WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Regional Headquarters
2300 N. Dr. ML King Drive, PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8483
TDD 414-263-8713

November 5, 1998

Mr. Phil Dallisto
Illinois Tool Works
3600 West Lake Avenue
Glenview, IL 60025

Subject: Case Closure for the Heat Treating Area within the ITW/Former Charter Manufacturing Facility, 3704 North Palmer Street, Milwaukee, WI. FID: 241282030, BRRTS: 02-41-000010.

Dear Mr. Dallisto:

This letter acknowledges the receipt of documents requested in our letter dated 28 February 1997, by Linda Michalets, WDNR. This includes documents submitted by:

Environmental Science & Engineering, Inc. (28 April 1997):

1. Boring hole locations in the Heat Treating Area.
2. Boring logs for the sampling conducted in the Heat Treating Area.
3. Borehole Abandonment Forms for borings completed in the Heat Treating Area.

Robert J. Hollis, Attorney at Law (30 June 1998):

1. Certified copy (209025) of the recorded Declaration of Restriction (7518849).
2. Site map, plant layout and soil boring map.

The Department considers the heat treating area case closed under s. NR 726.05 (9), having determined that no further action is necessary at this time. However, the case may be reopened pursuant to s. NR 726.09, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare, or the environment.

The Department appreciates the actions you have taken to investigate and remediate the contamination at this site. If you have any questions or comments, please feel free to contact me at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. Future correspondence should be sent directly to the Remediation and Redevelopment program assistant, Mike Farley, at the above address.

Sincerely

John J. Hnat
Hydrogeologist
Remediation and Redevelopment

c: Michale Hoffman, Environmental Science & Engineering, Inc.
WDNR SED Files

ROBERT J. HOLLIS
ATTORNEY AT LAW
1642 COLONIAL PARKWAY
INVERNESS, ILLINOIS 60067
(847) 991-8125
(847) 991-4082 - FAX

RECEIVED
JUL - 6 1998
DEPT. of NATURAL RESOURCES
SERVICE CENTER / HQ
MILWAUKEE, WI
PC

June 30, 1998

Ms. Margaret Graefe
Wisconsin Department of Natural Resources
Southeast Region Annex
4041 N. Richards Street
Box 12436
Milwaukee, WI 53212-0436

RE: CLOSURE REQUEST FOR THE HEAT TREATING AREA WITHIN THE ITW/FORMER CHARTER MANUFACTURING FACILITY
3704 NORTH PALMER STREET
MILWAUKEE, WISCONSIN
FID # 241282030
BRR/ERP

02-41-000010

Dear Ms. Graefe:

Enclosed you will please find a certified copy of the recently recorded Declaration of Restriction pertaining to the above-referenced matter. Ms. Judy Ohm of the Bureau of Legal Services of the Wisconsin Department of Natural Resources asked that I forward this copy to you.

If you have any questions, please contact me at any time.

Very truly yours,

Robert J. Hollis

RJH/plc
Enclosure

c: Robert A. Hank
Philip S. Dallosto
Judy Ohm

7518849

Document Number

DEED RESTRICTION

7518849 #

RECORD 18.00

In Re: Lots 1 to 9 inclusive, in Block 4, in Webster Avenue Addition, and all of the vacated alley in said Block 4; all of vacated E. Nash Street lying between the east line of N. Palmer Street and the westerly line of the Chicago, Milwaukee, St. Paul & Pacific Railroad Co. right of way; Lots 19 to 22 inclusive, in Block 5, in Webster Avenue Addition; Lots 1 to 12 inclusive, Lots 35 to 38 inclusive, and the vacated alley lying between Lots 1 to 4 inclusive and Lots 35 to 38 inclusive, in Block 6, in Webster Avenue Addition; all of Lot 34, in Block 6, in Webster Avenue Addition, excepting therefrom that portion of Lot 34 to be dedicated to the City of Milwaukee for alley purposes, bounded and described as follows: Commencing at the northwest corner of Lot 34; running thence East along the north line of said Lot 34, 120.00 feet to a point in the west line of an existing 14.00 foot alley; thence South on a line parallel to the east line of N. Palmer Street 30.00 feet to a point in the south line of said Lot 34; thence Northwesterly on a line to a point which is 110.00 feet East of the east line of North Palmer Street and 20.00 feet South of the north line of said Lot 34; thence West on a line parallel to the north line of said Lot 34, 110.00 feet to a point in the east line of N. Palmer Street; thence North along the east line of N. Palmer Street 20.00 feet up to the place of beginning, in the North East 1/4 of Section 8, Township 7 North, Range 22 East, in the City of Milwaukee, Milwaukee County, Wisconsin. Also the vacated part of N. Hubbard Street which lies north of the easterly extension of the south line of Lot 18, Block 6, of said Webster Addition, and south of the southwesterly line of the Chicago, Milwaukee, St. Paul & Pacific Railroad Co. right of way.

REGISTER'S OFFICE } SS
Milwaukee County, WI
RECORDED AT 11 00 AM
APR 17 1998
REEL ____ IMAGE ____
Walter R. Bergl REGISTER OF DEEDS

Recording Area

Name and Return Address

Robert J. Hollis
Attorney At Law
1642 Colonial Parkway
Inverness, IL 60067

DECLARATION OF RESTRICTIONS

Parcel Identification Number:
273- 1751- 113-8

Address of Real Estate: 3704 N. Palmer Street, Milwaukee, WI

STATE OF WISCONSIN)
) ss
COUNTY OF MILWAUKEE)

WHEREAS, ILLINOIS TOOL WORKS INC. is the owner of the above-described property; and

WHEREAS, said property is improved with a concrete block building; and

WHEREAS, lead discharges into the soil have occurred at a specific location within the improvement on the above-described property; and

WHEREAS, lead contaminated soil may remain on this property at the heat treating/plating area located within the improvement on said property; and

(See also site map, plant layout and soil boring map attached hereto as Exhibit A showing soil borings and locations of lead concentrations).

18.00

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further soil remediation activities on the property at the present time.

NOW, THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restriction:

> The property described above may not be used or developed for a residential, commercial, agricultural or other non-industrial use, unless (at the time that the non-industrial use is proposed) an investigation is conducted to determine the degree and extent of lead contamination that remains on the property and remedial action is taken as necessary to meet all applicable non-industrial soil cleanup standards.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction inures to the benefit of and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that the restriction set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restriction contained herein can be extinguished.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restriction, this 20th day of March, 1998.

ILLINOIS TOOL WORKS INC.
ITW Shakeproof Assembly Components/
Mellowes Plant

By: Joseph F. Musuraca

Joseph F. Musuraca

Its: General Manager

Subscribed and sworn to before me this 20th day of March, 1998.

Linda S. Falco

Notary Public, State of

"OFFICIAL SEAL"
LINDA S. FALCO
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 1/19/2001

My Commission Expires

This instrument was prepared by: Philip S. Dallosto, 3600 W. Lake Avenue, Glenview, IL 60025

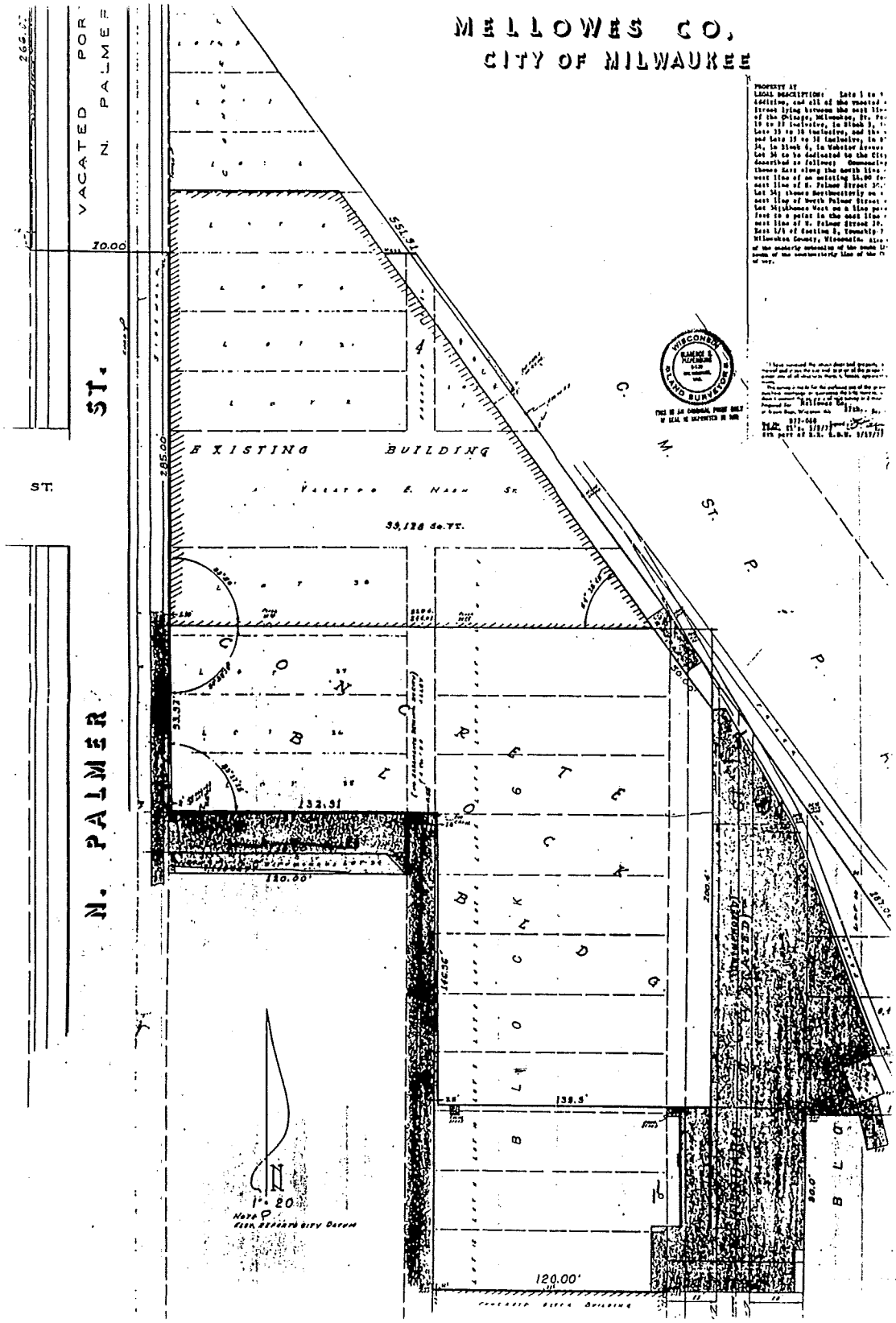
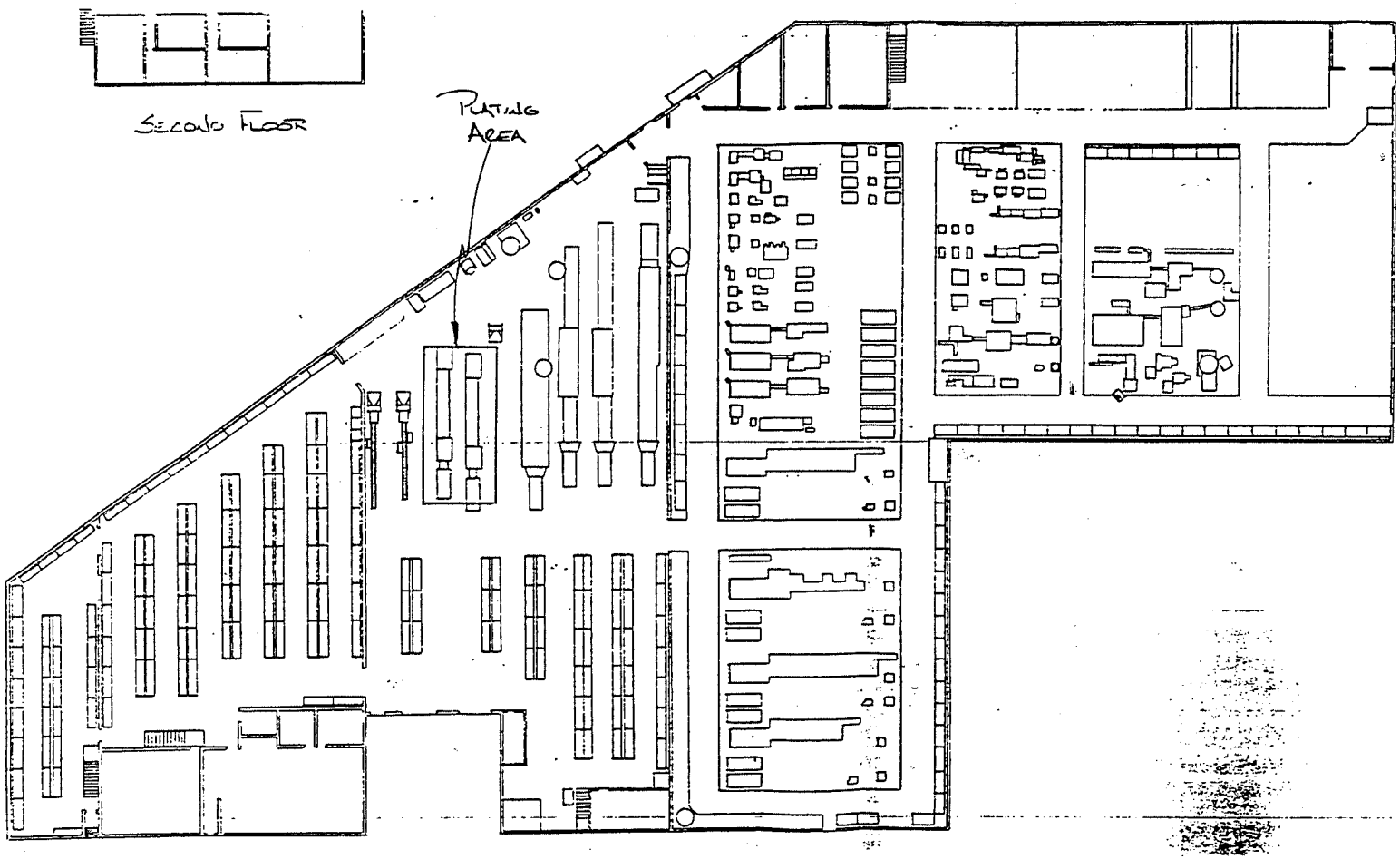
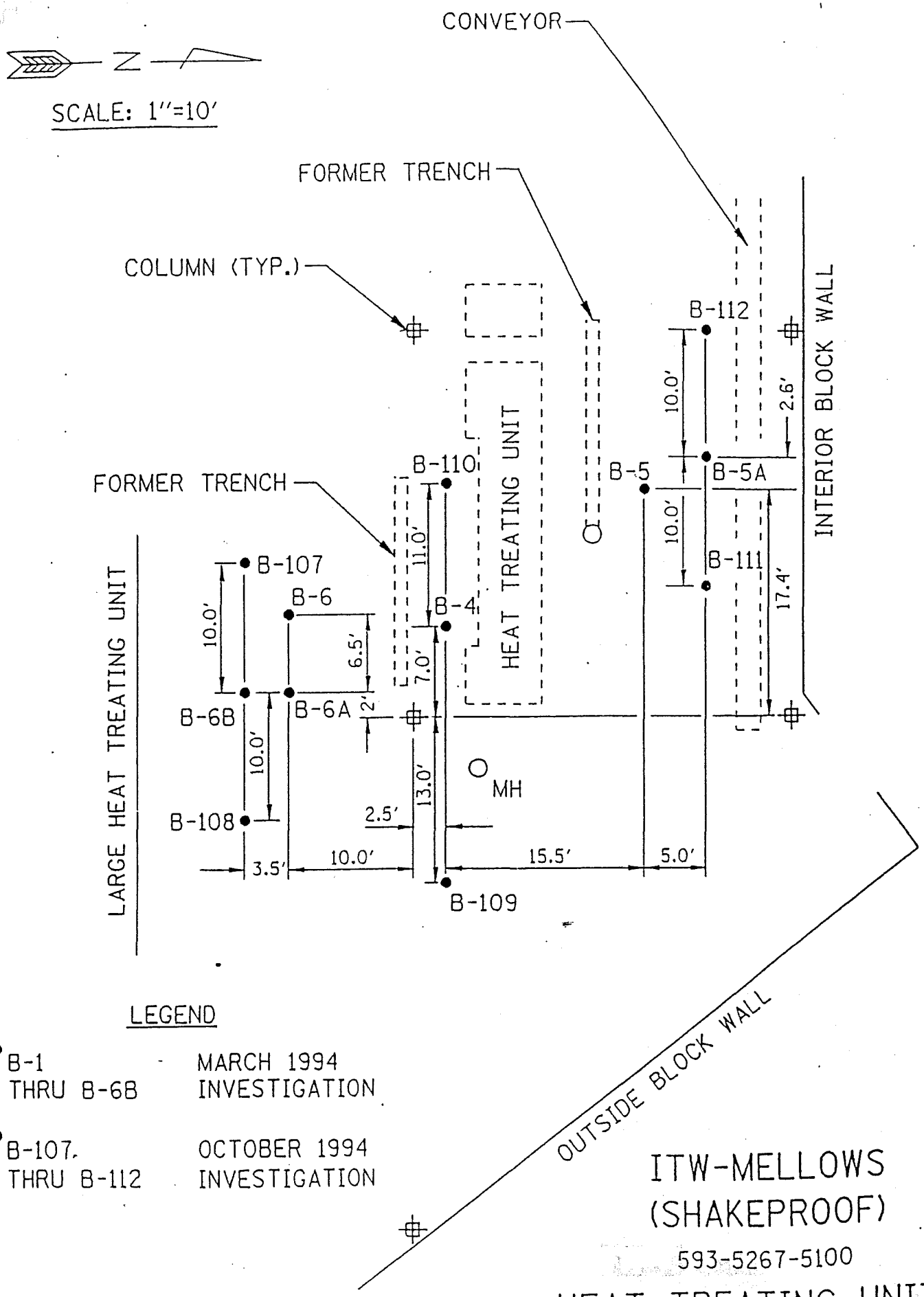

MELLOWES CO.
CITY OF MILWAUKEE
VACATED PORTION N. PALMER
N. PALMER ST.
ST.
EXISTING BUILDING
VACATED E. NASH ST.
35,128 SQ.FT.
C. M. ST. P. & P.
CONCRETE BLOCK BUILDING
132.31
130.00'
138.5'
120.00'
285.00
70.00
40.00
N
1" = 20'
NOTE: PER RECORD CITY DATUM

EXHIBIT "A"


SECOND FLOOR
PLATING AREA



LEGEND

● B-1 THRU B-6B	MARCH 1994 INVESTIGATION
● B-107 THRU B-112	OCTOBER 1994 INVESTIGATION

ITW-MELLOWS
(SHAKEPROOF)

593-5267-5100

HEAT TREATING UNIT

CERTIFICATE NO. 209025

STATE OF WISCONSIN
MILWAUKEE COUNTY SS.

OFFICE OF
REGISTER OF DEEDS

SEAL

I, the undersigned, Register of Deeds of Milwaukee County, hereby certify that this document is a true and correct copy of the original on file or record in this office.

Witness my hand and official seal this

APR 17 1998

Walter R. Barczak

Walter R. Barczak

FID # 241282030
BRR/ERP

Environmental Science & Engineering, Inc.
A CILCORP Company

We're changing our name to
QST ENVIRONMENTAL
Offering expanded products and services

DEPARTMENT OF NATURAL RESOURCES SED
1997 APR 30 AM 10: 24

April 28, 1997

Ms. Linda M. Michalets
State of Wisconsin
Department of Natural Resources
Southeast Region Annex
P.O. Box 12436
4041 N. Richards Street
Milwaukee, WI 53212-0436

RE: Illinois Tool Works Inc. (ITW) Former Charter Manufacturing Facility
3704 N. Palmer Street
Milwaukee, Wisconsin

Dear Ms. Michalets:

In response to your request, enclosed in Attachment 1 are the following:

4/30/97
Map of area forthcoming
Deed Restriction forthcoming

1. A map indicating the boring locations in the Heat Treating Area.
2. Boring logs for the sampling conducted in the Heat Treating Area.
3. Borehole Abandonment Forms for borings completed in the Heat Treating Area.

