the date of this Bill of Lading:

at WITZ COUNTY RD KK, KAUKAUNA, date 9-5-01 from _____

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address of consignee for purposes of notification only.)

TO: HEART OF THE VALLEY
Consignee METRO SEWERAGE DISTRICT
Street
Destination HILMANN ROAD Zip
Route: KAUKAUNA WI 54130

FROM: MIRRO COMPANY PLANT 2
Shipper
Street 2401 MIRRO DRIVE
Origin MANITOWOC WI Zip

Delivering Carrier | Trailer Initial/ Number | U.S. DOT Hazmat Reg. Number

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	I.D. Number	Packing Group	*Weight (subject to correction)	Class or rate	Labels required (or exemption)	Check column
		IMPACTED GROUND WATER							
		FROM PLANT 02							
		REMOVAL OF (2) 20K UST							
		DELIVERED 9-7-01							
		TOTAL GALLONS 4700							
		HAZMAT ACCEPTANCE							

Remit C.O.D. to:
Address:
City: State: Zip:

COD AMT: $

Charges Advanced $ _____

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of consignor)

C. O. D. FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES ☐ Prepaid ☐ Collect

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight". Note. – where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
Per _____

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO – FURNISHED BY CARRIER

DRIVER'S SIGNATURE:

SHIPPER: MIRRO COMPANY
PER: DOUG DEDON DATE: 9-5-01
Permanent post office address of shipper

CARRIER: GENE FREDERICKSON TRUCKING
PER: _____ DATE: _____
EMERGENCY RESPONSE TELEPHONE NUMBER: ( ) 920-766-6356
Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (§172.604).

9-BLS-B3 (Rev. 8/95)

Copy

***The following load(s) from the date(s) listed below are being billed separately, due to their strengths exceeding the Holding Tank Strengths, as listed in the Metro's Sewer Use Ordinance or that the load was marked as waste other than Holding Tank Waste (Example: Septic Waste, Contaminated Groundwater). The Billing Amount is the total charge per load on the date listed. These strengths are billed separately and are not used when averaging the Holding Tank Strengths used for monthly billing purposes.

Holding Tank Limits are as follow B.O.D. of 600 mg/L
Suspended Solids of 1,800 mg/L
Phosphorus of 30 mg/L

Date	Gallons	Parameter Exceeded	Billing Amount
Sep 7	4,700	(Contaminated Groundwater) [Mirro Company - Manitowoc]	

Jess

SubTotal =

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385O						**Sample Type** Soil			
Sample ID S22						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	82.6	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1
Lab Code 5034385P						**Sample Type** Soil			
Sample ID S23						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	83.9	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	< 10	mg/kg	0.38	1.3	1	8/24/01	DRO95	KAH	1
Lab Code 5034385Q						**Sample Type** Water			
Sample ID TANKER						**Sample Date** 8/14/01			
Organic									
PAH's									
Acenaphthene	6.5	ug/l	1.7	5.5	10	8/24/01	8310	DJM	2
Acenaphthylene	< 10	ug/l	10	32	10	8/24/01	8310	DJM	2
Anthracene	1.7	ug/l	0.1	0.33	10	8/24/01	8310	DJM	1
Benzo(a)anthracene	3.1	ug/l	0.74	2.5	10	8/24/01	8310	DJM	1
Benzo(a)pyrene	3.2 "J"	ug/l	1	3.4	10	8/24/01	8310	DJM	1
Benzo(b)fluoranthene	2.8	ug/l	0.65	2.2	10	8/24/01	8310	DJM	1
Benzo(g,h,i)perylene	< 5.2	ug/l	5.2	17	10	8/24/01	8310	DJM	2
Benzo(k)fluoranthene	1.3	ug/l	0.1	0.33	10	8/24/01	8310	DJM	1
Chrysene	< 7	ug/l	7	24	10	8/24/01	8310	DJM	1
Dibenzo(a,h)anthracene	< 4.2	ug/l	4.2	14	10	8/24/01	8310	DJM	2
Fluoranthene	110 "J"	ug/l	36	120	100	8/30/01	8310	DJM	1
Fluorene	7.1 "J"	ug/l	3.3	11	10	8/24/01	8310	DJM	2
Indeno(1,2,3-cd)pyrene	< 5.9	ug/l	5.9	20	10	8/24/01	8310	DJM	1
1-Methyl naphthalene	72	ug/l	2.1	7	10	8/24/01	8310	DJM	2
2-Methyl naphthalene	74	ug/l	2	6.7	10	8/24/01	8310	DJM	2

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385Q						**Sample Type** Water			
Sample ID TANKER						**Sample Date** 8/14/01			
Naphthalene	17	ug/l	2.2	7.4	10	8/24/01	8310	DJM	2
Phenanthrene	34	ug/l	0.37	1.2	10	8/24/01	8310	DJM	1
Pyrene	7.5	ug/l	0.59	2	10	8/24/01	8310	DJM	2
PVOC									
Benzene	0.41 "J"	ug/l	0.21	0.67	1	8/20/01	8021A	CAH	1
Ethylbenzene	7.2	ug/l	0.22	0.7	1	8/20/01	8021A	CAH	1
MTBE	< 0.46	ug/l	0.46	1.5	1	8/20/01	8021A	CAH	1
Toluene	3.4	ug/l	0.41	1.3	1	8/20/01	8021A	CAH	1
1,2,4-Trimethylbenzene	42	ug/l	0.26	0.84	1	8/20/01	8021A	CAH	1
1,3,5-Trimethylbenzene	14	ug/l	0.34	1.1	1	8/20/01	8021A	CAH	1
m&p-Xylene	21	ug/l	0.43	1.4	1	8/20/01	8021A	CAH	1
o-Xylene	11	ug/l	0.26	0.82	1	8/20/01	8021A	CAH	1

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

Code	*Comment*
1	All laboratory QC requirements were met for this sample.
2	The duplicate RPD failed to meet acceptable QC limits.
44	Chromatogram indicates possible lube oil contamination.

Authorized Signature

Northern Environmental
Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

No: 16555

Check office originating request

Lab ID# 5034385

- [ ] 1214 W. Venture Ct., Mequon, WI 53092, 262-241-3133, FAX 262-241-8222
- [ ] 372 West County Road D, New Brighton, MN 55112, 651-635-9100, FAX 651-635-0643
- [X] 954 Circle Drive, Green Bay, WI 54304, 920-592-8400, FAX 920-592-8444
- [ ] 330 South 4th Avenue, Park Falls, WI 54552, 715-762-1544, FAX 715-762-1844
- [ ] 1203 Storbeck Drive, Waupun, WI 53963, 920-324-8600, FAX 920-324-3023
- [ ] 3211 Arnold Lane, Northbrook, IL 60062, 847-562-8577, FAX 847-562-8552
- [ ] 112 7th Street NE, Rochester, MN 55906, 507-282-3800, FAX 507-282-3100
- [ ] 31628 Glendale Ave., Ste 100, Livonia, MI 48150, 734-422-2624, FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~100~~ 50
Laboratory: U.S. Oil
Project Location (city): Manitowoc
Wisconsin DNR Certification #: 445027660
Project Manager: Lynelle Caine
Laboratory Contact: Mike Ricker
Sampler (name): Susan Knabe
Price Quote:
Sampler (Signature): Sue Knabe
Sampling Date(s): 8-14-01
Reports to be Sent to: Sue Knabe

TURNAROUND TIME REQUIRED: [soil] Normal [X] Rush (water only)
RUSH
Date Needed: 8-20-01

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt [X] yes [ ] no
Method of shipment: Courier
Contents Temperature: 4 °C Refrigerator No.: ✓

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Water	Soil	Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385A	S13	8-14-01	1214	2-40ml, 1-2oz		X		Ice	X			X		X	
B	S10	↓	946	↓		X		↓	X			X		X	
C	S25		1540			X			X			X		X	
D	S8		944			X			X			X			
E	S26		1604			X			X			X			
F	S15		1216			X			X			X			
G	S19		1220			X			X			X			
H	S1		910			X			X			X			
I	S5		943			X			X			X			
J	S24	↓	1527	↓		X		↓	X			X			

Packed for Shipping by: Sue Knabe
Shipment Date: 8-16-01

Comments: Called to confirm jar labelled S24 but in S25 bag was for S25 sample. CSM 8/17/01 CSM

Relinquished By: MB Roque	Date: 8-16-01	Relinquished By: Clay Paquette	Date: 8/16/01	Relinquished By:	Date:
Company: Northern Environmental	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:
Received By: Clay Paquette	Date: 8-16-01	Received By: Katie Asman	Date: 8-16-01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

Northern Environmental℠
Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Page 2 of 2
No: 16556

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222
☐ 372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643
☒ 954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444
☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844
☐ _____
☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023
☐ 3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552
☐ 112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100
☐ 31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~00~~ 50
Project Location: (city) Manitowoc
Project Manager: Lynelle Caine
Sampler: (name) Susan Knabe
Sampler: (Signature) Sue Knabe
Sampling Date(s): 8-14-01
Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil
Wisconsin DNR Certification #: 445027660
Laboratory Contact: Mike Ricker
Price Quote:

TURNAROUND TIME REQUIRED
☒ Normal soil ☒ Rush water only
Date Needed _____

RUSH

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt ☐ Yes ☐ No
Method of shipment Courier
Contents Temperature _____ °C Refrigerator No: _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method	Pb (EPA Method
5034385K	S14	8-14-01	1215	2-40ml, 1-2oz		X		Ice	X			X			
L	S12		1213			X			X			X			
M	S20 *		1405			X			X						
N	S21 *		1406			X			X						
O	S22 *		1450			X			X						
P	S23 *		1451			X			X						
Q	Tanker sample	8-14-01	1648	3-40ml, 1-1L	X			HCl, Ice				X		X	

Packed for Shipping by: Sue Knabe,
Shipment Date: 8-16-01

Comments: * If DRO detected at greater than 100ppm, then run PVOCs.