If you have any questions regarding the enclosed information, please do not hesitate to contact me or Michael Hoffman at 309-692-4422.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

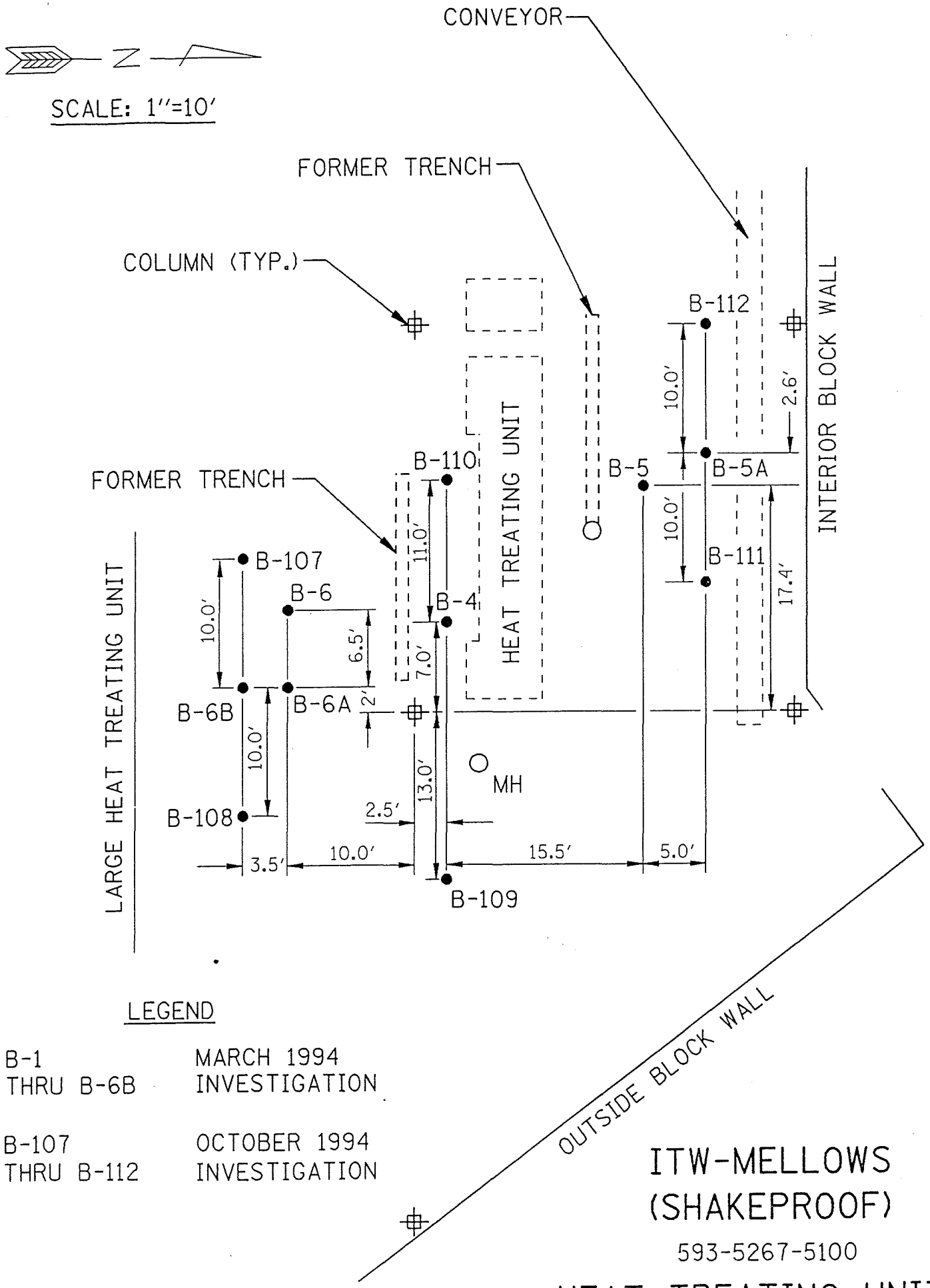
Anthony Wlodarski

Anthony Wlodarski
Senior Hydrogeologist

attachment

8901 N. Industrial Road Peoria, IL 61615-1589 Phone (309) 692-4422 Fax (309) 692-9364

ATTACHMENT 1



LEGEND

● B-1 THRU B-6B	MARCH 1994 INVESTIGATION
● B-107 THRU B-112	OCTOBER 1994 INVESTIGATION

ITW-MELLOWS
(SHAKEPROOF)

593-5267-5100

HEAT TREATING UNIT
BORING LAYOUT

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW SHAKEPROOF		B-4

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
ESE PEORIA - DW HISCHKE	03/04/94	/ /	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
☐ N ☐ E
____ Feet ☐ S ____ Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/~~FID~~	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
HA-1			1	CRUSHED STONE & SAND FILL				>250						
HA-2			2	MEDIUM TO FINE SAND WITH LARGE GRAVEL (FILL	SP			244						
HA-3			3					250						
HA-4			4	GRAYISH BROWN SILTY CLAY WITH SAND AND CINDERS	CL			253						
HA-5			5					118						
HA-6			6	BROWN SILTY CLAY TRACE GRAVEL	CL			14.8						
HA-7			7					17.9						
HA-8			8					18.2						
HA-9			9					0.0						
HA-10			10	TERMINATED @ 10'				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-4

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 03/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 03/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☑ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10' (From groundsurface)
Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) N/A

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
CEMENT/BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work
ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 4/24/97

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of ____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
LTW - SHAKEPROOF	_ _ _ _ _ _ _	B-5

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - PEORIA, D.W. HISCHKE	03/04/94 (MM DD YY)	03/04/94 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	____ Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE	____	MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
				CRUSHED STONE & SAND										
			1	TERMINATED ON CONCRETE AT 0.75'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm _____

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-5

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 03/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 03/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 0.75 (From groundsurface)

Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) N/A

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☐ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7)

Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	

(8) Comments: BORING TERMINATED ON CONCRETE AT 0.75 FT.

(9) Name of Person or Firm Doing Sealing Work
ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of ____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-52

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - PEORIA, D.W. HISCHKE	03/04/94 (MM DD YY)	03/04/94 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	____ Feet MSL	4" inches

Boring Location
State Plane ____ N, ____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
HA-1			1	CRUSHED STONE WITH SAND										
HA-2			2	FINE TO MEDIUM GRAINED SAND WITH GRAVEL	SP									
HA-3			3											
HA4			4	DARK GRAY SILTY CLAY WITH CINDERS, TRACE SAND	CL									
HA-5			5											
HA6			6	GRAYISH BROWN SILTY CLAY	CL									
HA7			7											
HA8			8											
HA-9			9	GRAYISH BROWN SILTY CLAY TRACE SAND & GRAVEL	CL									
HA-10			10	TERMINATED @ 10'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-5 a

WI Unique Well No.: _____

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 03/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 03/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND DUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.0' (From groundsurface)
Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) N/A

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
CEMENT / BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/20/99

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-6

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
ESE PEORIA	03/04/94	03/04/94	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "
___ 1/4 of ___ 1/4 of Section ___, T ___ N, R ___ E/W

Local Grid Location (If applicable)
___ Feet ☐ N ☐ S ___ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample: Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
				CRUSHED STONE										
			1	BORING TERMINATED ON CONCRETE @ 1.0'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm _____

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-6

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 03/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 03/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 1.0 (From groundsurface)

Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) N/A

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	1.0	1/2	

(8) Comments: BORING REFUSAL ON CONCRETE AT 1.0 FT

(9) Name of Person or Firm Doing Sealing Work
ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD.

Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-6

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE PEORIA	03/04/94 (MM DD YY)	03/04/94 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	_____ Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
				CRUSHED STONE										
			1	BORING TERMINATED ON CONCRETE @ 1.0'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm _____

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State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-62

WI Unique Well No.: _ _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 03/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 03/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 1.0 (From groundsurface)

Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) N/A

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials

☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only

☐ Bentonite Pellets
☐ Granular Bentonite
☐ Bentonite - Cement Grout

(7)

Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	1.0	1/2	

(8) Comments: BORING REFUSAL ON CONCRETE @ 1.0 FT.

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKESPROOF	_ _ _ _ _ _ _ _	B-6b

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE PEORIA - D.W. HISCHKE	03/04/94 (MM DD YY)	03/04/94 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			9.0 Feet MSL	_____ Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE	_ _	MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
HA1			1	CRUSHED STONE										
HA2			2	BROWN FINE TO MEDIUM SAND WITH GRAVEL	SP									
HA3			3											
HA4			4	GRAYISH BROWN SILTY CLAY WITH SAND AND CINDERS	CL									
HA5			5	GRAYISH BROWN SILTY CLAY WITH SAND	CL									
HA6			6	BROWN SILTY CLAY, TRACE SAND	CL									
HA7			7	- WITH SAND										
HA8			8	DARK GRAY SLIGHTLY SILTY CLAY, TRACE SAND (TILL)	CL									
HA9			9											
HA10			10	- WITH SAND, TRACE GRAVEL (TILL)	CL									
				TERMINATED @ 10'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm _____

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State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-6b

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 03/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 03/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10' (From groundsurface)
Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) 9.10

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND / BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/29/97

Street or Route: 8901 N. INDUSTRIAL RD.

Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-107

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
E.S.E. - DOUGLAS W. HISCHKE	10/04/94 8:00	10/04/94 11:30	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		N/A	8'-6" CHK Feet MSL	FIN. GR Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
☐ N ☐ E
____ Feet ☐ S ____ Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONC - 2" CRUSHED STONE										
				GRAYISH TAN SAND & GRAVEL				207						
			2	TAN FINE SAND WITH MEDIUM GRAVEL, OCCASIONAL COBBLE POORLY GRADED. DRY				0.0						
				DARK GRAY SILTY CLAY WITH LIMESTONE SCREENINGS. DAMP. SOIL WARM TO TOUCH.				3.1						
			4					0.0						
				BROWN SANDY CLAY, SOME GRAVEL - DAMP				0.0						
			6					0.0						
				SAME - MOIST				0.0						
			8	SAME - SOME GRAY -				0.0						
								0.0						
			10	BORING TERMINATED @ 10.0'				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-107

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 10/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 10/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.0 (From groundsurface)
Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) 8'-6"

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7)

Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND / BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work
ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature]
Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD.
Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-108

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
E.S.E - D.W. HISLIKE	10/04/94 (11.75)	10/04/94 (11.75)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	8'9" @ 2.50 Feet MSL	FIN. FL. Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N Lat ___ ° ___ ' ___ "
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONCRETE, 4" CRUSHED LIMESTONE										
				TAN FINE GRAINED SAND WITH COBBLES - POORLY GRADED DRY				0.0						
			2					0.0						
								0.0						
				DARK BROWN & GRAY SILTY CLAY WITH SAND & GRAVEL DAMP - WOOD FRAGMENT @ 4.0 FT.										
			4					0.0						
								0.0						
				BROWN & BROWNISH GRAY SILTY CLAY W/ SAND & GRAVEL. WET @ 6.0 FT.										
			6					0.0						
				BROWN CLAYEY SAND - WET.				0.0						
			8					0.0						
								0.0						
			10	BORING TERMINATED @ 10.0 FT.				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
D. W. Hislike	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-108

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 10/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 10/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.0 (From groundsurface)
Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) 8'-9"

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7)

Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND / BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD.

Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF	— — — — — — —	B-109

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
E.S.E - D.W. HISCHKE	10/04/94 (MM DD YY) 1430	10/04/94 (MM DD YY) 1530	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
—	—	—	9'-2" @ 1.54 Feet MSL	FIN FL Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE	— —	MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONCRETE										
				TAN FINE GRAINED SAND WITH COBBLES, TRACE GRAVEL, POORLY GRADED - DRY				0.0						
			2					0.0						
								0.0						
			4	DARK GRAY SILTY CLAY WITH GRAVEL & CINDERS, TRACE SAND - DRY				0.0						
								0.0						
			6	BROWN SILTY CLAY WITH SAND MOIST				0.0						
				- SAND INCREASES W/ DEPTH				0.0						
				- VERY MOIST										
			8					0.0						
				- WET										
								0.0						
			10	BORING TERMINATED @ 10.0 FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Douglas W. Hischke	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-109

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 10/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) ___

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.0 (From groundsurface)

Casing Diameter (in.) ___
Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) 9'-2"

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials

☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only

☐ Bentonite Pellets
☐ Granular Bentonite
☑ Bentonite - Cement Grout

(7)

Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND/BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW. SHAKEPROOF		B-110

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
	10/04/94 16:00	10/04/94 17:20	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	Dry @ 0.5 hr. Feet MSL	FIN. EL. Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample: Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONC. 2" CRUSHED STONE										
				TAN FINE GRAINED SAND WITH GRAVEL & COBBLES. POORLY GRADED - DRY				62.1						
			2					11.5						
								8.0						
				DARK GRAY SILTY CLAY WITH CINDERS AND SAND - DAMP										
			4					0.0						
								0.0						
				BROWN & GRAY SILTY CLAY TRACE SAND - MOIST										
			6					0.0						
								0.0						
			8					0.0						
				- WITH SAND				0.0						
			10	BORING TERMINATED @ 10.0 ft				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-110

WI Unique Well No.: _ _ _ _ _

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 10/04/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 10/04/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.0 (From groundsurface) Casing Diameter (in.) ___ Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) DRY

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND / BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work
ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKERPROOF		B-111

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - D.W. HISCHKE	10/05/94 (M M D D Y Y) 7:00	10/05/94 (M M D D Y Y) 9:40	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	DRY Feet MSL	FIN FL Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				9½" CONCRETE										
				TAN FINE GRAINED SAND WITH COBBLES & GRAVEL - POORLY GRADED - DRY				25.9						
			2					28.6						
								20.9						
			4	DARK BROWN SILTY CLAY WITH SAND CINDERS & GRAVEL - DAMP				10.6						
								33.2						
			6	BROWN SILTY CLAY, TRACE SAND - MOIST				29.8						
								3.7						
			8					0.3						
								0.0						
			10	BORING TERMINATED @ 10.0FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	ENVIRONMENTAL SCIENCE & ENGINEERING, INC

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW. SLAKEPROOF		B-112

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - D.W. HISCUKS	10/05/94 9:00	10/05/94 11:20	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	7'-9" @ 0HR Feet MSL	FIN. FL. Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample: Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6½" CONCRETE OVER 6½" CONCRETE				—						
			2	TAN FINE GRAINED SAND WITH GRAVEL & COBBLES - POORLY GRADED - DRY				4.1						
								1.1						
			4	DARK BROWN SILTY CLAY WITH CINDERS, GRAVEL & COBBLES & SAND				0.1						
								0.0						
			6	BROWNISH GRAY SILTY CLAY TRACE SAND, COBBLES				0.0						
								0.0						
			8	BROWN SANDY CLAY TRACE GRAVEL				0.0						
								0.0						
			10	BORING TERMINATED @ 10.0 FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature]
Firm: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-111

WI Unique Well No. ___ ___ ___ ___ ___

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 10/05/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 10/05/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.5 (From groundsurface) Casing Diameter (in.) ___ Casing Depth (ft.) ___

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ___ Feet

(4) Depth to Water (Feet) DRY

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	N/A

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, ~~Sacks~~ Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND/BENTONITE GROUT	0.75	10.5	1/2	5% BENTONITE

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: [signature] Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD. Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-95

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or NR 141, Wis. Adm. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: ITW - SHAKEPROOF

County: MILWAUKEE

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location: ___ ft. ☐ N. ☐ S., ___ ft. ☐ E. ☐ W.

Civil Town Name: MILWAUKEE

Street Address of Well: 3704 N. PALMER ST.

City, Village: MILWAUKEE

(2) FACILITY NAME

Original Well Owner (If Known): ITW - SHAKEPROOF

Present Well Owner:

Street or Route: 3704 N. PALMER ST.

City, State, Zip Code: MILWAUKEE WI

Facility Well No. and/or Name (If Applicable): B-112

WI Unique Well No.: ____

Reason For Abandonment: BORING COMPLETED

Date of Abandonment: 04 10/05/94

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 10/05/94

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☑ Borehole

Construction Report Available? ☐ Yes ☐ No N/A

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (Specify) HAND AUGER

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 10.0 (From groundsurface)
Casing Diameter (in.) ____
Casing Depth (ft.) ____

Lower Drillhole Diameter (in.) 4"

Was Well Annular Space Grouted? N/A ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ____ Feet

(4) Depth to Water (Feet) 7'-9"

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	N/A

If No, Explain ____

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	N/A
Did Sealing Material Rise to Surface?	☑ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☑ No	
If Yes, Was Hole Retopped?	☐ Yes	☑ No	

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☑ Other (Explain) GRAVITY

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

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

(7) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
CONCRETE (SACKRETE)	Surface	0.75	1/2	
PORTLAND/BENTONITE GROUT	0.75	10.0	1/2	5% BENTONITE

(8) Comments: ____

(9) Name of Person or Firm Doing Sealing Work: ESE - PEORIA, D.W. HISCHKE

Signature of Person Doing Work: D. W. Hischke
Date Signed: 04/24/97

Street or Route: 8901 N. INDUSTRIAL RD.
Telephone Number: (309) 692-4422

City, State, Zip Code: PEORIA, IL 61615

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

February 28, 1997

File Ref: FID# 241282030
BRR/ERP
Milwaukee County

Mr. Phil Dallisto
Illinois Tool Works
3600 West Lake Avenue
Glenview, IL 60025

02-41-000010

RE: Closure Request for the Heat Treating Area within the ITW/Former Charter Manufacturing Facility, 3704 North Palmer Street, Milwaukee

Dear Mr. Dallisto:

The Wisconsin Department of Natural Resources (WDNR) Environmental Repair Program reviewed the ITW file to determine whether the case qualified for closure under ch. NR 726, Wisconsin Administrative Code. The heat treating area within the ITW facility was identified as a potential source of adverse environmental impacts due to the former plating operation. Elevated lead concentrations were detected in subsurface borings, with the greatest concentration, at 366 parts per million (ppm), detected within boring B-5A. This concentration exceeds the state soil cleanup standard of 50 ppm for non-industrial sites, but is below the cleanup level of 500 ppm for industrial sites. Therefore, under s. NR 726.05(9), the site is eligible for closure as an industrial-zoned facility.

Based on the investigative documentation provided to the Department, it appears that the lead contamination beneath the heat treating area at the above named site has been investigated to the extent practicable under current site conditions. However, lead contaminated soil remains beneath the building, specifically in the area of boring B-5A. When the conditions listed below are fulfilled and a deed restriction is recorded at the County Register of Deeds office to restrict the site to industrial land use only, the Department will consider the heat treating area case closed, having determined that no further action is necessary at this time. However, the case may be reopened pursuant to s. NR 726.09, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare, or the environment.

To complete the requirements for closure of the heat treating area, the following documents must be submitted to this office:

1. Please submit a site map that clearly identifies the heat treating area in the context of the entire facility.

2. Please submit borehole abandonment logs for the investigations to date within the next 60 days.

3. Please submit a certified copy of the deed restriction, per s. NR 726.05(9).

The WDNR appreciates the actions you have taken to investigate the contamination at this site. If you have any questions or comments, please feel free to contact me at the above address or at (414) 229-0873.

Sincerely,

Linda M. Michalets

Linda M. Michalets
Hydrogeologist

cc: Mr. Michael J. Hoffman, Environmental Science & Engineering, Inc.
SER Case File

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

January 21, 1997

File Ref: FID# 241282030
ERR/ERP

BRRTS#02-41-000958

Mr. Tom McElligott
Quarles and Brady
411 East Wisconsin Avenue
Milwaukee, WI 53202-4497

RE: Closure Request for Quench Oil Releases at the Charter Manufacturing Facility, 3704 North Palmer Street, Milwaukee

Dear Mr. McElligott:

The Wisconsin Department of Natural Resources (WDNR) was informed that the required investigation and remediation of soil contamination were accomplished at the above-named site. The Environmental Repair Program reviewed the file to determine whether the case qualified for closure under ch. NR 726, Wisconsin Administrative Code.

Based on the investigative and remedial documentation provided to the Department, it appears that the soil contamination from quench oil releases at the referenced site was remediated according to the requirements of chs. NR 700 to 724, Wis. Adm. Code. Therefore, the Department considers the case "closed," having determined that no further action is necessary at the site at this time. However, the case may be reopened pursuant to NR 726.09, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare, or the environment.

Land Recycling Program Information
Please be aware that this letter does not represent Department "certification" under s. 292 [formerly s. 144.765(2)(a)3], Stats., as created by the 1993 Wisconsin Act 453. Persons who meet the definition of "purchaser" in s. 292 must receive Department pre-approval prior to conducting a site investigation in order to be eligible for the liability exemption under s. 292, Stats.

The WDNR appreciates the actions you have taken to investigate and remediate the contamination at this site. If you have any questions or comments, please feel free to contact me at the above address or at (414) 229-0873.