Relinquished By:	Date:	Relinquished By:	Date:	Relinquished By:	Date:
MB Thyssen	8-16-01	Clay Paquette	8/16/01		
Company: Northern Environmental	Time: 0740	Company: U.S. Oil	Time: 18:45	Company:	Time:
Received By: Clay Paquette	Date: 8-16-01	Received By: Mike Asman	Date: 8/16/01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

Northern Environmental℠
Hydrologists • Engineers • Geologists

954 Circle Drive
Green Bay, WI 54304
920-592-8400
1-800-854-0606
Fax • 920-592-8444
E-mail • netigb@admin.itol.com

January 8, 2002
(ESP-03-2200-1267)

Mr. Keld Lauridsen
Wisconsin Department of Natural Resources
1125 North Military Avenue
Post Office 10448
Green Bay, Wisconsin 54307

RE: Disposal of Stockpiles Soil, Mirro Company Plant #02, 2401 Mirro Drive, Manitowoc, Wisconsin 54166; BRRTs ID #03-36-280532

Dear Mr. Lauridsen:

Per our conversation Northern Environmental Technologies, Inc. (Northern Environmental) is providing documentation of the disposal of the stockpiled soil at Mirro Plant #02, 2401 Mirro Drive, Manitowoc, Wisconsin (the Site). During August 2001, 2-20,000-gallon fuel oil underground storage tanks (USTs) were removed from the Site. During the UST closure assessment, slight petroleum odors and slightly elevated photoionization detector (PID) readings were observed in the soil surrounding the USTs. Based on the field screening results, soil that appeared to be potentially impacted from the petroleum release was excavated and temporarily stockpiled on-site. Approximately 100 yards of soil was stockpiled adjacent to the former UST locations, placed on and covered with plastic.

During the soil excavation on August 14, 2001, the soil sample (S13) exhibiting the highest PID reading was submitted for laboratory analysis for waste characterization purposes. Results of laboratory analysis detected concentrations of diesel range organics (DRO), trimethylbenzenes, and several polycyclic aromatic hydrocarbons (PAHs) in the soil sample. Based on the results of previous investigations completed at Mirro Plant #02, the native soil consists predominantly of silty clay and is considered a less permeable soil. Under Section NR 720 Wisconsin Administrative Code (Wis. Adm. Code), generic residual cleanup levels (RCLs) for less permeable soil have been established for DRO at 250 milligrams per kilogram (mg/kg). Based upon this level, the DRO concentration detected in S13 (120 mg/kg DRO) is below NR720 Wis. Adm. Code generic RCLs. The concentrations of trimethylbenzenes and PAHs detected in S13 were compared to the Table 1 and 2 values established in NR746 Wis. Adm. Code and the table values listed in the Wisconsin Department of Natural Resources (WDNR) Interim Guidance for Soil Cleanup Levels for PAHs. None of the petroleum constituents detected in S13 were above these values.

On November 28, 2001, a second sample was collected from the stockpiled soil to confirm the laboratory results. Soil sample SP1 was collected and submitted for laboratory analysis of DRO and petroleum volatile organic compounds (PVOCs). DRO and PVOCs were not detected above laboratory method detection limits in SP1. Copies of the laboratory analytical results are attached.

Based on the laboratory analytical results of soil samples S13 and SP1, Northern Environmental believes the stockpiled soil can be properly disposed of by thin spreading it on site. The soil would be spread in the vicinity of the former fuel oil USTs. Given that the concentrations detected in the soil are below Wis. Adm. Code standards for protection from direct contact exposure and ground water quality impacts, additional soil sampling should not be necessary.

If you agree that the soil pile can be thinspread on-site, please indicate your approval by signing below. Please return a signed copy in the envelope supplied.

Signature

1/23/02
Date

If you have any questions regarding this submittal, please contact us at 920-592-8400.

Sincerely,
Northern Environmental Technologies, Incorporated

Lynelle P. Caine
Project Manager

LPC/hmo
Attachment

c: Mr. Doug Deaton, Mirro Company

CTLaboratories

1230 Lange Court
Baraboo, WI 53913-3109
Phone: (800) 228-3012
Fax: (608) 356-2766
www.ctlaboratories.com

ORIGINAL

ANALYTICAL REPORT

NORTHERN ENVIRONMENTAL
ANN KRZYZEWSKI
954 CIRCLE DRIVE
GREEN BAY, WI 54304

Project Name: MANITOWOC
Contract #: 1595
Project #: ESP-1267
Folder #: 22187
Purchase Order #: INV 22148
Arrival Temperature: See COC
Report Date: 12/4/01
Date Received: 11/29/01
Reprint Date:

CTI LAB#: 99008 Sample Description: SP1 Sampled: 11/28/01 1125

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Solids, Percent	84.1	%	N/A	N/A	1			12/3/01	SET	EPA 5030A
Organic Results										
Diesel Range Organics	<3.2	mg/kg	3.2	10	1		12/3/01	12/4/01	KJJ	WDNR DRO
Benzene	<25	ug/kg	10	34	1		11/30/01	12/1/01	PRH	EPA 8020
Ethylbenzene	<25	ug/kg	13	44	1		11/30/01	12/1/01	PRH	EPA 8020
Methyl tert-butyl ether	<25	ug/kg	12	39	1		11/30/01	12/1/01	PRH	EPA 8020
Toluene	<25	ug/kg	11	38	1		11/30/01	12/1/01	PRH	EPA 8020
1,2,4-Trimethylbenzene	<25	ug/kg	12	39	1		11/30/01	12/1/01	PRH	EPA 8020
1,3,5-Trimethylbenzene	<25	ug/kg	13	42	1		11/30/01	12/1/01	PRH	EPA 8020
m & p-Xylene	<25	ug/kg	24	79	1		11/30/01	12/1/01	PRH	EPA 8020
o-Xylene	<25	ug/kg	14	46	1		11/30/01	12/1/01	PRH	EPA 8020

Notes: * Indicates Value in between LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: _____

Record Reviewer

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289

Solid sample results reported on a Dry Weight Basis

Northern Environmental℠
Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Page 1 of 1

No: 16415

Check office originating request

- ☐ *1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222*
- ☐ *372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643*
- ☒ *954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444*
- ☐ *330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844*
- ☐ _____
- ☐ *1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023*
- ☐ *3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552*
- ☐ *112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100*
- ☐ *31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530*

Project No: ESP-1267 Task No:

Project Location: (city) Manitowoc

Project Manager: Cynelle Caine

Sampler: (name) Kevin Eibenholz

Sampler: (Signature) Kevin Eibenholz

Sampling Date(s): 11-28-01

Reports to be Sent to: A Krzyzewski

Laboratory: C. T. Labs

Wisconsin DNR Certification #: 157066030

Laboratory Contact: Eric Korthals

Price Quote:

TURNAROUND TIME REQUIRED

☐ Normal ☒ Rush

Date Needed 12-5-01

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt ☐ yes ☐ no
Method of shipment _____
Contents Temperature _____ °C Refrigerator No. _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method	Pb (EPA Method
	SP1	11-28-01	1125	2-60mL, HCl		X		MeoH	X			X			

Folder #: 22187
Company: NORTHERN ENVIRON.
Project: MANITOWOC
Logged By: DAB PM: ETK

ICE PRESENT: (YES) NO
TEMPERATURE 2.7 °C
INITIALS DAB
DATE 29-Nov-01 TIME 15:55

Packed for Shipping by:

Shipment Date:

Comments:

Relinquished By:	Date:	Relinquished By:	Date:	Relinquished By:	Date:
Company: NETI	Time: 1628	Company:	Time:	Company:	Time:
Received By: DAB	Date: 29-Nov-01	Received By:	Date:	Received By:	Date:
Company: CT LABS	Time: 16:22	Company:	Time:	Company:	Time:

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385A						**Sample Type** Soil			
Sample ID S13						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	79	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	120	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PAH's									
Acenaphthene	< 35	ug/kg	13	43	1	9/12/01	M8270	DJM	1
Acenaphthylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Anthracene	200	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Benzo(a)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(a)pyrene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	1
Benzo(b)fluoranthene	< 24	ug/kg	24	80	1	9/12/01	M8270	DJM	1
Benzo(g,h,i)perylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(k)fluoranthene	< 37	ug/kg	37	120	1	9/12/01	M8270	DJM	1
Chrysene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Dibenzo(a,h)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluoranthene	23 "J"	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluorene	350	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Indeno(1,2,3-cd)pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
1-Methyl naphthalene	340	ug/kg	10	33	1	9/12/01	M8270	DJM	1
2-Methyl naphthalene	89	ug/kg	17	57	1	9/12/01	M8270	DJM	2
Naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	2
Phenanthrene	410	ug/kg	12	40	1	9/12/01	M8270	DJM	1
Pyrene	87	ug/kg	13	43	1	9/12/01	M8270	DJM	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	GRO95	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	GRO95	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	GRO95	CJR	1
1,2,4-Trimethylbenzene	140	ug/kg	24	77	1	8/29/01	GRO95	CJR	1
1,3,5-Trimethylbenzene	110	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Xylene's	< 75	ug/kg	18	60	1	8/29/01	GRO95	CJR	1

No: 16555

Northern Environmental℠ — CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Hydrologists • Engineers • Geologists

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222

☐ 372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643

☒ 954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444

☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844

☐ _____

☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023

☐ 3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552

☐ 112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100

☐ 31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~00~~ 50

Project Location: (city) Manitowoc

Project Manager: Lynelle Caine

Sampler: (name) Susan Knabe

Sampler: (Signature) Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricker

Price Quote:

TURNAROUND TIME REQUIRED

SDI Normal ☒ Rush

Date Needed 8-20-01

RUSH water only

Sample Integrity - To be completed by receiving lab

Seal intact upon receipt ☐ yes ☐ no

Method of shipment Courier

Contents Temperature 4 °C Refrigerator No. 2

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385A	S13	8-14-01	1214	2-40ml, 1-2oz		X		Ice	X			X		X	
B	S10		946			X			X			X		X	
C	S25		1540			X			X			X		X	
D	S8		944			X			X			X			
E	S26		1604			X			X			X			
F	S15		1216			X			X			X			
G	S19		1220			X			X			X			
H	S1		910			X			X			X			
I	S5		943			X			X			X			
J	S24	↓	1527			X		↓	X			X			

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments: Called to confirm jar labelled S24 but in S25 bag was for S25 sample. csm 8/16/01 csm

Relinquished By:	Date:	Relinquished By:	Date:	Relinquished By:	Date:
MBRoque	8-16-01	Clay Paquette	8/16/01		
Company: Northern Environmental	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:
Received By: Clay Paquette	Date: 8-16-01	Received By: Katie Asman	Date: 8-16-01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