Sincerely,

Linda M. Michalets

Linda M. Michalets
Hydrogeologist

cc: Mr. Mark Briggs, RMT, Inc.
SER Case File

02-41-000958

DEPARTMENT OF
NATURAL RESOURCES
SED

1997 JAN 21 AM 9:21

January 15, 1997

Ms. Linda Michalets
Wisconsin Department of Natural Resources
4041 N. Richards Street
P.O. Box 12436
Milwaukee, WI 53212

RE: Remedial Action Report and Closure Request for the Charter Manufacturing/ITW Facility in Milwaukee, Wisconsin (WDNR File # 241282030 EER/ERP)

Dear Ms. Michalets:

As you recall, RMT, Inc. conducted a site investigation at the Charter Manufacturing/Illinois Tool Works facility located at 3704 N. Palmer Street in Milwaukee to determine the extent of soil impacts from a historical quench oil release. Results of the investigation were summarized in the Remedial Action Work Plan submitted to the Wisconsin Department of Natural Resources in June 1996.

RMT's investigation results were consistent with the soil results obtained by E&K Environmental in 1991 during remediation of shallow soils impacted by the quench oil release. RMT concluded that a small volume of soil (approximately 40 cubic yards) containing diesel range organics (DRO) at concentrations above NR 720.09 cleanup standards remained on the site and that excavation and off-site biotreatment was the most cost effective remedial option.

In October, 1996, RMT and North Shore Environmental Construction Company excavated approximately 57 cubic yards (85 tons) of quench oil impacted soil from the area identified during the site investigation. Soils were loaded directly onto trucks and transported to Waste Management's Orchard Ridge Landfill for bioremediation. Visual observations and field screening results collected during soil excavation indicated that the quench oil contamination extended to a depth of approximately 5 feet below ground surface. RMT instructed North Shore Environmental Construction Company to over-excavate to a depth of 7 feet below ground surface to verify that the vertical extent of contamination was removed from the native clay soils. Water was not encountered in the excavation indicating that the water table was below the quench oil impacted soils.

Verification soil samples collected from the sidewalls and bottom of the excavation indicate that diesel range organic (DRO) concentrations are below the NR 720.09 cleanup standard of 250 mg/kg for clay-type soils. In addition, all polynuclear aromatic hydrocarbons (PAHs) measured in soil samples from the excavation were below their respective estimated quantitation limits (EQL).

Based on the results of the remedial activities conducted at the site, RMT is requesting case closure per NR 726.07. RMT believes that closure is now warranted since:

- DRO was the only contaminant of concern; the levels are now below the NR 720 cleanup standard
- Any residual DRO will not adversely affect surface water or groundwater due to the impermeable native geology.

RMT, INC. — MILWAUKEE
150 N. PATRICK BLVD.
BROOKFIELD, WI 53045
414/879-1212 414/879-1220 FAX

Linda, your timely review of the attached remedial action report and your written response to our request for closure is greatly appreciated. If you have any questions or need clarification, please call either Tom McElligott with Quarles & Brady at 277-5000 or myself at 879-1212.

Sincerely,

Mark Briggs
Project Manager

tjs

cc: Tom McElligott, Quarles & Brady
John Couper, Charter Manufacturing
Phil Dallosto, Illinois Tool Work, Inc.

02-41-000958

DEPARTMENT OF
NATURAL RESOURCES
SED

1997 JAN 21 AM 9: 22

SOIL REMEDIATION DOCUMENTATION REPORT FOR THE FACILITY AT 3704 NORTH PALMER STREET

PREPARED FOR
CHARTER MANUFACTURING COMPANY, INC.
MEQUON, WISCONSIN

PREPARED BY
RMT, INC.
BROOKFIELD, WISCONSIN

JANUARY 1997

Tim Petrick
Project Scientist

Mark Briggs
Project Manager

RMT, INC. — MILWAUKEE
150 N. PATRICK BLVD.
BROOKFIELD, WI 53045
414/879-1212 414/879-1220 FAX

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   1.2 Purpose and Scope 3

2. **FINDINGS AND CONCLUSIONS** 4

3. **RECOMMENDATIONS** 5

4. **DISCUSSION OF SITE ACTIVITIES** 6
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   4.2 Excavation of Petroleum-Impacted Soils 6
   4.3 Collection of Verification Soil Samples 8

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Appendix B Laboratory Data
Appendix C Chain of Custody Documentation
Appendix D Waste Manifests
Appendix E Calculated Soil Cleanup Goals

Section 1
INTRODUCTION

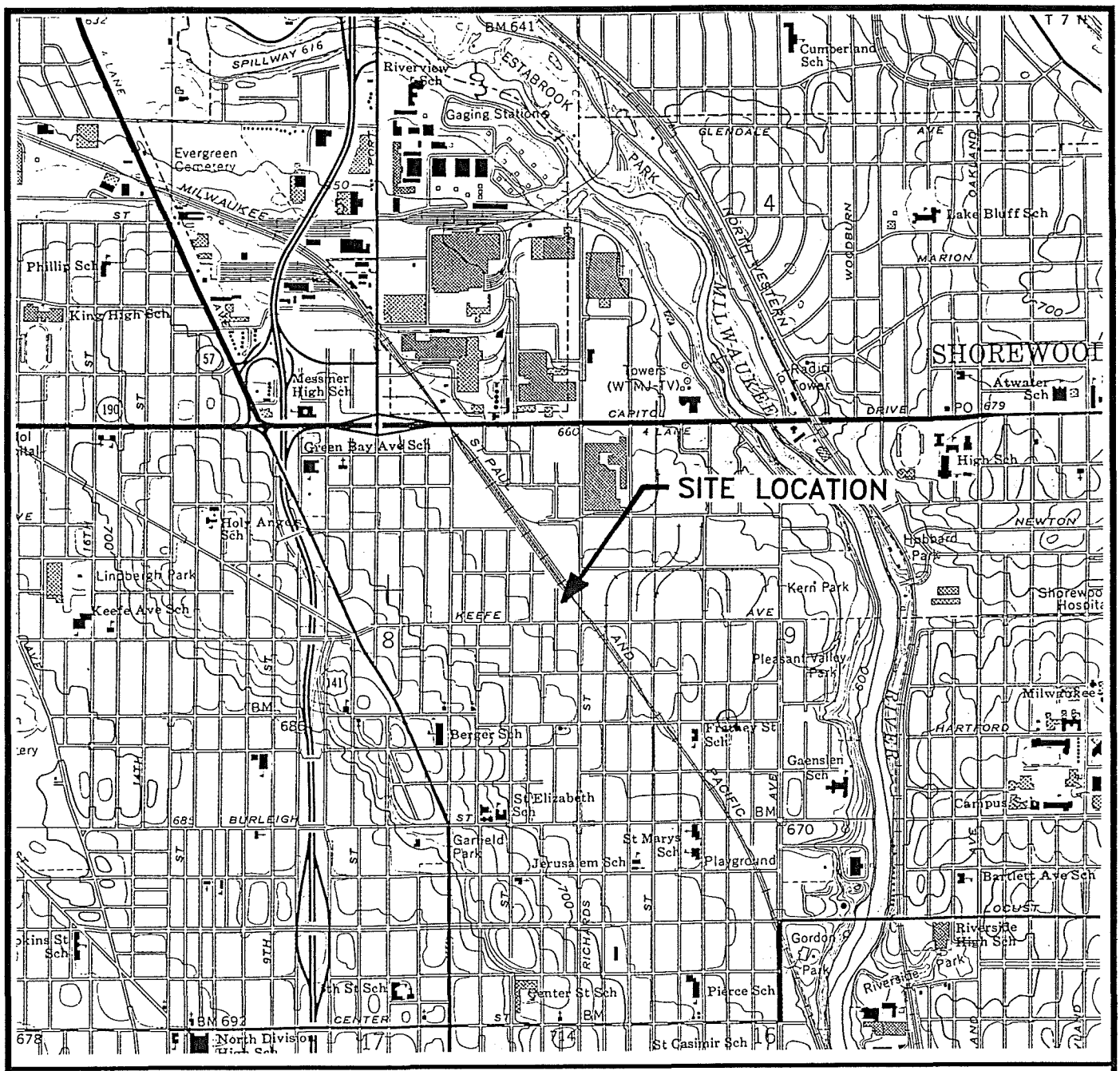
1.1 Background

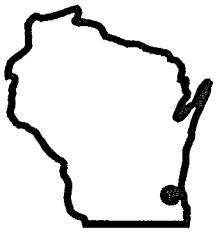
Charter Manufacturing Company, Inc. (Charter Manufacturing) formally owned a facility at 3704 N. Palmer Street in Milwaukee, Wisconsin, (Figure 1). The site was sold in 1991 and is presently owned and operated by Illinois Tool Works. Environmental site assessment activities conducted by E&K Hazardous Waste Services, Inc. (E&K) on behalf of Charter Manufacturing in 1991 identified an area of shallow soil impacted by petroleum hydrocarbons. Impacted soils ranged in depth from 6 inches to 4 feet with associated total petroleum hydrocarbon (TPH) concentrations ranging from 154 mg/kg to 3,920 mg/kg. The contamination sources were two aboveground quench oil tanks on a nearby concrete pad.

Remediation of shallow soils impacted by quench oil was conducted in late 1991 by E&K. E&K excavated approximately 66 cubic yards of contaminated soils to a depth of 4 feet. Data collected by E&K during excavation indicated that total petroleum hydrocarbons (TPH-IR) increased from 21 mg/kg at a depth of 4 feet to 5,000 mg/kg at a depth of 5 feet within the excavation. After reviewing E&K's data, Ms. Pam Mylotta at the Wisconsin Department of Natural Resources (WDNR) Southeast District requested that the property owners undertake further site investigation activities to determine the extent and degree of contamination in the former excavated area.

In December 1994, RMT, Inc. (RMT), prepared a workplan and submitted it to the WDNR to determine the extent of petroleum impacted soils near the former excavation area. In October 1995, RMT installed four hand-auger borings to assess the extent of quench oil impacts to soil and the depth to groundwater relative to the impacted soils. The investigation results determined that impacted soils are localized in a small area along the east side of the property. These results are consistent with the previous verification sampling results from E&K's remedial activities in 1991.

In June 1996, a workplan for remedial activities at the site was prepared and submitted to the WDNR for approval. Based on the investigation results, RMT recommended that Charter Manufacturing excavate the unsaturated petroleum-impacted soil and transport the soil off site for biopile treatment.





STATE LOCATION

0 2000 4000

SCALE: 1"=2000'

N

SITE LOCATOR MAP

CHARTER MANUFACTURING
MILWAUKEE, WISCONSIN

SOURCE: BASE MAP FROM MILWAUKEE, WI.
7.5 MINUTE USGS QUADRANGLE.

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	NOVEMBER 1996
PROJ. #	4119.02
FILE #	41190101

FIGURE 1

This report summarizes the results of the remedial activities conducted to address the quench oil-impacted soils.

1.2 Purpose and Scope

The objective of the remedial action was to overexcavate the quench oil-impacted soil from the site and transport the soil to an off-site location for biotreatment. The scope of the remedial action included the following tasks:

- Coordinated and scheduled the excavation and disposal of the quench oil-impacted soil with Charter Manufacturing, Illinois Tool Works (the present property owner), North Shore Environmental Construction, Inc. (North Shore) (the remedial contractor), and Waste Management's Orchard Ridge biopile.
- Observed and documented the excavation of quench oil-impacted soil.
- Collected confirmation soil samples from the sidewalls and the base of the excavation to document that the quench oil-impacted soil had been removed.
- Prepared a remedial action documentation report that summarizes the removal and the treatment/disposal of the quench oil-impacted soil.

Section 2

FINDINGS AND CONCLUSIONS

The findings and conclusions from the excavation and biopile treatment/disposal are discussed below:

- Approximately 85 tons of quench oil-impacted soil were excavated and disposed of at Waste Management's Orchard Ridge biopile.
- The excavation was approximately 14 feet long by 10 feet wide to an average depth of 7 feet below ground surface.
- Groundwater was not encountered during excavation and, therefore, removal of water from the excavation was not required. Visual, olfactory evidence, and laboratory data indicate that all quench oil contamination was above the water table.
- The results of the field-screening and subsequent soil laboratory analysis indicated that unsaturated quench oil-impacted soil has been effectively remediated. None of the confirmatory samples collected from the bottom and sidewalls of the excavation contained petroleum constituents at levels above the NR 720.09 soil cleanup levels for clay-type soils.
- The small amount of diesel range organics (DRO)-impacted soils remaining on the site are not expected to impact groundwater quality. This DRO-impacted soil is above the water, and the native geology consists of tight clays which impede the migration of contaminates. In addition, because quench oils do not contain regulated parameters such as petroleum volatile organic compounds (PVOCs) found in gasoline and diesel fuel, exceedances of NR 140 groundwater enforcement standards would not be expected.

Section 3
RECOMMENDATIONS

Based on field observations and the laboratory analytical results from the overexcavation activities, RMT recommends that no further investigation or remedial activities be conducted at the site and that the WDNR grant closure.

Section 4
DISCUSSION OF SITE ACTIVITIES

4.1 Overview of Site Activities

Prior to the start of excavation activities, a grid pattern was laid out on the subject property in the proposed excavation area to document the initial excavation limits. Photographic documentation of on-site activities are shown in Appendix A.

RMT's Field Personnel was:

Tim Petrick, Project Scientist
RMT, Inc.
150 N. Patrick Blvd.
Brookfield, Wisconsin 53045
(414) 879-1212

The remediation contractor was:

Ken Nelson, Project Manager
North Shore Environmental Construction, Inc.
N117 W18493 Fulton Drive
Germantown, Wisconsin 53022
(414) 255-4468

4.2 Excavation of Petroleum-Impacted Soils

On October 23, 1996, North Shore began excavation activities in the area identified by RMT as having DRO concentrations above NR 720 cleanup standards. The petroleum-impacted soil was excavated based on field-screening results, visual and olfactory evidence of petroleum impacts, and historical soil boring data. The excavated soil was immediately loaded into trucks and transported to Waste Management's Orchard Ridge Landfill in Menomonee Falls, Wisconsin, for biotreatment.

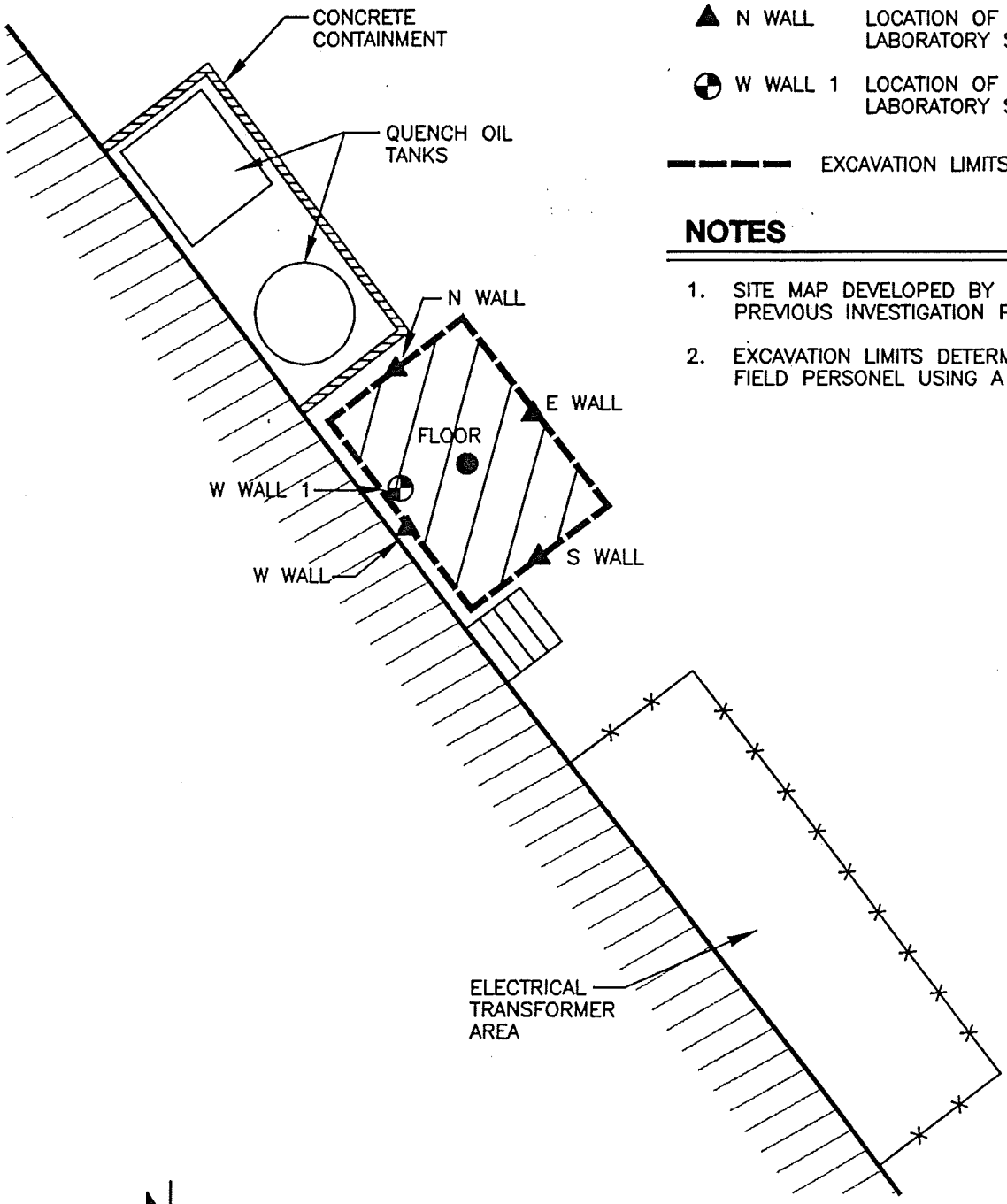
Field-screening results along with visual and olfactory evidence indicated that petroleum contamination was within the initial area outlined in the June 1996 workplan. Photographic documentation in Appendix A shows the dark, petroleum-stained soils. The final excavation limits are shown in Figure 2. The final excavation was approximately 14 feet long and 10 feet wide with an average depth of 7 feet. Approximately 85 tons of soil were excavated and transported to

LEGEND

● FLOOR	LOCATION OF BOTTOM LABORATORY SOIL SAMPLE
▲ N WALL	LOCATION OF SIDEWALL LABORATORY SOIL SAMPLE
⊕ W WALL 1	LOCATION OF GEOPBOBE LABORATORY SOIL SAMPLE
▬▬▬	EXCAVATION LIMITS

NOTES

1. SITE MAP DEVELOPED BY RMT DURING PREVIOUS INVESTIGATION PHASES.
2. EXCAVATION LIMITS DETERMINED BY RMT FIELD PERSONEL USING A TAPE MEASURE.



APPROX. SCALE: 1"=10'

LABORATORY SOIL SAMPLE SAMPLE LOCATIONS

CHARTER MANUFACTURING MILWAUKEE, WISCONSIN

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	NOVEMBER 1996
PROJ. #	4119.02
FILE #	41190202

FIGURE 2

Waste Management's Orchard Ridge Landfill in Menomonee Falls, Wisconsin, for biotreatment. Copies of the manifests for the biotreatment of the petroleum-impacted soils are presented in Appendix D.

4.3 Collection of Verification Soil Samples

A total of 4 sidewall soil samples and 1 floor soil sample was collected from the excavation to document the effectiveness of the remedial actions and to report any residual quench oil-impacted soil left in place. One soil sample (W Wall-1) was collected for laboratory analysis using a geoprobe sampler in order to sample close to the building foundation. The locations of sidewall samples, the geoprobe sample, and the floor sample are referenced in Figure 2. The soil samples were analyzed for DRO and polyaromatic hydrocarbons (PAHs). The results of the laboratory analyses are summarized in Table 1. Laboratory data is provided in Appendix B. Chain of custody documentation is provided in Appendix C. DRO values are reported as TPH-screens in the laboratory data sheets since the samples delivered to the laboratory contained greater than 35 grams of soils. According to the laboratory, the DRO and TPH-screens are equivalent methods.

The results of the laboratory analyses indicate that DRO concentrations are below the NR 720.09 cleanup standard of 250 mg/kg for complex sites. The laboratory results also show that PAH concentrations are below both the proposed NR 720.11 cleanup goals. Proposed cleanup goals for PAHs are attached in Appendix F.