4

Page 2 of 2

No: 16556

Northern Environmental℠ — CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Hydrologists • Engineers • Geologists

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct. Mequon, WI 53092 262-241-3133 FAX 262-241-8222

☐ 372 West County Road D New Brighton, MN 55112 651-635-9100 FAX 651-635-0643

☒ 954 Circle Drive Green Bay, WI 54304 920-592-8400 FAX 920-592-8444

☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 FAX 715-762-1844

☐ _____

☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023

☐ 3211 Arnold Lane Northbrook, IL 60062 847-562-8577 FAX 847-562-8552

☐ 112 7th Street NE Rochester, MN 55906 507-282-3800 FAX 507-282-3100

☐ 31628 Glendale Ave., Ste 100 Livonia, MI 48150 734-422-2624 FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~DQ~~ 50

Project Location: (city) Manitowoc

Project Manager: Lynelle Caine

Sampler: (name) Susan Knabe

Sampler: (Signature) Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricker

Price Quote:

TURNAROUND TIME REQUIRED

☒ Normal soil ☒ Rush water only

Date Needed _____

RUSH

Sample Integrity - To be completed by receiving lab

Seal intact upon receipt ☐ yes ☐ no

Method of shipment Courier

Contents Temperature _____ °C Refrigerator No: _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385K	S14	8-14-01	1215	2-40mL, 1-2oz		X		ice	X			X			
L	S12		1213			X			X			X			
M	S20 *		1405			X			X						
N	S21 *		1406			X			X						
O	S22 *		1450			X			X						
P	S23 *		1451			X			X						
Q	Tanker sample	8-14-01	1648	3-40mL, 1-1L	X			HCl, ice				X		X	

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments: * If DRO detected at greater than 100ppm, then run PVOCs.

Relinquished By: MB Thompson	Date: 8-16-01	Relinquished By: Clay Paquette	Date: 8/16/01	Relinquished By:	Date:
Company: Northern Environmental	Time: 0740	Company: U.S. Oil	Time: 18:45	Company:	Time:
Received By: Clay Paquette	Date: 8-16-01	Received By: Tom Asman	Date: 8/16/01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary
Ronald W. Kazmierczak, Regional Director

Northeast Region Headquarters
1125 N. Military Ave., P.O. Box 10448
Green Bay, Wisconsin 54307-0448
Telephone 920-492-5800
FAX 920-492-5913
TTY 920-492-5912

RECEIVED
JAN 3 0 2002
ERS DIVISION
OSHKOSH

September 19, 2001

Mr. Douglas Deaton
Mirro Company
P. O. Box 1330
Manitowoc, WI 54220

Subject: Reported Contamination at Mirro Company, 2401 Mirro Drive, Manitowoc, Wisconsin
WDNR BRRTS # 03-36-280532

Dear Mr. Deaton:

On August 20, 2001, you notified the Wisconsin Department of Natural Resources (WDNR) that petroleum (fuel oil) contamination had been detected at the site listed above.

Based on the information submitted to the WDNR, we believe you are responsible for restoring the environment at the referenced site under Section 292, Wisconsin Stats., known as the hazardous substances spills law.

This letter describes your legal responsibilities, explains what you need to do to investigate and clean up the contamination, and provides you with information about cleanups, environmental consultants, possible financial assistance, and working cooperatively with the WDNR and Department of Commerce (Commerce).

Legal Responsibilities:
Your legal responsibilities are defined both in statute and in administrative codes. The hazardous substances spill law, Section 292.11 (3) Wisconsin Statutes, states:

- RESPONSIBILITY. A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands, or waters of the state.

Wisconsin Administrative Code chapters NR 700 through NR 749 establish requirements for emergency and interim actions, public information, site investigations, design and operation of remedial action systems, and case closure. Chapter NR 708 includes provisions for immediate actions in response to limited contamination. Wisconsin Administrative Code chapter NR 140 establishes groundwater standards for contaminants that reach groundwater.

Steps to Take:

The longer contamination is left in the environment the farther it can spread and the more it may cost to clean up. Quick action may lessen damage to your property and neighboring properties and reduce your costs in investigating and cleaning up the contamination. To ensure that your cleanup complies with Wisconsin's laws and administrative codes, you should hire a professional environmental consultant who understands what needs to be done. These are the first three steps to take:

1. Within the next **30 days of the date of this letter**, you must submit written verification (such as a letter from the consultant) that you have hired an environmental consultant.

2. Within the next **60 days of the date of this letter**, your consultant must submit a workplan and schedule for the investigation. The consultant must follow the WDNR administrative codes and technical guidance documents. To facilitate prompt agency review of your reports, your consultant should use the site investigation and closure formats which are available on-line at www.dnr.state.wi.us.

   Once an investigation has established the degree and extent of contamination involved at your site, your consultant will be able to determine whether Commerce or the WDNR has authority over the case.

3. Within 30 days of completion of the site investigation, you or your consultant must provide a brief report at least every 90 days per NR 724.13(3). Quarterly reports need only include one or two pages of text, plus any relevant maps and tables. Should conditions at your site warrant, we may require more frequent contacts.