Groundwater was not encountered in the bottom of the excavation during soil removal indicating the water table is below the former quench oil impacts. Because DRO and PAH concentrations measured in soils from the bottom of the excavation (approximately 7 feet) are below the cleanup values established for protection of groundwater, RMT believes that groundwater is not an issue at this site. Based on the laboratory data, the depth of contamination in relation to the groundwater, table, and the site geology, RMT believes that no additional investigation or remediation is necessary to address the quench oil issues at the site.

TABLE 1
RMER CHARTER MANUFACTURING FACILTY IN MILWAUKEE
COMFIRMATION SAMPLE RESULTS
(all units in mg/kg, unless otherwise noted)

Benzo(b)-floranthene	Benzo(ghi) perylene	Benzo(k) fluoranthene	Chrysene	Dibenz (ah) anthracene	Fluoranthene	Fluorene	Indeno (123-cd) pyrene	1-methyl naphthalene	2-methyl naphthalene	Naphthalene	Phenanthrene	Pyrene
<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
3.90	39	39	390	0.39	16,000	650	3.90	9.90	9.90	2.50	2.70	12,000

APPENDIX A

PHOTOGRAPHIC DOCUMENTATION

Photograph 1: Quench oil imported area prior to excavation.

Photograph 2: Photograph of petroleum stained soils during excavation.

Photograph 3: Photograph of south and east excavation walls.

Photograph 4: Photograph of north excavation wall. Concrete containment around the quench oil tanks shown at the top of the photograph.

Photograph 5: Photograph showing the west wall of the excavation.

Photograph 6: Photograph showing the northeast corner of the excavation and the excavation floor.

Photograph 7: Photograph of backfilled and compacted excavation area.

APPENDIX B
LABORATORY DATA

Madison Office & Laboratory
802 Deming Way
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EN CHEM INC.

Corporate Office & Laboratory
1795 Industrial Drive
Green Bay, WI 54302
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- Analytical Report -

Project Name : CHARTER MANUFACTURING

Project Number : 4119.01

WI DNR LAB ID : 113138520

Submitter # : 1000.78

Submitter : RMT - MILWAUKEE

Report Date : 11/8/96

Sample No.	Station ID	Collection Date	Sample No.	Station ID	Collection Date
962715-01	N WALL	10/23/96			
962715-02	S WALL	10/23/96			
962715-03	E WALL	10/23/96			
962715-04	W WALL	10/23/96			
962715-05	FLOOR	10/23/96			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this final report is authorized by Laboratory management, as is verified by the following signature.

Gregory J. Graf
Approval Signature

11/11/96
Date

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- Analytical Report -

Project Name : CHARTER MANUFACTURING
Project Number : 4119.01
Lab Sample Number : 962715-01
Station ID : N WALL
WI DNR LAB ID : 113138520

Submitter # : 1000.78
Submitter : RMT - MILWAUKEE
Report Date : 11/8/96
Collection Date : 10/23/96
Matrix Type : SOIL

Inorganic Results

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	88.4		%		10/28/96	EPA 160.3	EPA 160.3

Semi-Volatile Organic Results

PAH - WI LUST LIST - SEMIVOLATILES Prep Method: SW846 3550 Extraction Date: 10/29/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 380	380	ug/kg		11/4/96	SW846 8270
2-Methylnaphthalene	< 380	380	ug/kg		11/4/96	SW846 8270
Acenaphthene	< 380	380	ug/kg		11/4/96	SW846 8270
Acenaphthylene	< 380	380	ug/kg		11/4/96	SW846 8270
Anthracene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(a)anthracene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(a)pyrene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(b)fluoranthene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(g,h,i)perylene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(k)fluoranthene	< 380	380	ug/kg		11/4/96	SW846 8270
Chrysene	< 380	380	ug/kg		11/4/96	SW846 8270
Dibenzo(a,h)anthracene	< 380	380	ug/kg		11/4/96	SW846 8270
Fluoranthene	< 380	380	ug/kg		11/4/96	SW846 8270
Fluorene	< 380	380	ug/kg		11/4/96	SW846 8270
Indeno(1,2,3-cd)pyrene	< 380	380	ug/kg		11/4/96	SW846 8270
Naphthalene	< 380	380	ug/kg		11/4/96	SW846 8270
Phenanthrene	< 380	380	ug/kg		11/4/96	SW846 8270
Pyrene	< 380	380	ug/kg		11/4/96	SW846 8270

TPH - SCREEN Prep Method: SCREEN Extraction Date: 10/28/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
TPH Screen	3.0	1.8	mg/kg		10/30/96	SCREEN

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : CHARTER MANUFACTURING
Project Number : 4119.01
Lab Sample Number : 962715-02
Station ID : S WALL
WI DNR LAB ID : 113138520

Submitter # : 1000.78
Submitter : RMT - MILWAUKEE
Report Date : 11/8/96
Collection Date : 10/23/96
Matrix Type : SOIL

Inorganic Results

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	78.6		%		10/28/96	EPA 160.3	EPA 160.3

Semi-Volatile Organic Results

PAH - WI LUST LIST - SEMIVOLATILES Prep Method: SW846 3550 Extraction Date: 10/29/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 420	420	ug/kg		11/4/96	SW846 8270
2-Methylnaphthalene	< 420	420	ug/kg		11/4/96	SW846 8270
Acenaphthene	< 420	420	ug/kg		11/4/96	SW846 8270
Acenaphthylene	< 420	420	ug/kg		11/4/96	SW846 8270
Anthracene	< 420	420	ug/kg		11/4/96	SW846 8270
Benzo(a)anthracene	< 420	420	ug/kg		11/4/96	SW846 8270
Benzo(a)pyrene	< 420	420	ug/kg		11/4/96	SW846 8270
Benzo(b)fluoranthene	< 420	420	ug/kg		11/4/96	SW846 8270
Benzo(g,h,i)perylene	< 420	420	ug/kg		11/4/96	SW846 8270
Benzo(k)fluoranthene	< 420	420	ug/kg		11/4/96	SW846 8270
Chrysene	< 420	420	ug/kg		11/4/96	SW846 8270
Dibenzo(a,h)anthracene	< 420	420	ug/kg		11/4/96	SW846 8270
Fluoranthene	< 420	420	ug/kg		11/4/96	SW846 8270
Fluorene	< 420	420	ug/kg		11/4/96	SW846 8270
Indeno(1,2,3-cd)pyrene	< 420	420	ug/kg		11/4/96	SW846 8270
Naphthalene	< 420	420	ug/kg		11/4/96	SW846 8270
Phenanthrene	< 420	420	ug/kg		11/4/96	SW846 8270
Pyrene	< 420	420	ug/kg		11/4/96	SW846 8270

TPH - SCREEN Prep Method: SCREEN Extraction Date: 10/28/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
TPH Screen	160	19	mg/kg		11/1/96	SCREEN

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : CHARTER MANUFACTURING
Project Number : 4119.01
Lab Sample Number : 962715-03
Station ID : E WALL
WI DNR LAB ID : 113138520

Submitter # : 1000.78
Submitter : RMT - MILWAUKEE
Report Date : 11/8/96
Collection Date : 10/23/96
Matrix Type : SOIL

Inorganic Results

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	87.1		%		10/28/96	EPA 160.3	EPA 160.3

Semi-Volatile Organic Results

PAH - WI LUST LIST - SEMIVOLATILES Prep Method: SW846 3550 Extraction Date: 10/29/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 380	380	ug/kg		11/4/96	SW846 8270
2-Methylnaphthalene	< 380	380	ug/kg		11/4/96	SW846 8270
Acenaphthene	< 380	380	ug/kg		11/4/96	SW846 8270
Acenaphthylene	< 380	380	ug/kg		11/4/96	SW846 8270
Anthracene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(a)anthracene	98	380	ug/kg	Q	11/4/96	SW846 8270
Benzo(a)pyrene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(b)fluoranthene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(g,h,i)perylene	< 380	380	ug/kg		11/4/96	SW846 8270
Benzo(k)fluoranthene	< 380	380	ug/kg		11/4/96	SW846 8270
Chrysene	140	380	ug/kg	Q	11/4/96	SW846 8270
Dibenzo(a,h)anthracene	< 380	380	ug/kg		11/4/96	SW846 8270
Fluoranthene	190	380	ug/kg	Q	11/4/96	SW846 8270
Fluorene	< 380	380	ug/kg		11/4/96	SW846 8270
Indeno(1,2,3-cd)pyrene	< 380	380	ug/kg		11/4/96	SW846 8270
Naphthalene	< 380	380	ug/kg		11/4/96	SW846 8270
Phenanthrene	120	380	ug/kg	Q	11/4/96	SW846 8270
Pyrene	150	380	ug/kg	Q	11/4/96	SW846 8270

TPH - SCREEN Prep Method: SCREEN Extraction Date: 10/28/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
TPH Screen	< 1.8	1.8	mg/kg		10/31/96	SCREEN

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : CHARTER MANUFACTURING
Project Number : 4119.01
Lab Sample Number : 962715-04
Station ID : W WALL
WI DNR LAB ID : 113138520

Submitter # : 1000.78
Submitter : RMT - MILWAUKEE
Report Date : 11/8/96
Collection Date : 10/23/96
Matrix Type : SOIL

Inorganic Results

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	89.2		%		10/28/96	EPA 160.3	EPA 160.3

Semi-Volatile Organic Results

PAH - WI LUST LIST - SEMIVOLATILES Prep Method: SW846 3550 Extraction Date: 10/29/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 370	370	ug/kg		11/4/96	SW846 8270
2-Methylnaphthalene	< 370	370	ug/kg		11/4/96	SW846 8270
Acenaphthene	< 370	370	ug/kg		11/4/96	SW846 8270
Acenaphthylene	< 370	370	ug/kg		11/4/96	SW846 8270
Anthracene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(a)anthracene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(a)pyrene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(b)fluoranthene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(g,h,i)perylene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(k)fluoranthene	< 370	370	ug/kg		11/4/96	SW846 8270
Chrysene	< 370	370	ug/kg		11/4/96	SW846 8270
Dibenzo(a,h)anthracene	< 370	370	ug/kg		11/4/96	SW846 8270
Fluoranthene	< 370	370	ug/kg		11/4/96	SW846 8270
Fluorene	< 370	370	ug/kg		11/4/96	SW846 8270
Indeno(1,2,3-cd)pyrene	< 370	370	ug/kg		11/4/96	SW846 8270
Naphthalene	< 370	370	ug/kg		11/4/96	SW846 8270
Phenanthrene	< 370	370	ug/kg		11/4/96	SW846 8270
Pyrene	< 370	370	ug/kg		11/4/96	SW846 8270

TPH - SCREEN Prep Method: SCREEN Extraction Date: 10/28/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
TPH Screen	190	17	mg/kg		11/1/96	SCREEN

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : CHARTER MANUFACTURING
Project Number : 4119.01
Lab Sample Number : 962715-05
Station ID : FLOOR
WI DNR LAB ID : 113138520

Submitter # : 1000.78
Submitter : RMT - MILWAUKEE
Report Date : 11/8/96
Collection Date : 10/23/96
Matrix Type : SOIL

Inorganic Results

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	89.7		%		10/28/96	EPA 160.3	EPA 160.3

Semi-Volatile Organic Results

PAH - WI LUST LIST - SEMIVOLATILES Prep Method: SW846 3550 Extraction Date: 10/29/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 370	370	ug/kg		11/4/96	SW846 8270
2-Methylnaphthalene	< 370	370	ug/kg		11/4/96	SW846 8270
Acenaphthene	< 370	370	ug/kg		11/4/96	SW846 8270
Acenaphthylene	< 370	370	ug/kg		11/4/96	SW846 8270
Anthracene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(a)anthracene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(a)pyrene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(b)fluoranthene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(g,h,i)perylene	< 370	370	ug/kg		11/4/96	SW846 8270
Benzo(k)fluoranthene	< 370	370	ug/kg		11/4/96	SW846 8270
Chrysene	< 370	370	ug/kg		11/4/96	SW846 8270
Dibenzo(a,h)anthracene	< 370	370	ug/kg		11/4/96	SW846 8270
Fluoranthene	< 370	370	ug/kg		11/4/96	SW846 8270
Fluorene	< 370	370	ug/kg		11/4/96	SW846 8270
Indeno(1,2,3-cd)pyrene	< 370	370	ug/kg		11/4/96	SW846 8270
Naphthalene	< 370	370	ug/kg		11/4/96	SW846 8270
Phenanthrene	< 370	370	ug/kg		11/4/96	SW846 8270
Pyrene	< 370	370	ug/kg		11/4/96	SW846 8270

TPH - SCREEN Prep Method: SCREEN Extraction Date: 10/28/96

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
TPH Screen	2.8	2.1	mg/kg		10/31/96	SCREEN

All soil results are reported on a dry weight basis unless otherwise noted.

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FAX: 414-469-8827

Lab Certification No. 405132750
Location : CHARTER MFG / #4119.01
Your Sample ID:
Sample Desc. : W WALL 1
Sample Matrix : SOIL Date Collected: 10/24/1996
En Chem Proj# : 9610618 Date Received : 10/25/1996
En Chem Lab # : 203141 Date Reported : 11/01/1996

Report to: RMT,INC
150 N PATRICK ROAD
BROOKFIELD, WI 53045

Bill to: RMT, INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyze By
TOTSOLID	Total Solids	89	percent				SM2540G	10/29/1996	PHS
PAH-S	Acenaphthene	ND	mg/kg	0.28	SW846 3550	10/29/1996	SW846 8270	10/30/1996	NJS
	Acenaphthylene	ND	mg/kg	0.28					
	Anthracene	ND	mg/kg	0.28					
	Benzo (a) anthracene	ND	mg/kg	0.28					
	Benzo (a) pyrene	ND	mg/kg	0.28					
	Benzo (b) fluoranthene	ND	mg/kg	0.28					
	Benzo (ghi) perylene	ND	mg/kg	0.28					
	Benzo (k) fluoranthene	ND	mg/kg	0.28					
	Chrysene	ND	mg/kg	0.28					
	Dibenzo (a,h) anthracene	ND	mg/kg	0.28					
	Fluoranthene	ND	mg/kg	0.28					
	Fluorene	ND	mg/kg	0.28					
	Indeno (1,2,3-cd) pyrene	ND	mg/kg	0.28					
	1-Methylnaphthalene	ND	mg/kg	0.28					
	2-Methylnaphthalene	ND	mg/kg	0.28					
	Naphthalene	ND	mg/kg	0.28					
	Phenanthrene	ND	mg/kg	0.28					
	Pyrene	ND	mg/kg	0.28					
	2-Fluorobiphenyl (ss)	57.4	% recov	1					
	2,4,6-Tribromophenol (ss)	58.6	% recov	1					
	Terphenyl-d14 (ss)	78.1	% recov	1					
DRO-S	Diesel Range Organics(DRO)-Soil	ND	mg/kg	3.2		10/27/1996	WDNR MOD DRO	10/31/1996	PHS
	Soil spike	85	% RECOV	50					
	Soil spike duplicate	89	% RECOV	50					

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

These results have been reviewed and their authenticity verified by:

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SAMPLE NARRATIVE
SEMIVOLATILE ORGANIC ANALYSIS

PROJECT NAME: Charter Manufacturing
PROJECT NUMBER: 4119.01
WORKORDER NUMBER: 962715
DATE: 11/8/96

The following samples for DRO analysis were received over the 35 gram weight allowed by the method:

Workorder #	Sample ID	Weight in grams
962715-01	N Wall	62.5
962715-02	S Wall	66.1
962715-03	E Wall	64.7
962715-04	W Wall	66.0
962715-05	Floor	53.2

Per client request the samples were analyzed using the DRO method as guidance. Results are reported as " TPH-SCREEN".

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Project Name: Charter Manufacturing
Project Number: 4119.01
Work Order Number: 962715
Analyst: BB

QC Batch: 962715A
Matrix: SOIL
Report Date: 10/31/96

Associated QC sample: SS05 and SS06
Extraction Date: 10/25/96

DRO Control Spike and Control Spike Duplicate Recoveries

Compound Name	Control Spike % REC.	Control Spike Dup. % REC.	%RPD	Control Limits % REC.	Control Limits % RPD
DRO	83	87	5	80 - 120	20

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Organic GC/MS Data Qualifier Sheet

B(n)	Analyte is present in the method blank. If the processes that were applied to the sample were applied to the method blank, the value of the analyte in the method blank would likely be "n".
D	Analyte value from diluted analysis.
E	Analyte concentration exceeds calibration range (see Sample Narrative).
H(n)	Analysis performed "n" days past holding time.
J	Estimated concentration to tentatively identified compounds (TICs).
K	Concentration may be elevated due to the presence of an unrequested analyte (see Sample Narrative).
N	Presumptive evidence of a compound based on mass spectral library search.
NR	Not required.
Q	Qualitative mass spectral evidence of analyte present: concentration is less than the reporting limit.
U	Analyte undetected.
W	Sample received with headspace.

Effective 08/28/95

APPENDIX C

CHAIN OF CUSTODY DOCUMENTATION

Company Name: RMT-milwaukee
Branch or Location:
Project Contact: MARK BRIGGS
Telephone: 879-1212
Project Number: 4119.01
Project Name: Charter Mfg
Project Location: milwaukee, WI
Sampled By (Print): Tim Petrin

Regulatory Program *(circle)*: UST RCRA CLP SDWA
NPDES/WPDES CAA NR_____ Other_____

EN CHEM INC.
802 Deming Way
Madison, WI 53717

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

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

CHAIN OF CUSTODY

NR720 Confirmation Analysis Required?
(En Chem will confirm unless otherwise instructed.)

Mail Report To: MARK BRIGGS
Company: RMT
Address: 150 N. PATRICK BLVD
BROOKFIELD, WI 53045

Invoice To:
Company: SAME
Address:
2 week turn
P.O. No.: Quote No.:

Field ID	Sample Description	Collection Date	Collection Time	Field Screen	Matrix	Filt'd Y/N	Preserv*	Analysis Requested	Good Cond.	Total Bottles	Comments	Laboratory Number
	N WALL	10-23-96	1pm		soil	N	A	DRO (WI MOD)	X	1		9602715-01
	N WALL							PAH (8270 WI LUST)		1		01
	N WALL							dry weight		1		01
	S WALL							DRO (WI MOD)		1		02
	S WALL							PAH (8270 WI LUST)		1		02
	S WALL							dry weight		1		02
	E WALL							DRO (WI MOD)		1		03
	E WALL							PAH (8270 WI LUST)		1		03
	E WALL							dry weight		1		03
	W WALL							DRO (WI MOD)		1		04
	W WALL							PAH (8270 WI LUST)		1		04
	W WALL							dry weight		1		04

SHADED AREA FOR LABORATORY USE ONLY

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

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

Relinquished By:	Date/Time:	Received By:	En Chem Project No.
Tim Petrin	10/23/96 3:30p	Air Bourne	
Relinquished By: Airborne	Date/Time: 10/24/96 10:00a	Received By: Jean Rueden 10/24/96 10:00	Sample Receipt Temp. (Must be rec'd at 4°C)
Relinquished By:	Date/Time:	Received By (En Chem):	Ice PH-NA

Company Name:
Branch or Location: RMT
Project Contact:
Telephone:
Project Number: 4119.01
Project Name: Charter Mfg
Project Location:
Sampled By (Print): Thompson

Regulatory Program *(circle)*: UST RCRA CLP SDWA
NPDES/WPDES CAA NR_____ Other_____

EN CHEM INC.
802 Deming Way
Madison, WI 53717

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

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

CHAIN OF CUSTODY

NR720 Confirmation Analysis Required?
(En Chem will confirm unless otherwise instructed.)