4. When the site investigation is complete, NR 716.15(1) requires that you or your consultant submit to the WDNR a full report (within 30 days of completion of the report) on the extent and degree of soil and groundwater contamination and a proposal for cleaning up the contamination.

5. After the appropriate remedial action as been implemented and there is no threat to human health or the environment, you or your consultant may apply for closure (no further action required) to the WDNR.

6. Sites where discharges to the environment have been reported are entered into the Bureau for Remediation and Redevelopment Tracking System (BRRTS), a version of which appears on the WDNR's Internet site. You may view the information related to your site at any time (http://www.dnr.state.wi.us/org/aw/rr/brrts) and use the feedback system to alert us to any errors in the data.

If you request a formal response from the agency on a specific submittal, please be aware that a review fee is required in accordance with s. NR 749, Wis. Adm. Code. If a fee is not submitted with your reports, you should proceed under the advice of your consultant to complete the site investigation to maintain your compliance with the spills law and chs. NR 700 through NR 749. **Do not delay the investigation of your site by waiting for an agency response.** We have provided detailed technical guidance to environmental consultants. Your consultant is expected to know our technical procedures and administrative codes and should be able to answer your questions on meeting cleanup requirements.

All correspondence regarding this site should be sent to:

Keld Lauridsen
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
P. O. Box 10448
Green Bay, WI 54307-0448
920/492-5921

Unless otherwise requested, please send only one copy of plans and reports. To speed processing, correspondence should reference the BRRTS and FID numbers (if assigned) shown at the top of this letter.

Additional Information for Site Owners:
Information to help you select a consultant, review the contractor list, help control costs is enclosed. In addition, *Fact Sheet 2 - Voluntary Party Remediation and Exemption from Liability* is enclosed and provides information on obtaining protection of limited liability under s. 292.15, Stats.

Financial Assistance:
Reimbursement from the Petroleum Environmental Cleanup Fund (PECFA) is available for some of the costs of cleaning up contamination from eligible petroleum storage tanks. Please refer to the enclosed information sheet entitled *Information About PECFA* for more information on eligibility and regulations for this program For more information on the PECFA program, please call the Department of Commerce at 608-266-2424 or visit their web site at http://www.commerce.state.wi.us/ER/ER.

Drycleaning Sites:
Funding is also available for cleanup at some drycleaning sites.

Thank you for your cooperation. Call Mr. Lauridsen for more information on eligibility or visit the RR web site http://www.dnr.state.wi.us/org/aw/rr. You may also contact this person for all other questions regarding this letter.

Sincerely,

Cynthia R. Egtvedt

Cynthia R. Egtvedt
Program Assistant
Bureau for Remediation & Redevelopment

Enclosures: 1. Selecting an Environmental Consultant
2. Environmental Services Contractor List
3. Controlling UST Cleanup Costs
4. Information About PECFA
5. Fact Sheet 2, VPLE

cc: Lynelle Caine; Northern Environmental; 954 Circle Drive; Green Bay; WI 54304
K. Lauridsen/Green Bay

LETTER OF TRANSMITTAL

Northern Environmental℠
Hydrologists • Engineers • Geologists

954 Circle Drive
Green Bay, Wisconsin 54304

414-592-8400
1-800-854-0606
Fax 414-592-8444

DATE	PROJECT NO.
9-17-01	ESP 03-2200-1267
ATTENTION	
RE	
Lab results	

TO: Cindy Egtvedt
WDNR

WE ARE SENDING YOU

- [X] Attached
- [ ] Under separate cover
- [ ] Shop Drawings
- [ ] Specifications
- [ ] Plans
- [ ] Copy of letter
- [ ] Samples
- [ ] Change order
- [ ] _____

COPIES	DESCRIPTION
1	Lab report

RECEIVED
JAN 30 2002
ERS DIVISION
OSHKOSH

THESE ARE TRANSMITTED (see code)

A. For Approval
B. For Your Use
C. As Requested
D. For Review and Comment
E. For Bids Due _____ 19 ____
F. No Exceptions Taken
G. Make Noted Corrections
H. Amend & Resubmit
I. _____
J. Resubmit _____ Copies for Review
K. Submit _____ Copies for Distribution
L. Return _____ Corrected Prints
M. Review and Sign _____

REMARKS: Cindy

Attached is a copy of the lab report of the dirty soil sample collected during a recent tank pull at Mirro Plant #2 in Manitowoc, WI. Mirro completed the WDNR report a release form. Please call if you need any additional information. Thank you