Mail Report To: MARK BRIGGS
Company: RMT
Address: 150 N PATRICK BLVD
BROOKFIELD, WI 53045

Invoice To:
Company: SAME
Address:
2 week turn

P.O. No.: Quote No.:

Field ID	Sample Description	Collection Date	Collection Time	Field Screen	Matrix	Filt'd Y/N	Preserv*	Analysis Requested	Good Cond.	Total Bottles	Comments	Laboratory Number
	FLOOR	10-23-96	1pm		Soil	N	A	DRO (WI MOD)	X	1		962715-05
	FLOOR	↓	↓		↓	↓	↓	PAH (8270 WI LUST)	↓	1		↓ 05
	FLOOR	↓	↓		↓	↓	↓	dry weight	↓	1		↓ 05

SHADED AREA FOR LABORATORY USE ONLY

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

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

Relinquished By:	Date/Time:	Received By:	En Chem Project No.
Thompson	10/23/96 3:30p	Air Bourne	
Relinquished By: Air Bourne 10/24/96 8:00	Date/Time: [illegible]	Received By: Allen Reeley 10/24/96 10:00	Sample Receipt Temp. (Must be rec'd at 4°C) iced
Relinquished By:	Date/Time:	Received By (En Chem):	n/1 - 1/1a

Company Name:
Branch or Location: RMT - Milw
Project Contact: Mark Briggs
Telephone: 873-1212
Project Number: 4119.01
Project Name: Charter Mfg
Project Location: Milwaukee, WI
Sampled By (Print): Tim Petrick

Regulatory Program *(circle)*: UST RCRA CLP SDWA
NPDES/WPDES CAA NR_____ Other_____

EN CHEM INC. CHAIN OF CUSTODY

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

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

☒ 802 Deming Way
Madison, WI 53717
608-827-5501 • 1-888-5 ENCHEM
Fax: 608-827-5503

NR720 Confirmation Analysis Required?
(En Chem will confirm unless otherwise instructed.)

P.O. # _____ Quote # _____ Page 1 of 1

Mail Report To: RMT
Company: 1510 N Patrick
Address: Brookfield, WI 53045
ATTN: Mark Briggs

Invoice To:
Company: SAME
Address:
2 week turn

Mail Invoice To:

Field ID	Sample Description	Collection Date	Collection Time	Field Screen	Matrix	Filt'd Y/N	Preserv*	Analysis Requested	Good Cond.	Total Bottles	Comments	Laboratory Number
	W wall 1	10/24	1230		soil	N	A	DRO (WI mod)		1	3-202	203141
	W wall 1	↓	↓		↓	↓	↓	PAH (8270 WI LVST)		1	Delete	~~203142~~
	W wall 1	↓	↓		↓	↓	↓	dry weight		1		~~203143~~
											BH 3114	

SHADED AREA FOR LABORATORY USE ONLY

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

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

Relinquished By:	Date/Time:	Received By:	En Chem Project No.
Tim Petrick	10/24/96 330pm	[illegible] 10/25/96 1030	961061 8
Relinquished By:	Date/Time:	Received By:	Sample Receipt Temp. (Must be rec'd at 4°C)
[illegible]		[illegible] Mohrenko 10/25/96 12N	
Relinquished By:	Date/Time:	Received By (En Chem):	
[illegible] Mohrenko	10/25/96 1610	[illegible]	KJ

APPENDIX D

WASTE MANIFESTS

(DRIVER: PLEASE SIGN BELOW)

597386

T

REFERENCE NO. 222192

(PLEASE SIGN HERE)

GROSS: 35.55
TARE: 14.38
NET: 21.17 COUNTY: O

ORCHARD RIDGE RDF

W124 N9355 BOUNDARY ROAD
MENOMONEE FALLS WI 53051
(414)253-8620

COMMENTS: 580810

CUSTOMER NO.	TRUCK NO.	INITIALS	TIME	DATE	BATCH NO.
0012034	45		10:58:58	10/23/96	

CUSTOMER:

R.M.T., INC.
150 N. PATRICK BLVD

BROOKFIELD WI 53045

MANIFEST NO. BIO60180
PERMIT NO.

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
BIO	BIOREMEDIATION/SOIL	21.17	561.00
	TOTAL GATE FEE:		561.00

Printed on recycled paper

WHITE & YELLOW - GENERATOR COPY / PINK - DISPOSAL SITE COPY / GOLD - TRANSPORTER COPY

DCE-009-8/95

SPECIAL WASTE MANIFEST DISPOSAL TICKET

580810

ORCHARD RIDGE RDF

A Waste Management Company

BILL TO: RMT, Inc.

TRANSPORTER: North Shore Environmental

GENERATOR: Charter Manufacturing

GENERATORS SIGNATURE: MB for John Cooper 10/23/96 Date

WASTE DESCRIPTION: Contaminated Soil

PROFILE # BIO60180

ACCEPTED BY: / / Date

DRIVERS SIGNATURE: 10/23/96 Date

TRUCK NO. 45

TONS/YARDS

21.17

115838

06/00/MW

(DRIVER: PLEASE SIGN BELOW)

597433

T

REFERENCE NO. 222243

(PLEASE SIGN HERE)

GROSS: 38.54
TARE: 14.38
NET: 24.16

COUNTY: O

ORCHARD RIDGE RDF
W124 N9355 BOUNDARY ROAD
MENOMONEE FALLS WI 53051
(414)253-8620

COMMENTS: 580812

CUSTOMER NO.	TRUCK NO.	INITIALS	TIME	DATE	BATCH NO.
0012034	45		12:46:07	10/23/96	

CUSTOMER:

R.M.T., INC.
150 N. PATRICK BLVD

BROOKFIELD WI 53045

MANIFEST NO. BIO60180
PERMIT NO.

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
BIO	BIOREMEDIATION/SOIL	24.16	640.24
	TOTAL GATE FEE:		640.24

Printed on recycled paper

ORCHARD RIDGE RDF

SPECIAL WASTE MANIFEST DISPOSAL TICKET

580812

A Waste Management Company

BILL TO: R.M.T. Inc.

TRANSPORTER: North Shore Environmental

GENERATOR: Charter Manufacturing

GENERATORS SIGNATURE: MJB for Jim Cooper 10 23 96 Date

WASTE DESCRIPTION: Contaminated Soil

PROFILE # BIO60180

ACCEPTED BY: [signature] 102396 Date

DRIVERS SIGNATURE: [signature] 102396 Date

TRUCK NO. 45

24.16 TONS/YARDS

WHITE & YELLOW - GENERATOR COPY / PINK - DISPOSAL SITE COPY / GOLD - TRANSPORTER COPY

DCE-009-8/95

(DRIVER: PLEASE SIGN BELOW)

597446

T

REFERENCE NO. 222252

(PLEASE SIGN HERE)

GROSS: 30.69
TARE: 14.82
NET: 15.87 COUNTY: O

ORCHARD RIDGE RDF
W124 N9355 BOUNDARY ROAD
MENOMONEE FALLS WI 53051
(414)253-8620

COMMENTS: 580813

CUSTOMER NO.	TRUCK NO.	INITIALS	TIME	DATE	BATCH NO.
0012034	1		13:09:12	10/23/96	

CUSTOMER:

R.M.T., INC.
150 N. PATRICK BLVD

BROOKFIELD WI 53045

MANIFEST NO. BIO60180
PERMIT NO.

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
BIO	BIOREMEDIATION/SOIL	15.87	420.56
	TOTAL GATE FEE:		420.56

Printed on recycled paper

WHITE & YELLOW - GENERATOR COPY / PINK - DISPOSAL SITE COPY / GOLD - TRANSPORTER COPY

DCE-009-8/95

SPECIAL WASTE MANIFEST DISPOSAL TICKET

580813

A Waste Management Company

BILL TO: RMT, Inc.

TRANSPORTER: North Shore Environmental

GENERATOR: Charter Manufacturing

GENERATORS SIGNATURE: [signature] Date 10/23/96

WASTE DESCRIPTION: Contaminated Soil

PROFILE # BIO60180

ACCEPTED BY: [signature] Date 10/23/96

DRIVERS SIGNATURE: [signature] Date 10/23/96 TRUCK NO. 1

15.87 TONS/YARDS

116838

APPENDIX E

CALCULATED SOIL CLEANUP GOALS

direct contact

Compound	CAS #		RfDo	RfDi	CSFo	CSFi	Class	non-industrial non-cancer ingest	non-industrial non-cancer inhal	non-industrial cancer ingest	non-industrial cancer inhal	industrial non-cancer ingest	industrial non-cancer inhal	industrial cancer ingest	industrial cancer inhal	RCL (mg/kg) non-industrial	RCL (mg/kg) industrial
acenaphthene	83-32-9		6.00E-02	na			D	900	na			60000	na			900	60000
acenaphthylene	208-96-8				7.30E-03	6.10E-03	D			8.8	100000			390	1400000	8.8	390
anthracene	120-12-7		3.00E-01	na			D	5000	na			300000	na			5000	300000
benz(a)anthracene	56-55-3				7.30E-01	6.10E-01	B2			0.088	1000			3.9	14000	0.088	3.9
benzo(a)pyrene	50-32-8				7.3	6.1	B2			0.0088	100			0.39	1400	0.0088	0.39
benzo(b)fluoranthene	205-99-2				7.30E-01	6.10E-01	B2			0.088	1000			3.9	14000	0.088	3.9
benzo(ghi)perylene	191-24-2				7.30E-02	6.10E-02	D			0.88	10000			39	140000	0.88	39
benzo(j)fluoranthene	205-82-3																
benzo(k)fluoranthene	207-08-9				7.30E-02	6.10E-02	B2			0.88	10000			39	140000	0.88	39
chrysene	218-01-9				7.30E-03	6.10E-03	B2			8.8	100000			390	1400000	8.8	390
dibenz(ah)anthracene	53-70-3	high			7.3	6.1	B2			0.0088	100			0.39	1400	0.0088	0.39
		low			36.5	30.5	B2			0.0018	20			0.078	280	0.0018	0.078
fluoranthene	206-44-0		4.00E-02	na			D	600	na			40000	na			600	40000
fluorene	86-73-7		4.00E-02	na			D	600	na			40000	na			600	40000
indeno(123-cd)pyrene	193-39-5				7.30E-01	6.10E-01	B2			0.088	1000			3.9	14000	0.088	3.9
1-methyl naphthalene					7.30E-03	6.10E-03	D			8.8	100000			390	1400000	8.8	390
2-methyl naphthalene	91-57-6				7.30E-03	6.10E-03	D			8.8	100000			390	1400000	8.8	390
naphthalene	91-20-3		4.00E-02	na			D	600	na			40000	na			600	40000
phenanthrene	85-01-8				7.30E-02	6.10E-02	D			0.88	10000			39	140000	0.88	39
pyrene	129-00-00		3.00E-02	na			D	500	na			30000	na			500	30000

na = not available/not applicable

groundwater

Compound	CAS #		RfD	CSF	Class	ES (ug/L)	PAL (ug/L)	NR 140?	Koc	DAF	RCL (mg/kg)
acenaphthene	83-32-9		6.00E-02		D	600	120		2.50E+03	390	120
acenaphthylene	208-96-8			7.30E-03	D	4.8	0.96		2.50E+03	390	0.96
anthracene	120-12-7		3.00E-01		D	3000	600		1.40E+04	2000	17000
benz(a)anthracene	56-55-3			7.30E-01	B2	0.048	0.0048		1.38E+06	190000	1300
benzo(a)pyrene	50-32-8			7.3	B2	0.003	0.0003	y	5.50E+06	750000	1200
					B2	0.2	0.02	p	5.50E+06	750000	83000
benzo(b)fluoranthene	205-99-2			7.30E-01	B2	0.048	0.0048		5.50E+05	75000	200
benzo(ghi)perylene	191-24-2			7.30E-02	D	0.48	0.096		1.60E+06	220000	34000
benzo(j)fluoranthene	205-82-3										
benzo(k)fluoranthene	207-08-9			7.30E-02	B2	0.48	0.048		5.50E+05	75000	2000
chrysene	218-01-9			7.30E-03	B2	4.8	0.48		2.00E+05	27000	2600
dibenz(ah)anthracene	53-70-3	high		7.3	B2	0.0048	0.00048		3.30E+06	450000	710
		low		36.5	B2	0.00096	0.000096		3.30E+06	450000	140
fluoranthene	206-44-0		4.00E-02		D	400	80		3.80E+04	5300	16000
fluorene	86-73-7		4.00E-02		D	400	80	p	7.30E+03	1100	650
indeno(123-cd)pyrene	193-39-5			7.30E-01	B2	0.048	0.0048		1.60E+06	220000	1700
1-methyl naphthalene				7.30E-03	D	4.8	0.96		8.50E+03	1200	9.9
2-methyl naphthalene	91-57-6			7.30E-03	D	4.8	0.96		8.50E+03	1200	9.9
naphthalene	91-20-3		4.00E-02		D	40	8	y	1.30E+03	230	2.5
phenanthrene	85-01-8			7.30E-02	D	0.48	0.096		1.40E+04	2000	2.7
pyrene	129-00-00		3.00E-02		D	300	60		3.80E+04	5300	12000

y = included in NR 140
p = proposed for inclusion in NR 140

DEPARTMENT OF
NATURAL RESOURCES
SED

1996 SEP 19 PM 12:01

September 17, 1996

Ms. Linda Michalets
Wisconsin Department of Natural Resources
4041 N. Richard Street
P.O. Box 12436
Milwaukee, WI 53212

Dear Pam:

On behalf of Charter Manufacturing, RMT, Inc. (RMT), is submitting a Workplan for Remedial Activities recommended for the Charter Manufacturing/former Illinois Tools Works facility on Palmer Street. We are planning to implement the remediation activities as soon as possible. Please contact us if you have any questions.

Sincerely,

Mark Briggs

Mark J. Briggs
Project Manager

ss

Enclosure

RMT, INC. — MILWAUKEE
150 N. PATRICK BLVD.
BROOKFIELD, WI 53045
414/879-1212 414/879-1220 FAX

I:\WPMLW\PJT\00-04119\01\L0004119.01E 9/16/96

DEPARTMENT OF
NATURAL RESOURCES
SED

1996 SEP 19 PM 12: 01

WORKPLAN FOR REMEDIAL ACTIVITIES AT 3704 NORTH PALMER STREET MILWAUKEE, WISCONSIN

PREPARED FOR
QUARLES AND BRADY
411 EAST WISCONSIN AVENUE
MILWAUKEE, WISCONSIN

PREPARED BY
RMT, INC.
BROOKFIELD, WISCONSIN

JUNE 1996

RMT, INC. — MILWAUKEE
150 N. PATRICK BLVD.
BROOKFIELD, WI 53045
414/879-1212 414/879-1220 FAX

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3. DATA INTERPRETATION AND REPORT PREPARATION 7
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3.2 Scope of Work 7

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Table 1 Soil Analytical Results For Charter Manufacturing 3

Section 1

INTRODUCTION

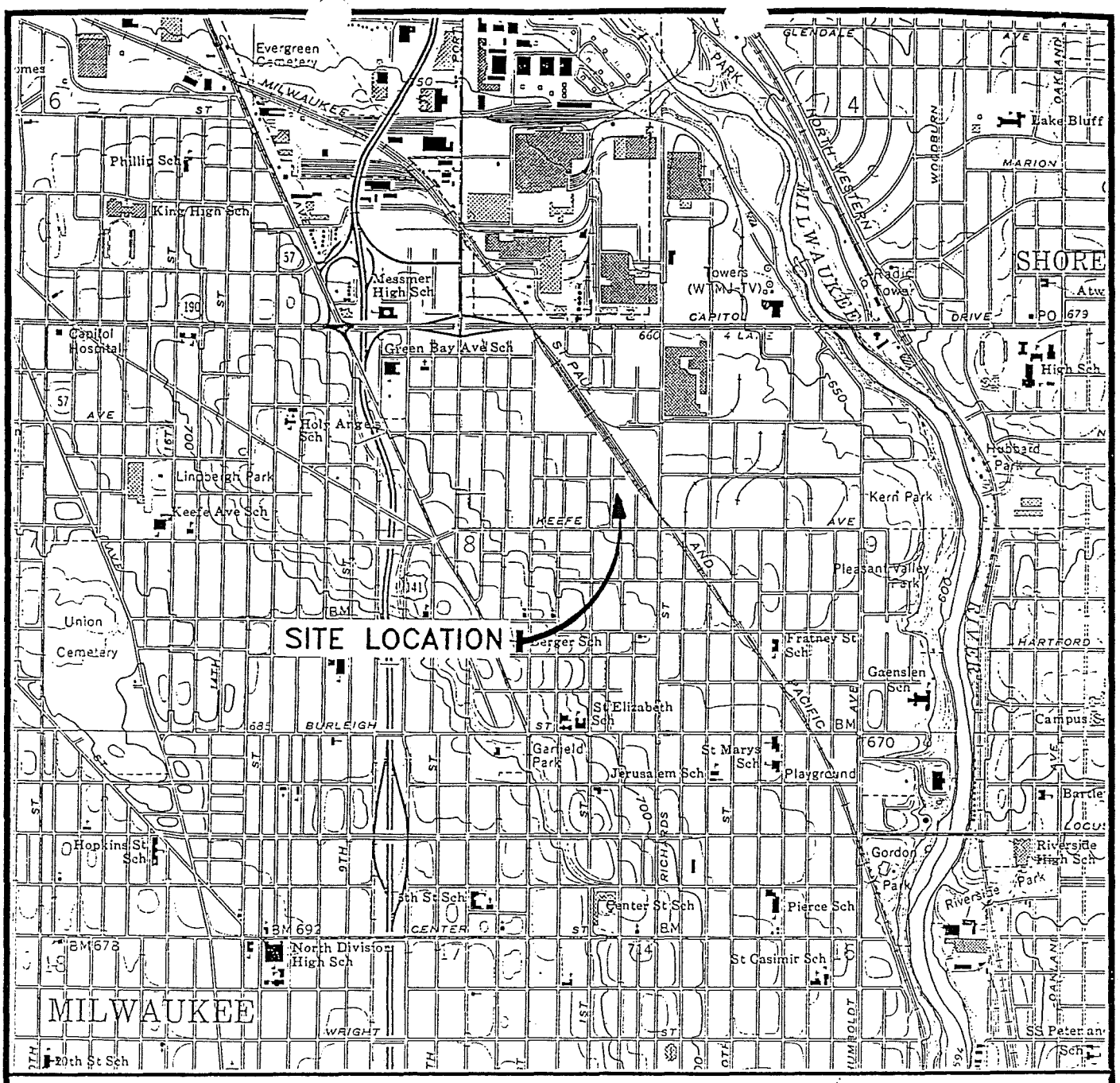
1.1 Background

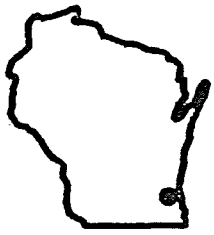
Illinois Tool Works/Charter Manufacturing Company, Inc. (Charter), operates a facility at 3704 N. Palmer Street in Milwaukee, Wisconsin (Figure 1). Environmental site assessment activities conducted in 1991 identified an area of shallow soil impacted by petroleum hydrocarbons. Impacted soils ranged in depth from 6 inches to 2 feet with associated total petroleum hydrocarbon (TPH) concentrations of 154 mg/kg to 3,920 mg/kg. The contamination sources are two aboveground quench oil tanks on a nearby concrete pad and run-off from paved areas.

Remediation of the shallow petroleum contamination at the Charter facility was conducted in late 1991 by E&K Hazardous Waste Services, Inc. E&K excavated approximately 66 cubic yards of contaminated soils to a depth of 4 feet. Following sampling of each excavation, E&K issued a final report requesting a "no further action" letter from the Wisconsin Department of Natural Resources (WDNR).

Data collected by E&K during excavation activities indicated that total petroleum hydrocarbons (TRPH-IR) increased from 21 mg/kg at a depth of 4 feet to 5,000 mg/kg at a depth of 5 feet within the excavation. No additional excavation or sampling was conducted to either remove the contaminated soil or verify the high TRPH-IR concentration. After reviewing E&K's data, Ms. Pam Mylotta at the WDNR Southeast District requested that the property owners undertake further assessment to determine the extent and degree of contamination in the former excavated area labeled "C".

In December 1994, RMT, Inc. (RMT) prepared a workplan and submitted it to WDNR to determine the extent of petroleum impacted soils near the former excavation areas. In October 1995, RMT constructed four hand auger borings to assess the extent of quench oil impacts to soil and the relationship of the shallow groundwater to the impacted soils. Analytical results for the four hand auger soil samples are provided in Table 1. The locations of each of the borings is shown on Figure 2. Soil impacts were found in boring HA-1 at a depth of 4.5 to 5 feet below ground surface.





STATE LOCATION

0 2000 4000

SCALE: 1"=2000'

N

SITE LOCATOR MAP

CHARTER MANUFACTURING CO., INC.
MILWAUKEE, WISCONSIN

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1994
PROJ. #	3243.01
FILE #	32430101

SOURCE: BASE MAP FROM MILWAUKEE, WISCONSIN 7.5 MINUTE USGS QUADRANGLE.

FIGURE 1

TABLE 1

SOIL ANALYTICAL RESULTS FOR CHARTER MANUFACTURING

		Concentrations	
Sample	**Depth (feet)**	**DRO (mg/kg)**	**TRPH (mg/kg)**
HA-1	4.5 to 5.0	1,900	2,500
HA-3	3.5 to 4.0	36	NA
HA-4	5.0 to 5.5	5.7	NA
HA-5	4.5 to 5.0	< 4.6	< 59

Notes:

DRO - Diesel Range Organics
TRPH - Total Recoverable Petroleum Hyrdrocarbons
NA - Not Analyzed

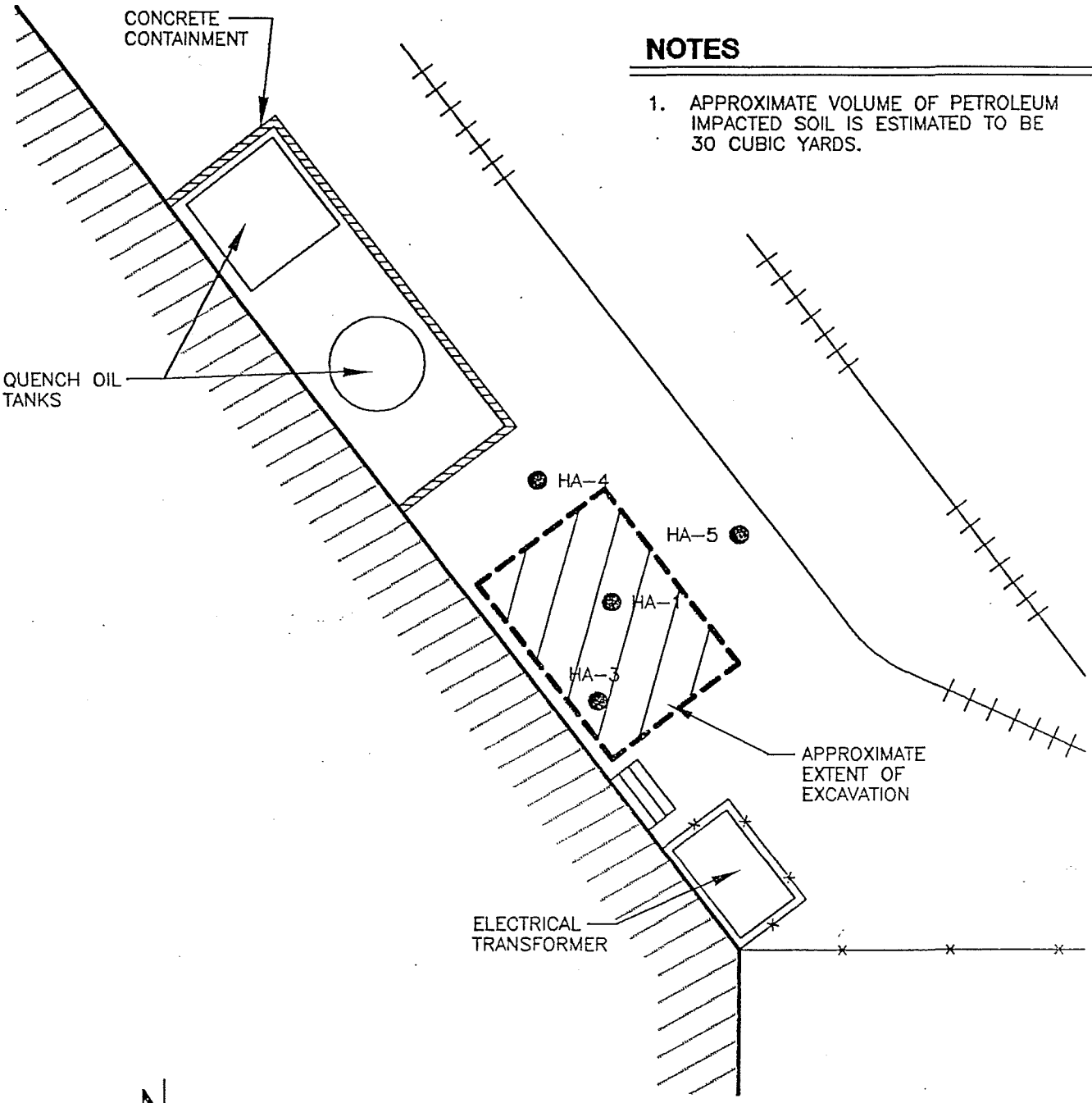
LEGEND

● HA–4 RMT HAND AUGER LOCATIONS

— — — — EXCAVATION LIMITS

NOTES

1. APPROXIMATE VOLUME OF PETROLEUM IMPACTED SOIL IS ESTIMATED TO BE 30 CUBIC YARDS.



N

APPROX. SCALE: 1"=10'

PROPOSED EXCAVATION AREA
ITW/CHARTER
MANUFACTURING CO., INC.
MILWAUKEE, WISCONSIN

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	JUNE 1996
PROJ. #	4119.01
FILE #	41190102

FIGURE 2

1.2 Project Objective and Approach

The objective of this workplan is to provide a guide for reducing the concentration of DRO in source area soils at the Charter facility in Milwaukee to levels less than NR 720.09 standards. Based on RMT's investigation results, the most cost-effective method to accomplish this objective is excavation followed by biotreatment of impacted soils at a local landfill.

The basic approach detailed in the following section will involve the excavation of approximately 30 cubic yards of petroleum impacted soils. The approximate location of the soil excavation is shown on Figure 2. The actual extent of the excavation will depend on field screening results and visual observations. Groundwater which enters the excavation due to the shallow water table will be removed and transported off-site for disposal. Three samples will be collected from the excavation sidewalls and one from the bottom of the excavation to verify that petroleum impacted soils have been removed. All soil samples will be analyzed for DRO. Following soil removal, the excavation will be backfilled with gravel.

Petroleum impacted soils will be shipped off-site to a local landfill for biotreatment. Many commercial landfills now bioremediate petroleum-impacted soils by creating a stock pile and circulating air, water, and nutrients through the system to enhance biodegradation. The landfill monitors the soil and following its treatment, provides treatment documentation to the owner. The soil is then used by the landfill for daily cover. This option reduces long term liability of the generator.

All remedial activities will be documented and a remedial report will be developed. A drawing showing the location of the excavation and the location of verification samples will be prepared along with documentation verifying the volume of soil removed. Analytical results for all verification samples collected from the excavation will be compared to the NR 720 soil cleanup standards. The results, interpretation, and discussion of recommended actions will be submitted to the WDNR for review following remedial actions. Assuming NR 720 cleanup goals are achieved, Charter will request a no further action determination from the WDNR.

Section 2

FILED INVESTIGATION AND LABORATORY ANALYSIS

2.1 Objective

- To remove and treat petroleum impacted soils from the Illinois Tool Works/Charter Manufacturing facility.

2.2 Scope of Work

- As required by OSHA, when performing work in potentially contaminated areas, prepare a site-specific Health and Safety Plan based on currently available information.
- Collect one sample by hand auguring from the impacted are for landfill characterization.
- Observe and document the excavation of approximately 30 cubic yards of petroleum impacted soils at the approximate location shown on Figure 2. Soils will be excavated to a depth of approximately 6 feet below ground surface. The extent of the excavation will depend on field-screening results and visual observations.
- Transport petroleum impacted soils to a local landfill for biological treatment. After petroleum constituents have been removed, the soil will be used by the landfill for daily cover.
- Remove and dispose off site any groundwater which collects in the excavation.
- Collect three soil samples from the excavation side walls and one from the bottom of the excavation for analysis of DRO.
- Backfill the excavation with clean, crushed 0.75-inch diameter stone.

Section 3

DATA INTERPRETATION AND REPORT PREPARATION

3.1 Objective

- To develop a remedial action report for submittal to the WDNR which summarizes the results of the soil excavation activities at Charter.

3.2 Scope of Work

- Review soil sample results to verify that DRO concentrations are less than the 100 mg/kg cleanup goal established in NR 720. All analytical data will be tableized and provided as an appendix to the report.
- Prepare an updated site drawing showing the exact location of the excavation.
- Prepare a drawing showing the exact location where soil samples were collected within the excavation.
- Provide all photographs and field notes as an appendix to the report.
- If NR 720 standards are met, a request for no further action from the WDNR will be made.

Environmental
Science &
Engineering, Inc.
A CILCORP Company

August 23, 1995

Ms. Pam Mylotta
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53212

Dear Ms. Mylotta:

RE: Illinois Tool Works (ITW/Former Charter Mfg. Facility)
3704 N. Palmer Street
Milwaukee, WI 53212

By this letter, we request closure of the heavy metals spill issue in accordance with NR700 based on our submittals of April 10, 1995 and November 14, 1994. Please direct questions or comments to the undersigned, or Mr. Phil Dallosto at ITW (708-657-4329).

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Michael J. Hoffman, P.E.
Senior Environmental Engineer

cc: Mr. Phil Dallosto

N:\DEPTS\5310\MJH146:ldw

No longer in service

8901 North Industrial Road Peoria, IL 61615 Phone (309) 692-4422 (800) 234-1239 Fax (309) 692-9364

OUTSIDE BLDG
AREA "B"

CHARTER MANU./MELLOWES DIV/IRSA
3704 N. PALMER
MILWAUKEE

Site Screening Worksheet

Answering yes to any of the questions below indicates the site has a high potential of causing or threatening to cause environmental pollution (mark yes in Box V. on form 4430-4).

1. Evidence (attributable to site) of groundwater within 1200 feet exceeding a preventive action limit (PAL) for any substance of public health concern or public welfare concern listed in ss. NR 140.10 and 140.12. — Yes [] No []

2. Evidence (attributable to site) of surface water within 1200 feet exceeding water quality standards contained in chs. NR 102, 103 and 104. — Yes [] No []

3. Evidence (attributable to site) of air within 1200 feet exceeding air quality standards contained in chs. NR 400 to 499. — Yes [] No []

4. Qualitative analysis of: Size of site, depth to groundwater, surface and underlying soils, distance to nearest private or public water supply, population within ¼ mile, type or characteristics and volume of waste, proximity to protected natural resources or environments, or any other appropriate factors. Some examples:

   a. Waste disposal area is less than 5 acres and nearest water supply used for human consumption is within 600 feet.

   b. Waste disposal area is between 5 and 10 acres and nearest water supply used for human consumption is within 1200 feet.

   c. There is insufficient (less than 5 feet) confining layer of silt or clay separating the bottom of the site from bedrock or groundwater table.

   d. There is a significant amount of hazardous material at the site.

   e. There is a protected natural resource or environment nearby.

   Based on the above, is there a reason to believe the environment and/or public health is at risk of contamination at this site? — Yes [] No [X] Unknown []

If Yes, then site shall be classified High Potential under ss.144.442 or ss.144.76. Unanticipated environmental consequences at a landfill fall under ss.144.442. Most other significant releases of hazardous materials fall under 144.76. — ss.144.442 [] ss.144.76 []

FID 241282030
ERR/ERP

June 30, 1995

Ms. Pam Mylotta
Wisconsin Department of Natural Resources
4041 North Richards Street
Milwaukee, Wi 53212

RE: Subsurface Investigation at the Illinois Tool Works/Charter Manufacturing Site in Milwaukee

Dear Ms. Mylotta:

This letter is to confirm our conversation today regarding review of the workplan for the Illinois Tool Works site located at 3704 North Palmer Street in Milwaukee. It is RMT's understanding that the Wisconsin Department of Natural Resources will not review the workplan or provide comments because the site has been given a low priority ranking. Therefore, RMT will be proceeding with the subsurface investigation as outlined in the workplan unless we are given further instructions from your office.

Sincerely,

Mark Briggs

Mark J. Briggs
Project Engineer

lml

cc: Tom McElligott - Quarles & Brady

I:\WPMLW\PJT\00-03243\01\L0003243.01A 06/30/95 3:45pm

RMT, INC. — MILWAUKEE
20900 SWENSON DRIVE - SUITE 100
WAUKESHA, WI - 53186-4050
414/798-9550 - 414/798-9551 FAX

FID 241282030
ERR/ERP

Environmental
Science &
Engineering, Inc.

A CILCORP Company

April 10, 1995

Ms. Pamela Mylotta
State of Wisconsin
Department of Natural Resources
Southeast District
P.O. Box 12436
4041 N. Richards Street
Milwaukee, WI 53212

RE: Illinois Tool Works Inc. (ITW) Former Charter Manufacturing Facility
3704 N. Palmer Street
Milwaukee, Wisconsin

Dear Ms. Mylotta:

This letter is in response to your request for additional information regarding sampling activities conducted at the above referenced facility related to heavy metals in the subsurface soils beneath the building.

The December 14, 1994 letter, requested the submission of information originally requested in a June 8, 1994 regarding sampling conducted at the facility in 1991 related to petroleum hydrocarbons. Additional information regarding this area of the facility will be provided following the completion of the additional investigation activities proposed in the RMT, Inc. January 1995 Work Plan. RMT, Inc. is under contract to the former facility owners and will address the petroleum hydrocarbon issue independently of ESE's efforts on behalf of ITW as the current owners.

A site map indicating the sampling locations, boring logs, analytical data reporting forms and chain of documentation for the March 1994 and October 1994 sampling activities are provided in Attachment 1.

8901 North Industrial Road Peoria, IL 61615 Phone (309) 692-4422 (800) 234-1239 Fax (309) 692-9364

If you have any questions about the enclosed information, please do not hesitate to contact me or Tony Wlodarski at 309-692-4422.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

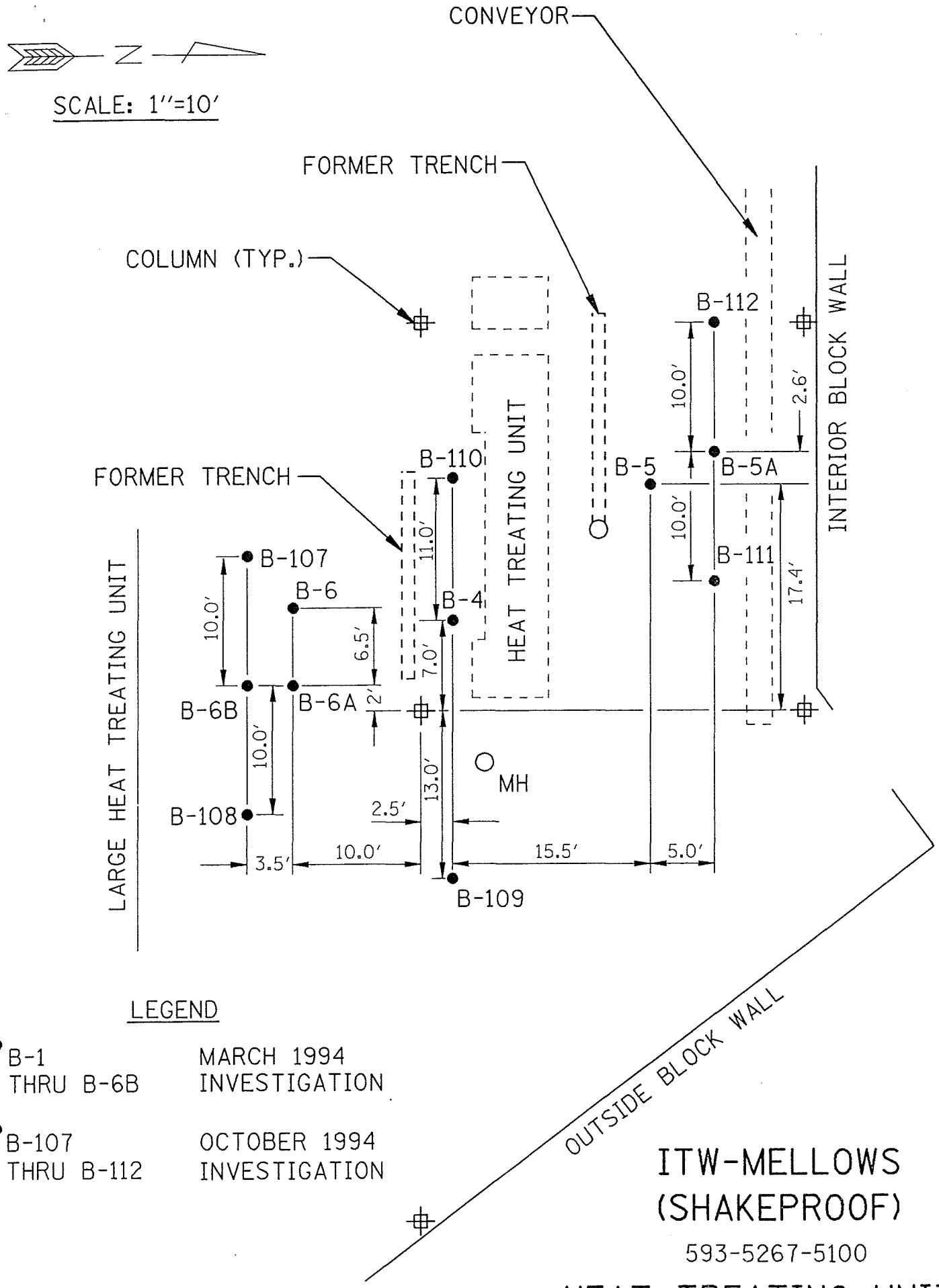
Tony Wlodarski /for/

Michael J. Hoffman, P.E.
Senior Environmental Engineer

attachments

cc: P. Dallosto (ITW)
T. Wlodarski (ESE)

ATTACHMENT 1


N
SCALE: 1"=10'
CONVEYOR
FORMER TRENCH
COLUMN (TYP.)
FORMER TRENCH
HEAT TREATING UNIT
INTERIOR BLOCK WALL
LARGE HEAT TREATING UNIT
OUTSIDE BLOCK WALL
B-112
B-110
B-5
B-5A
B-107
B-6
B-4
B-111
B-6B
B-6A
B-108
B-109
MH
10.0'
2.6'
11.0'
6.5'
7.0'
2'
17.4'
13.0'
2.5'
3.5'
15.5'
5.0'
LEGEND
B-1 THRU B-6B MARCH 1994 INVESTIGATION
B-107 THRU B-112 OCTOBER 1994 INVESTIGATION
ITW-MELLOWS (SHAKEPROOF)
593-5267-5100
HEAT TREATING UNIT BORING LAYOUT

State of Wisconsin
Department of Natural Resources

Route To:
- ☐ Solid Waste
- ☐ Emergency Response
- ☐ Wastewater
- ☐ Superfund
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-4

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE PEORIA - D.W. HISCHKE	03/04/94 (MM DD YY)	/ / (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "
___ 1/4 of ___ 1/4 of Section ___, T ___ N, R ___ E/W

Local Grid Location (If applicable)
☐ N ☐ E
___ Feet ☐ S ___ Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/~~FID~~	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
HA-1			1	CRUSHED STONE & SAND FILL				>2000						
HA-2			2	MEDIUM TO FINE SAND WITH LARGE GRAVEL (FILL	SP			244						
HA-3			3					250						
HA-4			4	GRAYISH BROWN SILTY CLAY WITH SAND AND CINDERS	CL			253						
HA-5			5					118						
HA-6			6	BROWN SILTY CLAY TRACE GRAVEL	CL			14.8						
HA-7			7					17.9						
HA-8			8					18.2						
HA-9			9					0.0						
HA-10			10	TERMINATED @ 10'				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of ____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-5

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - PEORIA, D.W. HISCHKE	03/04/94 (MM DD YY)	03/04/94 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	____ Feet MSL	4 inches

Boring Location
State Plane ____ N, ____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ° ' "
Long ° ' "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample: Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
				CRUSHED STONE & SAND										
			1	TERMINATED ON CONCRETE AT 0.75'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature ____ Firm ____

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of ____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-52

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
ESE - PEORIA, D.W. HISCHKE	03/04/94	03/04/94	HAND AUGER

DNR Facility Well No	WI Unique Well No	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	____ Feet MSL	4" inches

Boring Location
State Plane ____ N, ____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ° ' "
Long ° ' "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
HA-1			1	CRUSHED STONE WITH SAND										
HA-2			2	FINE TO MEDIUM GRAINED SAND WITH GRAVEL	SP									
HA-3			3											
HA4			4	DARK GRAY SILTY CLAY WITH CINDERS, TRACE SAND	CL									
HA-5		→	5											
HA6			6	GRAYISH BROWN SILTY CLAY	CL									
HA7			7											
HA8			8											
HA-9			9	GRAYISH BROWN SILTY CLAY TRACE SAND & GRAVEL	CL									
HA-10			10	TERMINATED @ 10'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-6

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE PEORIA	03/04/94 (MM DD YY)	03/04/94 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	_____ Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
				CRUSHED STONE										
			1	BORING TERMINATED ON CONCRETE @ 1.0'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm _____

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-6a

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
ESE PEORIA	03/04/94	03/04/94	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			NONE Feet MSL	_____ Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample: Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
				CRUSHED STONE										
			1	BORING TERMINATED ON CONCRETE @ 1.0'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW-SHAKESPROOF		B-6b

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (M M D D Y Y)	Date Drilling Completed (M M D D Y Y)	Drilling Method
ESE PEORIA - D.W. HISCHKE	03/04/94	03/04/94	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			9.0 Feet MSL	_____ Feet MSL	4 inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
☐ N ☐ E
_____ Feet ☐ S _____ Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				CONCRETE										
HA1			1	CRUSHED STONE										
HA2			2	BROWN FINE TO MEDIUM SAND WITH GRAVEL	SP									
HA3			3											
HA4			4	GRAYISH BROWN SILTY CLAY WITH SAND AND CINDERS	CL									
HA5			5	GRAYISH BROWN SILTY CLAY WITH SAND	CL									
HA6			6	BROWN SILTY CLAY, TRACE SAND	CL									
HA7			7	- WITH SAND										
HA8			8	DARK GRAY SLIGHTLY SILTY CLAY, TRACE SAND (TILL)	CL									
HA9			9											
HA10			10	- WITH SAND, TRACE GRAVEL (TILL)	CL									
				TERMINATED @ 10'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm _____

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

PAGE NUMBER: 2
REPORT DATE: 03-22-94
DATE RECEIVED: 03-05-94
PROJECT NUMBER: 591-5103

TO: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
8901 N. INDUSTRIAL ROAD
PEORIA, IL 61615
ATTN: MR. MIKE HOFFMAN

CLIENT PROJECT NAME: ITW - MELLOWES
CLIENT PROJECT NUMBER: 593-5267

ESE SAMPLE		16802*8	16802*9	16802*10			
SAMPLE DATE		03/04/94	03/04/94	03/04/94			
DESCRIPTION	UNITS	B-4 4' SOIL	B-6B 2' SOIL	B-6B 4' SOIL	METHOD NO.	DATE ANALYZED	ANALYST
VOLATILE ORGANIC COMPOUNDS							
CHLOROMETHANE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
BROMOMETHANE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
VINYL CHLORIDE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
CHLOROETHANE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
METHYLENE CHLORIDE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
ACETONE	UG/KG	18B	14B	32B	8240	03-15-94	NEB
CARBON DISULFIDE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,1-DICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,1-DICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
TRANS-1,2-DICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
CHLOROFORM	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,2-DICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
2-BUTANONE	UG/KG	< 10	< 10	10	8240	03-15-94	NEB
1,1,1-TRICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
CARBON TETRACHLORIDE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
VINYL ACETATE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
BROMODICHLOROMETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB

B = Compound also found in blank.