COPY TO: _____

SIGNED: Sue Knabe

U.S. Analytical Lab

SUE KNABE
NORTHERN ENVIRONMENTAL
954 CIRCLE DRIVE
GREEN BAY WI 54304

Project # ESP 03-220-1267
Project Name MANITOWOC
Invoice # E34385

Report Date *13-Sep-01*

Analyte	Result	Units	LOD	LOQ	Dil	Run Date	Method	Analyst	QC Code
Lab Code 5034385A						**Sample Type** Soil			
Sample ID S13						**Sample Date** 8/14/01			
Inorganic									
General									
Solids Percent	79	%			1	8/17/01	5021	JDB	1
Organic									
General									
Diesel Range Organics	120	mg/kg	0.38	1.3	1	8/22/01	DRO95	JDB	1
PAH's									
Acenaphthene	< 35	ug/kg	13	43	1	9/12/01	M8270	DJM	1
Acenaphthylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Anthracene	200	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Benzo(a)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(a)pyrene	< 17	ug/kg	17	57	1	9/12/01	M8270	DJM	1
Benzo(b)fluoranthene	< 24	ug/kg	24	80	1	9/12/01	M8270	DJM	1
Benzo(g,h,i)perylene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Benzo(k)fluoranthene	< 37	ug/kg	37	120	1	9/12/01	M8270	DJM	1
Chrysene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Dibenzo(a,h)anthracene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluoranthene	23 "J"	ug/kg	10	33	1	9/12/01	M8270	DJM	1
Fluorene	350	ug/kg	11	37	1	9/12/01	M8270	DJM	1
Indeno(1,2,3-cd)pyrene	< 13	ug/kg	13	43	1	9/12/01	M8270	DJM	1
1-Methyl naphthalene	340	ug/kg	10	33	1	9/12/01	M8270	DJM	1
2-Methyl naphthalene	89	ug/kg	17	57	1	9/12/01	M8270	DJM	2
Naphthalene	< 10	ug/kg	10	33	1	9/12/01	M8270	DJM	2
Phenanthrene	410	ug/kg	12	40	1	9/12/01	M8270	DJM	1
Pyrene	87	ug/kg	13	43	1	9/12/01	M8270	DJM	1
PVOC									
Benzene	< 25	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Ethylbenzene	< 25	ug/kg	7	22	1	8/29/01	GRO95	CJR	1
MTBE	< 25	ug/kg	10	33	1	8/29/01	GRO95	CJR	1
Toluene	< 25	ug/kg	5.7	18	1	8/29/01	GRO95	CJR	1
1,2,4-Trimethylbenzene	140	ug/kg	24	77	1	8/29/01	GRO95	CJR	1
1,3,5-Trimethylbenzene	110	ug/kg	15	48	1	8/29/01	GRO95	CJR	1
Xylene's	< 75	ug/kg	18	60	1	8/29/01	GRO95	CJR	1

Northern Environmental℠

Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

No: 16555

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct.
Mequon, WI 53092
262-241-3133
FAX 262-241-8222

☐ 372 West County Road D
New Brighton, MN 55112
651-635-9100
FAX 651-635-0643

☒ 954 Circle Drive
Green Bay, WI 54304
920-592-8400
FAX 920-592-8444

☐ 330 South 4th Avenue
Park Falls, WI 54552
715-762-1544
FAX 715-762-1844

☐ _____

☐ 1203 Storbeck Drive
Waupun, WI 53963
920-324-8600
FAX 920-324-3023

☐ 3211 Arnold Lane
Northbrook, IL 60062
847-562-8577
FAX 847-562-8552

☐ 112 7th Street NE
Rochester, MN 55906
507-282-3800
FAX 507-282-3100

☐ 31628 Glendale Ave., Ste 100
Livonia, MI 48150
734-422-2624
FAX 734-422-3530

Project No: ES 03-2200-1267 Task No: ~~00~~ 50

Project Location (city): Manitowoc

Project Manager: Lynelle Caine

Sampler (name): Susan Knabe

Sampler (Signature): Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricker

Price Quote:

TURNAROUND TIME REQUIRED

SDI Normal ☒ Rush

RUSH water only

Date Needed 8-20-01

Sample Integrity - To be completed by receiving lab

Seal intact upon receipt ☒ yes ☐ no

Method of shipment Courier

Contents Temperature 4 °C Refrigerator No. 2

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385A	S13	8-14-01	1214	2-40ml, 1-2oz		X		Ice	X			X		X	
B	S10		946			X			X			X		X	
C	S25		1540			X			X			X		X	
D	S8		944			X			X			X			
E	S26		1604			X			X			X			
F	S15		1216			X			X			X			
G	S19		1220			X			X			X			
H	S1		910			X			X			X			
I	S5		943			X			X			X			
J	S24	↓	1527	↓		X		↓	X			X			

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments: Called to confirm jar labelled S24 but in S25 bag was for S25 sample. csm 8/16/01 csm

Relinquished By	Date	Time	Relinquished By	Date	Time	Relinquished By	Date	Time
MB Rogers	8-16-01	0740	Clay Pequette	8/16/01	18:45			
Company: Northern Environmental			Company: US Oil			Company:		
Received By: Clay Pequette	8-16-01	0740	Received By: Katie Asman	8-16-01	18:45	Received By:		
Company: US Oil			Company: US Oil			Company:		

Northern Environmental℠

Hydrologists • Engineers • Geologists

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

No: 16556

Check office originating request

Lab ID# 5034385

☐ 1214 W. Venture Ct.
Mequon, WI 53092
262-241-3133
FAX 262-241-8222

☐ 372 West County Road D
New Brighton, MN 55112
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FAX 651-635-0643