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

TO: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
8901 N. INDUSTRIAL ROAD
PEORIA, IL 61615
ATTN: MR. MIKE HOFFMAN

PAGE NUMBER: 3
REPORT DATE: 03-22-94
DATE RECEIVED: 03-05-94
PROJECT NUMBER: 591-5103

CLIENT PROJECT NAME: ITW - MELLOWES
CLIENT PROJECT NUMBER: 593-5267

ESE SAMPLE		16802*8	16802*9	16802*10			
SAMPLE DATE		03/04/94	03/04/94	03/04/94			
DESCRIPTION	UNITS	B-4 4' SOIL	B-6B 2' SOIL	B-6B 4' SOIL	METHOD NO.	DATE ANALYZED	ANALYST
VOLATILE ORGANIC COMPOUNDS (CONT'D)							
1,2-DICHLOROPROPANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
CIS-1,3-DICHLOROPROPENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
TRICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
DIBROMOCHLOROMETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,1,2-TRICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
BENZENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
TRANS-1,3-DICHLOROPROPENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
BROMOFORM	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
4-METHYL-2-PENTANONE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
2-HEXANONE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
TETRACHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,1,2,2-TETRACHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
TOLUENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
CHLOROBENZENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
ETHYLBENZENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
STYRENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
XYLENES,TOTAL	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
CIS-1,2-DICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
A CH2M HILL Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 5911-5103
Due Date: 3-17-94

Chain of Custody Record

№ 6841

Company: ESE - PEORIA (HISCHKE)
Address:
Phone #: ( ) - Fax #: ( ) -
P.O. #:
Client Contact: M.J. HOFFMAN
Project # / Location: ITW - MELLOWES

Sample Type: 1. Water 2. Soil 3. Sludge 4. Oil 5. Tissue
Other:
Container Type: P - Plastic G - Glass V - VOC
Preservative: 1. None 2. H2SO4 3. HNO3 4. NaOH

Analyses: VOCs 8020; Total & Trip Metals *; Hold for Direction

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	VOCs 8020	Total & Trip Metals *											Hold for Direction	Comments
MW-1	2	1 oz	G	1	3/03/94		1	16802-5													✓	
MW-1	2	8 oz		1			1	~~7~~ *													✓	
MW-2	2	1 oz		1			1	-6													✓	
MW-2	2	8 oz		1			1														✓	
MW-3	2	1 oz		1			1	-7													✓	
MW-3	2	8 oz		1			1														✓	
B-4, 4'	2	1 oz		1	3/04/94		1	-1	✓											A		Poss. Hot Sample
B-6b, 2'	2	1 oz		1			1	-2	✓											B		" " "
B-6b, 4'	2	1 oz		1			1	-3	✓											A		" " "
B-4, 4'	2	8 oz		1			1	-4		✓										A		
B-5a, 5'	2	8 oz		1			1	-4		✓										~~B~~ C		
B-6b, 4'	2	8 oz		1			1	-3		✓										A		

Login per M. Hoffman 3/15/94 BQ

Relinquished By:	Date:	Received By:	Date:
[signature]	3-05-94 Time: 10:45		-- -- Time: :
Relinquished By:	Date: -- -- Time: :	Received For Lab By: [signature]	Date: 3-5-94 Time: 10:45

TURNAROUND TIME:
☐ RUSH: ____ day turnaround
☑ ROUTINE

FOR LAB USE ONLY
Samples Received Chilled
☐ Yes
☐ No
9C

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained by Sampler

SPECIAL INSTRUCTIONS: * BARIUM, CADMIUM, CHROMIUM, LEAD, NICKEL, ZINC.

State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-107

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
E.S.E. - DOUGLAS W. HISCHKE	10/04/94 8:00	10/04/94 17:35	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		N/A	8'-6" cHR Feet MSL	FIN. GR Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N Lat ___ ° ___ ' ___ "
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
☐ N ☐ E
_____ Feet ☐ S _____ Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONC - 2" CRUSHED STONE										
				GRAYISH TAN SAND & GRAVEL				207						
			2	TAN FINE SAND WITH MEDIUM GRAVEL, OCCASIONAL COBBLE POORLY GRADED. DRY				0.0						
				DARK GRAY SILTY CLAY WITH LIMESTONE SCREENINGS. DAMP. SOIL WARM TO TOUCH.				3.1						
			4					0.0						
				BROWN SANDY CLAY, SOME GRAVEL - DAMP				0.0						
			6					0.0						
				SAME - MOIST				0.0						
			8											
				SAME - SOME GRAY -				0.0						
								0.0						
			10	BORING TERMINATED @ 10.0'				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

Route To:
- ☐ Solid Waste
- ☐ Emergency Response
- ☐ Wastewater
- ☐ Superfund
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-108

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
E.S.E - D.W. HISCHKE	10/04/94 11:45 (MM DD YY)	10/04/94 11:45 (MM DD YY)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	8'9" @ 2.54 Feet MSL	FIN. FL. Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W

Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONCRETE, 4" CRUSHED LIMESTONE				0.0						
			2	TAN FINE GRAINED SAND WITH COBBLES - POORLY GRADED DRY				0.0						
								0.0						
			4	DARK BROWN & GRAY SILTY CLAY WITH SAND & GRAVEL DAMP - WOOD FRAGMENT @ 4.0 FT.				0.0						
								0.0						
			6	BROWN & BROWNISH GRAY SILTY CLAY W/ SAND & GRAVEL. WET @ 6.0 FT.				0.0						
				BROWN CLAYEY SAND - WET.				0.0						
			8					0.0						
								0.0						
			10	BORING TERMINATED @ 10.0 FT.				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF	— — — — — —	B-109

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
E.S.E - D.W. HISCHKE	10/04/94 (MM/DD/YY) 1430	10/04/94 (MM/DD/YY) 1530	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
—	—	—	9'-2" @ 5:40 Feet MSL	FIN FL Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
☐ N ☐ E
____ Feet ☐ S ____ Feet ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE	— —	MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONCRETE										
				TAN FINE GRAINED SAND WITH COBBLES, TRACE GRAVEL, POORLY GRADED - DRY				0.0						
			2					0.0						
								0.0						
			4	DARK GRAY SILTY CLAY WITH GRAVEL & CINDERS, TRACE SAND - DRY				0.0						
								0.0						
			6	BROWN SILTY CLAY WITH SAND MOIST				0.0						
				- SAND INCREASES W/ DEPTH				0.0						
				- VERY MOIST										
			8					0.0						
				- WET										
								0.0						
			10	BORING TERMINATED @ 10.0 FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Douglas W. Hischke	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW. SHAKEPROOF	— — — — — —	B-110

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
	10/04/94 16:00	10/04/94 17:20	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	Dry @ 0.5 Hr. Feet MSL	FIN. FL. Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE	— —	MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6" CONC. 2" CRUSHED STONE										
				TAN FINE GRAINED SAND WITH GRAVEL & COBBLES - POORLY GRADED - DRY				62.1						
			2					11.5						
								8.0						
				DARK GRAY SILTY CLAY WITH CINDERS AND SAND - DAMP										
			4					0.0						
								0.0						
		→	6	BROWN & GRAY SILTY CLAY TRACE SAND - MOIST				0.0						
								0.0						
			8					0.0						
				- WITH SAND				0.0						
			10	BORING TERMINATED @ 10.0 FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW - SHAKEPROOF		B-11

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - D.W. HISCHKE	10/05/94 (7:00)	10/05/94 (9:40)	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	DRY Feet MSL	FIN FL Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				9½" CONCRETE										
				TAN FINE GRAINED SAND WITH COBBLES & GRAVEL - POORLY GRADED - DRY				25.9						
			2					28.6						
								20.9						
				DARK BROWN SILTY CLAY WITH SAND CINDERS & GRAVEL - DAMP										
			4					10.6						
								33.2						
			6					29.8						
				BROWN SILTY CLAY, TRACE SAND - MOIST										
								3.7						
			8					0.3						
								0.0						
			10	BORING TERMINATED @ 10.0FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	ENVIRONMENTAL SCIENCE & ENGINEERING, INC

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State of Wisconsin
Department of Natural Resources

Route To:
☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ITW. SHAKEPROOF		B-112

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
ESE - D.W. HISCHKE	10/05/94 9:00	10/05/94 11:20	HAND AUGER

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		—	7'-9" @ 0HR Feet MSL	FIN. FL. Feet MSL	4" inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town/City/ or Village
MILWAUKEE		MILWAUKEE

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				6½" CONCRETE OVER 6½" CONCRETE				—						
			2	TAN FINE GRAINED SAND WITH GRAVEL & COBBLES - POORLY GRADED - DRY				4.1						
								1.1						
			4	DARK BROWN SILTY CLAY WITH CINDERS, GRAVEL & COBBLES & SAND				0.1						
								0.0						
			6	BROWNISH GRAY SILTY CLAY TRACE SAND, COBBLES				0.0						
								0.0						
			8	BROWN SANDY CLAY TRACE GRAVEL				0.0						
								0.0						
			10	BORING TERMINATED @ 10.0 FT				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

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Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

PAGE NUMBER: 1
REPORT DATE: 10-25-94
DATE RECEIVED: 10-06-94
PROJECT NUMBER: 591-5103

TO: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
8901 N. INDUSTRIAL ROAD
PEORIA, IL 61615
ATTN: MR. TONY WLODARSKI

CLIENT PROJECT NAME: ITW - SHAKEPROOF
CLIENT PROJECT NUMBER: 593-5267

ESE SAMPLE		19078*1	19078*2	19078*3	19078*4			
SAMPLE DATE		10/04/94	10/04/94	10/04/94	10/04/94			
DESCRIPTION	UNITS	B-107 8FT SOIL	B-108 8FT SOIL	B-109 6FT SOIL	B-110 6FT SOIL	METHOD NO.	DATE ANALYZED	ANALYST
TOTAL METALS								
BARIUM	MG/KG	28.5	13.1	52.0	69.7	6010	10-18-94	ELZ
CADMIUM	MG/KG	< 0.50	< 0.50	< 0.50	1.96	6010	10-18-94	ELZ
CHROMIUM	MG/KG	11.1	7.50	21.7	21.2	6010	10-18-94	ELZ
LEAD	MG/KG	10.5	12.3	45.4	13.4	6010	10-18-94	ELZ
TCLP METALS								
BARIUM	MG/L	0.630	0.520	0.439	0.690	6010	10-12-94	ELZ
CADMIUM	MG/L	< 0.005	< 0.005	< 0.005	0.035	6010	10-12-94	ELZ
CHROMIUM	MG/L	< 0.010	< 0.010	< 0.010	< 0.010	6010	10-12-94	ELZ
LEAD	MG/L	< 0.050	< 0.050	< 0.050	< 0.050	6010	10-12-94	ELZ

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

TO: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
8901 N. INDUSTRIAL ROAD
PEORIA, IL 61615
ATTN: MR. TONY WLODARSKI

PAGE NUMBER: 2
REPORT DATE: 10-25-94
DATE RECEIVED: 10-06-94
PROJECT NUMBER: 591-5103

CLIENT PROJECT NAME: ITW - SHAKEPROOF
CLIENT PROJECT NUMBER: 593-5267

ESE SAMPLE		19078*5	19078*6			
SAMPLE DATE		10/05/94	10/05/94			
DESCRIPTION	UNITS	B-111 7FT SOIL	B-112 7FT SOIL	METHOD NO.	DATE ANALYZED	ANALYST
TOTAL METALS						
BARIUM	MG/KG	18.5	23.9	6010	10-18-94	ELZ
CADMIUM	MG/KG	1.15	< 0.50	6010	10-18-94	ELZ
CHROMIUM	MG/KG	10.7	12.3	6010	10-18-94	ELZ
LEAD	MG/KG	7.78	10.3	6010	10-18-94	ELZ
TCLP METALS						
BARIUM	MG/L	0.513	0.534	6010	10-12-94	ELZ
CADMIUM	MG/L	< 0.005	< 0.005	6010	10-12-94	ELZ
CHROMIUM	MG/L	< 0.010	< 0.010	6010	10-12-94	ELZ
LEAD	MG/L	< 0.050	< 0.050	6010	10-12-94	ELZ

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 592-5263
Due Date: 10-18-94

Chain of Custody Record

№ 09054

Company: ESE - PEORIA
Address:
Phone #: ( ) - Fax #: ( ) -
P.O. #: 593-5267 SUB
Client Contact: Tony Wiedenski
Project # / Location: ITW - SHAKOPEE

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other :

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH

Analyses: Total Barium, Total Cadmium, Total Chromium, Total Lead

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	Total Barium	Total Cadmium	Total Chromium	Total Lead	Comments
B-107, 8 Ft	2	8oz	G	1	10/04		1	19078-1	/	/			
B-108 8 Ft				1	"		1	-2	/	/			
B-109 6 Ft				1	"		1	-3	/	/			
B-110 6 Ft				1	"		1	-4	/	/			
B-111 7 Ft				1	10/05		1	-5	/	/			
B-112 7 Ft				1	10/05		1	-6	/	/			
								ARH -7					

Relinquished By:	Date: 10-05-94 Time: 17:45	Received By:	Date: -- -- Time: :
Relinquished By:	Date: -- -- Time: :	Received For Lab By: Alan R. Hogan	Date: 10-6-94 Time: 8:00

TURNAROUND TIME:
☐ RUSH: _____ day turnaround
☑ ROUTINE

FOR LAB USE ONLY
Samples Received Chilled
☐ Yes
☐ No

SPECIAL INSTRUCTIONS:

Copies: White - Client; Canary - Lab Receiving; Pink - Lab File; Goldenrod - Retained by Sampler

FID 241 282030
ERR/ERP

February 20, 1995

Ms. Pam Mylotta
Wisconsin Department of Natural Resources
4041 N. Richards Street
Milwaukee, Wisconsin 53212

RE: Workplan for the Illinois Tool Works Site, 3704 N. Palmer Street in Milwaukee

Dear Ms. Mylotta:

On behalf of Mr. Thomas McEllingott at Quarles and Brady, RMT is submitting the attached workplan for conducting additional subsurface investigation at the Illinois Tool Works/Charter Manufacturing Company facility located at 3704 N. Palmer Street in Milwaukee. At this time, we are requesting your review and comment on the workplan prior to our field activites.

Pam, if you have any questions regarding the attached workplan, please contact Mr. McEllingott at 277-5000 or myself at 798-9550.

Sincerely,

Mark Briggs
Project Engineer

RMT, INC. — MILWAUKEE
20900 SWENSON DRIVE ▪ SUITE 100
WAUKESHA, WI ▪ 53186-4050
414/798-9550 ▪ 414/798-9551 FAX

02-41-000958

WORKPLAN FOR A SUBSURFACE INVESTIGATION AT 3704 NORTH PALMER STREET MILWAUKEE, WISCONSIN

PREPARED FOR
QUARLES AND BRADY
411 EAST WISCONSIN AVENUE
MILWAUKEE, WISCONSIN

PREPARED BY
RMT, INC.
WAUKESHA, WISCONSIN

FID 241282030 ERR/ERP

DECEMBER 1994

Madeline Gotkowitz
Project Geologist

Kathryn R. Huibregtse
Program Manager

Mark J. Briggs
Project Manager

RMT, INC. — MILWAUKEE
20900 SWENSON DRIVE ▪ SUITE 100
WAUKESHA, WI ▪ 53186-4050
414/798-9550 ▪ 414/798-9551 FAX

00-03243.01:i:\milw\rpt\quar0811

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Recycled Paper

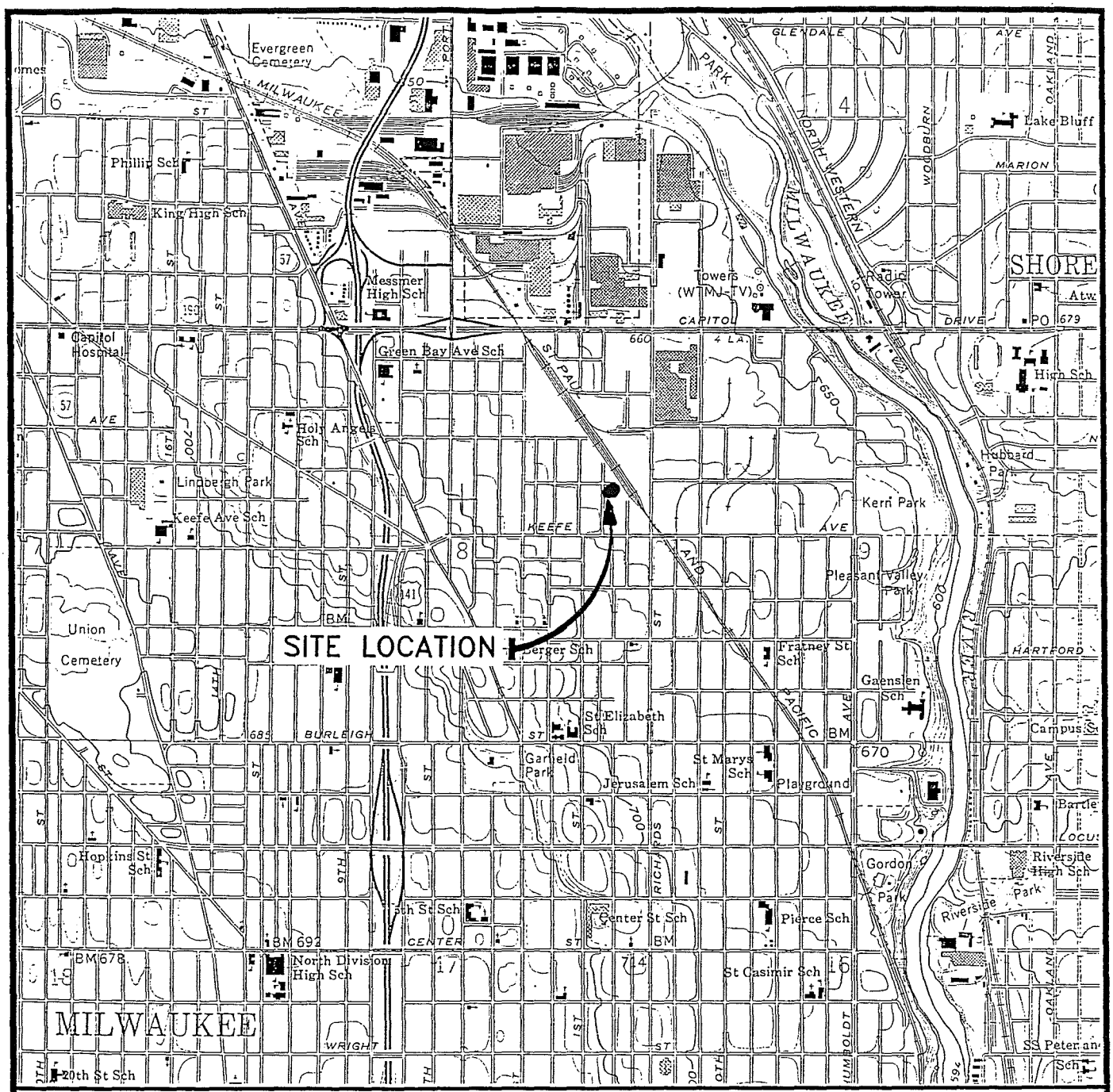
Section 1
INTRODUCTION

1.1 Background

Illinois Tool Works/Charter Manufacturing Company, Inc. operates a facility at 3704 N. Palmer Street in Milwaukee, Wisconsin (Figure 1). Environmental site assessment activities conducted in 1991 identified an area of shallow soil impacted by petroleum hydrocarbons. Impacted soils ranged in depth from 6 inches to 2 feet with associated total petroleum hydrocarbon (TPH) concentrations of 154 mg/kg to 3,920 mg/kg. The potential contamination sources identified were two aboveground quench oil tanks on a nearby concrete pad and run-off from paved areas.