☒ 954 Circle Drive
Green Bay, WI 54304
920-592-8400
FAX 920-592-8444

☐ 330 South 4th Avenue
Park Falls, WI 54552
715-762-1544
FAX 715-762-1844

☐ _____

☐ 1203 Storbeck Drive
Waupun, WI 53963
920-324-8600
FAX 920-324-3023

☐ 3211 Arnold Lane
Northbrook, IL 60062
847-562-8577
FAX 847-562-8552

☐ 112 7th Street NE
Rochester, MN 55906
507-282-3800
FAX 507-282-3100

☐ 31628 Glendale Ave., Ste 100
Livonia, MI 48150
734-422-2624
FAX 734-422-3530

Project No: ESP 03-2200-1267 Task No: ~~100~~ 50

Project Location: (city) Manitowoc

Project Manager: Lynelle Caine

Sampler: (name) Susan Knabe

Sampler: (Signature) Sue Knabe

Sampling Date(s): 8-14-01

Reports to be Sent to: Sue Knabe

Laboratory: U.S. Oil

Wisconsin DNR Certification #: 445027660

Laboratory Contact: Mike Ricter

Price Quote:

TURNAROUND TIME REQUIRED

☒ Normal soil ☒ Rush water only

RUSH

Date Needed _____

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt ☐ Yes ☐ No
Method of shipment Courier
Contents Temperature _____ °C Refrigerator No. _____

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Description Water	Description Soil	Description Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)
5034385K	S14	8-14-01	1215	2-40ml, 1-2oz		X		Ice	X			X			
L	S12	↓	1213	↓		X		↓	X			X			
M	S20*		1405			X			X						
N	S21*		1406			X			X						
O	S22*		1450			X			X						
P	S23*	↓	1451	↓		X		↓	X						
Q	Tanker sample	8-14-01	1648	3-40ml, 1-1L	X			HCl, Ice				X		X	

Packed for Shipping by: Sue Knabe

Shipment Date: 8-16-01

Comments:
* If DRO detected at greater than 100ppm, then run PVOCs.

Relinquished By: MB Thompson	Date: 8-16-01	Relinquished By: Clay Pozuelo	Date: 8/16/01	Relinquished By:	Date:
Company: Northern Environmental	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:
Received By: Clay Pozuelo	Date: 8-16-01	Received By: Mike Ashman	Date: 8/16/01	Received By:	Date:
Company: US Oil	Time: 0740	Company: US Oil	Time: 18:45	Company:	Time:

AUG-20-2001 16:19 PLANT 70 ENG 03-36-280532 920 684 3826 P.01/02 LAYERED

Resubmit 8/20/01

State of Wisconsin
Department of Natural Resource

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Cindy Eqtvedt	From D. Deaton
Co. WDNR	Co. Mirro
Dept.	Phone #
Fax # (920) 492-5913	Fax #

Please Fax Notification (Non-Emergency Only)

Form 4400-225 (7/01) Page 1 of 2

Emergency si ...920-943-0003

Notice: Hazardous substance ... Section NR 706.05(1)(b), Wis. A... telephoning the Department (toll ... or visiting a Department office in person. If you choose to notify the Department by facsimile, 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 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.). ..., s. 292.11, Wis. Stats. ...ed by one of three methods:

Confirmatory laboratory data should be included with this form, if available, to assist the DNR in processing this Hazardous Substance Release Notification.

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

- ☒ 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:

RECEIVED AUG 21 2001 WASTE/RR

TO:WDNR, Attn:	(Area Code) FAX Number
Cynthia Eqtvedt	(920) 492-5859

Name	Firm	Date FAXed to WDNR
Ef Douglas Deaton	Mirro Company	8/13/01
Mailing Address	**(Area Code) Telephone Number**	
P.O. Box 1330 Manitowoc WI 54220	(920) 684-3479 ext 7538	

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

Mirro Company

RECEIVED JAN 30 2002 ERS DIVISION OSHKOSH

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

2401 Mirro Drive, Manitowoc WI 54220

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

Manitowoc

County:	Legal Description:
Manitowoc	NW 1/4, NW 1/4, Section 9, Tn 19N, Range 24 (E) W (circle one)

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

Mirro Company

Contact Person Name (if different)	Telephone Number		
Douglas Deaton	(920) 684-3479 ext 7538		
Mailing Address	**City**	**State**	**ZIP Code**
P.O. Box 1330	Manitowoc	WI	54220

Identify and estimate the quantity of the hazardous substance discharged (check all that apply):

LYNDELLE CAINE
NORTHERN ENV.

State of Wisconsin
Department of Natural Resources

Hazardous Substance Release Fax Notification
(Non-Emergency Only)

- ☐ Unleaded gasoline _____ gallons
- ☐ Leaded gasoline _____ gallons
- ☐ Diesel _____ gallons
- ☐ Perchloroethlyene _____ gallons
- ☒ Fuel oil unknown gallons
- ☐ Waste oil _____ gallons
- ☐ Stoddard solvent _____ gallons
- ☐ Other: (Specify below)

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

- ___ Fire/explosion threat
- ___ Contaminated private wells (# of wells)_____
- ___ Contaminated public wells
- K Groundwater contamination
- K Soil contamination
- ___ Surface water impacts
- ___ Floating product
- ___ Other (Describe below)

Contamination was discovered as a result of:

- ☒ Tank closure assessment ☐ Site assessment
- ☐ Other – Describe below

On what date? 8/13/2001

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

Segregation of possibly contaminated soil from soil that is thought to not be contaminated.

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, Crawford, 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, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood Counties