Remediation of the shallow petroleum contamination at the Charter Manufacturing Company facility was conducted in late 1991 by E&K Hazardous Waste Services, Inc. E&K excavated approximately 66 cubic yards of contaminated soils to a depth of 4 feet. Figure 2 shows the locations of E&K's excavations (labeled A through E). Following sampling of each excavation, E&K issued a final report requesting a "no further action" letter from the Wisconsin Department of Natural Resources (WDNR).

Data collected by E&K during excavation activities indicated that total petroleum hydrocarbons (TRPH-IR) increased from 21 mg/kg at a depth of 4 feet to 5,000 mg/kg at a depth of 5 feet within the excavation. No additional excavation or sampling was conducted to either remove the contaminated soil or verify the high TRPH-IR concentration. After reviewing E&K's data, the WDNR Southeast District requested that the property owners undertake further assessment to determine the extent and degree of contamination in the former excavated area labeled "C" (Figure 2). Information obtained for the spill area during these past studies utilized different analytical procedures making direct comparison of results difficult. Therefore, one component of this workplan will involve testing selected soil samples for petroleum constituents using both the TRPH-IR method (applied by E&K) and the extended range Diesel Range Organic (DRO) method requested by the WDNR.



STATE LOCATION

0 2000 4000

SCALE: 1"=2000'

N

SITE LOCATOR MAP

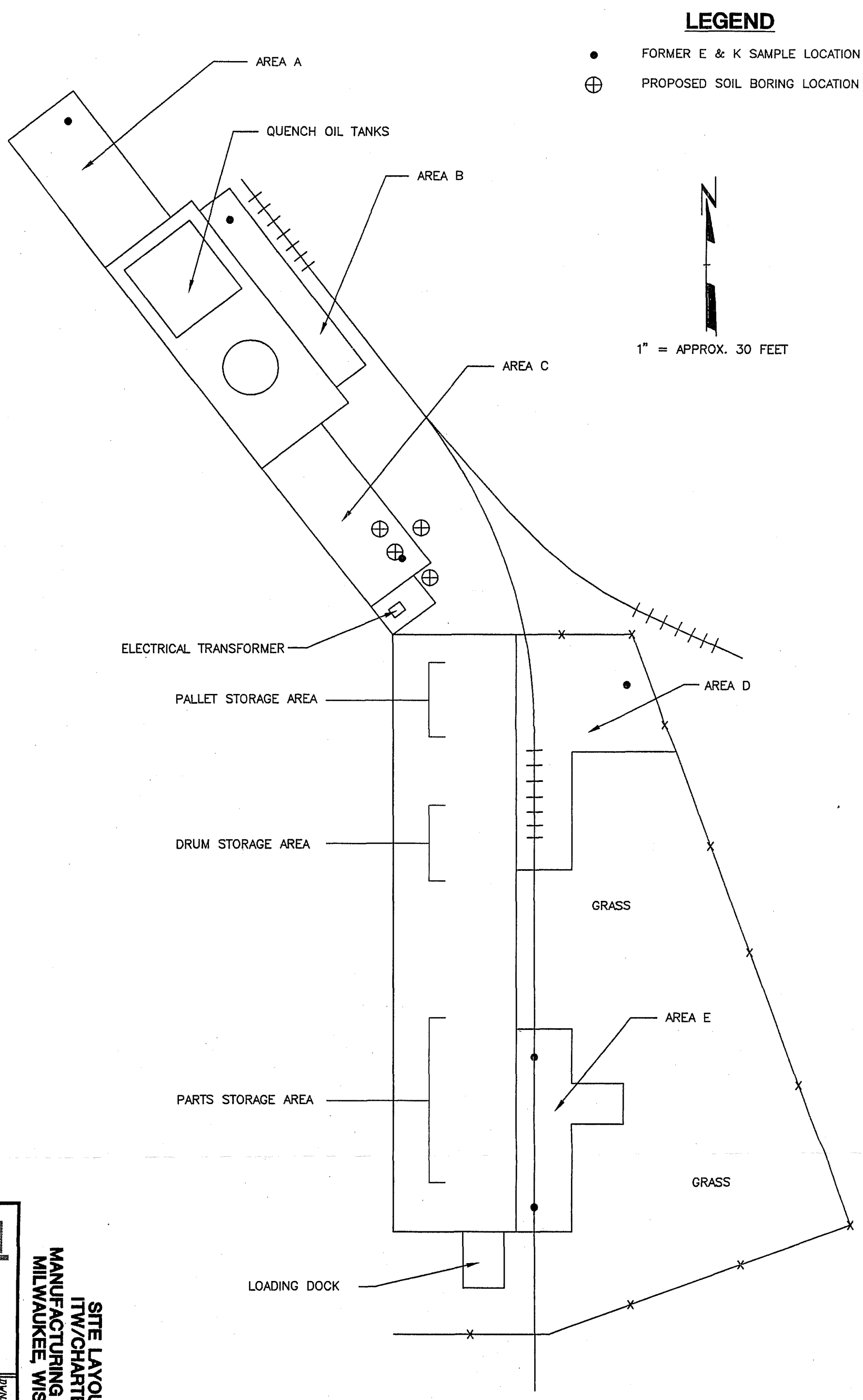
CHARTER MANUFACTURING CO., INC.
MILWAUKEE, WISCONSIN

SOURCE: BASE MAP FROM MILWAUKEE, WISCONSIN 7.5 MINUTE USGS QUADRANGLE.

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1994
PROJ. #	3243.01
FILE #	32430101

FIGURE 1



SITE LAYOUT
ITW/CHARTER
MANUFACTURING CO., INC.
MILWAUKEE, WISCONSIN

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1994
PROJ. #	3243.01
FILE #	32430102

FIGURE 2

1.2 Project Objective and Approach

The objective of this workplan is to develop a response to item 2b of the WDNR June 8, 1994, letter requesting follow-up on the environmental investigations at the ITW/Charter facility. The objectives of the project are:

- To define the extent of soil impacts with depth in "Area C."
- Document the results and review alternatives for appropriate follow-up actions.

The basic approach detailed in the following section will involve advancement of up to four borings in the former excavation area. Soil samples will be continuously collected in 1.5-foot split-spoon samplers through the depth of the borehole. Borings will be advanced to the water table or to a depth of 15 feet, whichever is encountered first. All soil samples will be screened using a hand-held flame ionization detector (FID) and visually classified. In addition, a small amount of the sample will be mixed with water and the mixture will be allowed to stabilize to determine if an oil sheen is visible. This procedure will facilitate sample selection since the volatility of weathered quench oil is low and may not be significant enough to register on the FID.

Two samples will be selected per boring for analyses of extended range DRO. Samples will be selected at the location with the highest potential impacts and at a potentially unimpacted depth based upon the screening results and sample characteristics. In addition, two of the samples for DRO will be quantified for TRPH-IR petroleum constituents to allow correlation to previous removal activities.

After the field investigation is complete, the results will be documented. Soil boring logs will be prepared and the general geological and hydrogeological setting will be reviewed. The actual boring locations will be surveyed, and a map and geologic cross-section prepared. Analytical results will be compared to the proposed NR 720 soil standards for DRO. Either 100 ppm or 250 ppm (depending on soil conditions) cleanup guidelines will be considered when assessing follow-up actions. The results, interpretation, and discussion of recommended actions will be submitted to the WDNR for review as part of the investigation report/remedial alternatives review. Specific discussions of the individual tasks are presented in Sections 2 and 3. Detailed procedures are appended in this workplan.

Section 2

FILED INVESTIGATION AND LABORATORY ANALYSIS

2.1 Objective

- To investigate the extent of potentially contaminated soils in and around the former "C" excavation.

2.2 Scope of Work

- As required by OSHA, when performing work in potentially contaminated areas, prepare a site-specific Health and Safety Plan based on currently available information.

- Observe and document four soil borings extending to a depth of 15 feet or to groundwater, whichever is less. The approximate location of the soil borings are shown in Figure 2. Soil boring drilling will progress away from the former excavation where the 5,000 mg/kg TRPH-IR sample was collected. Soil samples will be collected at 2.5-foot intervals using a split-spoon sampler and will be described according to the Unified Soil Classification System. Boring locations are tentative and subject to change based on actual field conditions.

- Each soil sample will be smelled and visually observed to screen for the presence of hydrocarbons. In addition, small amounts of soils will be placed in sample jars containing approximately 100 mls water. After shaking the jars, each water/soil sample will be screened for an oil sheen.

- Select at least one sample from each boring for analysis of "extended" DRO. Sample selection will be based on the visual/olfactory and water screening tests.

- Two soil samples containing the highest probability of hydrocarbon contamination will be sent to the laboratory for TRPH-IR analysis.

- One soil sample collected for "extended" DRO will be split and submitted to the laboratory as a blind duplicate.

- One composite sample from the drum soil cuttings produced during drilling will be collected from the stockpile and will be analyzed for "extended" DRO to provide waste characterization for future disposal.

- Locate and document all borings in relation to permanent structures such as the building wall and the quench oil tanks.

Section 3

DATA INTERPRETATION AND REPORT PREPARATION

3.1 Objective

- To evaluate field and analytical data, and to prepare a report that will describe the nature and extent of hydrocarbon contamination at the site and that will provide the basis for developing an appropriate remedial response, if necessary.

3.2 Scope of Work

- Review soil sample results, site hydrogeology, and other relevant site information.
- Finalize all soil boring logs. These will be provided on WDNR forms in compliance with NR 141.
- Prepare one simplified geologic cross section from the boring information.
- Tabulate the results of the in-field and laboratory chemical analysis performed on the soil samples. Compare to proposed NR 720 standards.
- Prepare a figure illustrating the extent of petroleum constituents detected in soils.
- Compile the existing information and the maps, tables, and data generated above; prepare a draft report containing findings, conclusions, and recommendations concerning the extent of soil contamination and alternative follow-up actions.

APPENDIX A

FIELD METHODS

APPENDIX A

FIELD METHODS

Borings

The soil borings will be drilled using hollow-stem augers to avoid introducing drilling fluids into the formation and to minimize downhole migration of contamination. Logs of each borehole will be prepared at the time of the drilling on WDNR Soil Boring Log information forms. The finalized boring logs and documentation required under NR 141, Wisconsin Administrative Code, will be included in an appendix to the subsurface investigation report.

To minimize potential cross-contamination between boreholes, drilling equipment will be cleaned using a steam-cleaner. Steam rinse condensate will not be collected. Precautions will be taken to minimize potential contamination between samples. The split-spoon soil sampler will be cleaned prior to its initial use on-site and between samples. Cleaning procedures will involve the following:

- Scrubbing away soil material with a stiff brush in a trisodium phosphate soap solution.
- Double-rinsing in deionized water.

Soil samples will be collected using a split-spoon sampler at 1.5-foot intervals. Samples will be collected according to ASTM D-1586. The soil samples will be examined, and the subsurface materials will be visually classified according to the Unified Soil Classification System (USCS).

Investigation-Derived Waste

Drill cuttings are not expected to be hazardous wastes. These materials will be contained in 55 gallon drums, staged on-site, as instructed by Charter, and disposed of appropriately.

WISCONSIN
DEPT. OF NATURAL RESOURCES

George E. Meyer
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Southeast District - Annex Building
Post Office Box 12436
4041 N. Richards St.
Milwaukee, Wisconsin 53212
TELEPHONE: 414-961-2727
TELEFAX #: 414-961-2770

December 14, 1994

File Ref: 241282030
ERR ERP
Sheboygan Co.

Mr. Phil Dallosto
3600 W. Lake Avenue
Glenview, Illinois 60025

RE: Illinois Tool Works, Inc. (ITW)/Former Charter Manufacturing Facility
3704 N. Palmer Street
Milwaukee, WI 53212

Dear Mr. Dallosto:

The Wisconsin Department of Natural Resources has reviewed the following information specifically related to the above referenced property:

1. "Final Report Remedial Action of Contaminated Soils, Charter Manufacturing Company, Inc., Mellowes Division Site, 3704 N. Palmer Street, Milwaukee, WI 53201" report prepared by E & K Hazardous Waste Services, Inc., General Hauling, Inc., prepared for Quarles & Brady, 411 E. Wisconsin, Milwaukee, WI 53202-4497, November 7, 1991.

2. A letter dated April 4, 1994 and prepared by Environmental Science & Engineering, Inc. (ESE) presented soil sample results of sampling event conducted March 4, 1994 at the subject facility.

3. A "responsible person" letter was sent to Mr. Phil Dallosto on April 5, 1994 from the Department.

4. On June 8, 1994, a "follow up to telephone conversation" letter was sent by the Department to Mr. Thomas McElligott with Quarles & Brady and Mr. Arthur Harrington with Godfrey & Kahn. The letter outlined additional issues to be addressed in reference to the subject site.

5. Response/comment letters dated June 24, 1994 and November 14, 1994 were prepared and submitted by ESE for the referenced facility.

The Department cannot review the submitted data as requested for site closure until the following actions and data has been completed and presented for the ITW/Former Charter Manufacturing facility:

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1. The information requested by the Department in the letter dated June 8, 1994, in reference to the 1991 report, has not yet been addressed. Please refer to the attached letter.

2. Please submit all data related to the soil impacts in report form in accordance with ch. NR 700 Wisc. Admin. Code, include soil borings, soil lithology, and chain of custody records for all laboratory analytics.

Please submit the requested information as soon as possible. The Department will be able to determine upon review of the requested information, if additional investigation or remediation is warranted. If you have any questions, please contact me at (414) 961-2773 or Pam Mylotta at (414) 961-2726 or at the above address.

Sincerely,

Mary Lou Bozica

Mary Lou Bozica, Hydrogeologist, Environmental Repair Program

cc: SED casefile

WISCONSIN
DEPT. OF NATURAL RESOURCES

George E. Meyer
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Southeast District - Annex Building
Post Office Box 12436
4041 N. Richards St.
Milwaukee, Wisconsin 53212
TELEPHONE: 414-961-2727
TELEFAX #: 414-961-2770

June 8, 1994

File Ref: FID# 241282030
ERR/ERP
Milwaukee Co.

Mr. Thomas McElligott
Quarles & Brady
411 E. Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497

Mr. Arthur Harrington
Godfrey & Kahn
780 N. Water Street
Milwaukee, Wisconsin 53202-3590

Dear Mr. McElligott and Mr. Harrington:

RE: Illinois Tool Works (ITW)/Former Charter Manufacturing facility
3704 N. Palmer Street, Milwaukee, Wisconsin

I am sending you this letter as a follow-up to our telephone conversation today regarding environmental investigations done at the ITW facility. As I explained, the Department would require additional action (to address the requirements of s. 144.76, Stats.) at this site. The following issues need to be addressed:

1. With regard to the recent sampling under the floor (April '94), one soil sample was found to contain 366 mg/kg lead, indicating contamination by this substance. Additional subsurface samples should be taken in the area of this sample to evaluate the extent and degree of any lead contamination and to make recommendations for remedial actions. To assess this area, the Department also requires that a map be submitted, showing the locations of the samples taken in April (as well as subsequent sampling), and that rationale be provided for the sample locations and analytical parameters.

2. With regard to the 1991 work done on the east side of the building:

a. The rationale for the use of TRPH as an analytical parameter in the areas identified as "D" and "E" should be provided. The areas are adjacent to a concrete pad used for "drum storage" and "machine parts storage". The nature of the materials stored in this area was not described or compared to the choice of analyte.

b. Sample C-3A, in the Area "C", found 5000 mg/kg TRPH, indicating an increasing level of contamination with depth in this area. Additional sampling should be done to determine the extent and degree of contamination in this area. The WDNR recommends the use of both the "extended" DRO analysis and the TRPH analysis on each sample taken.

Printed on Recycled Paper

I hope our conversation and this letter have provided you with the information you need to move toward a resolution of the environmental issues at this site. If you have any further questions, please contact me at (414) 961-2726.

Sincerely,

Pamela A. Mylotta

Pamela A. Mylotta
Hydrogeologist, Environmental Repair Program

c: Mr. Joe Musuraca - ITW, Inc.
Mr. Phil Gallosto - ITW, Inc.
SED Casefile

FID 241 2820 30
ERR/ERP

Environmental
Science &
Engineering, Inc.

A CILCORP Company

November 14, 1994

Ms. Pamela A. Mylotta
State of Wisconsin
Department of Natural Resources
Southeast District
P.O. Box 12436
4041 N. Richards Street
Milwaukee, WI 53212

Re: Illinois Tool Works Inc. (ITW)/Former Charter Manufacturing Facility
3704 N. Palmer Street
Milwaukee, Wisconsin

Dear Ms. Mylotta:

ESE has performed additional soil borings in the interior of the above referenced facility to identify whether metals concentrations in soil beneath the floor exceed Wisconsin Numeric Standards. Six soil borings were performed at the locations illustrated on the enclosed site map. Borings were performed by using a concrete core drill to penetrate the floor and by use of a hand auger. Samples were selected for analysis at the apparent boundary between the subgrade and native soils, or prior to shallow groundwater, at a depth of 6 to 8 feet.

Discrete soil samples were analyzed for barium, cadmium, chromium (total), and lead on a totals and TCLP basis. None of the samples analyzed on a totals basis had concentrations which exceed either Direct Contact Numeric Standard (industrial and non-industrial). The TCLP concentrations were generally below detection limits and clearly did not exceed hazardous waste criteria.

Based on this sampling program, no further action appears to be warranted for subsurface metals at the facility. We would appreciate your review of this data, and a written response. If you have any questions, please let me know.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Michael J. Hoffman

Michael J. Hoffman, P.E.
Senior Environmental Engineer

MJH.ldw_ltr_DNR_ITWCharter_111494

cc: Mr. Phil Dallosto

8901 North Industrial Road Peoria, IL 61615 Phone (309) 692-4422 (800) 234-1239 Fax (309) 692-9364

Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

PAGE NUMBER: 1
REPORT DATE: 10-25-94
DATE RECEIVED: 10-06-94
PROJECT NUMBER: 591-5103

TO: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
8901 N. INDUSTRIAL ROAD
PEORIA, IL 61615
ATTN: MR. TONY WLODARSKI

CLIENT PROJECT NAME: ITW - SHAKEPROOF
CLIENT PROJECT NUMBER: 593-5267

ESE SAMPLE		19078*1	19078*2	19078*3	19078*4			
SAMPLE DATE		10/04/94	10/04/94	10/04/94	10/04/94			
DESCRIPTION	UNITS	B-107 8FT SOIL	B-108 8FT SOIL	B-109 6FT SOIL	B-110 6FT SOIL	METHOD NO.	DATE ANALYZED	ANALYST
TOTAL METALS								
BARIUM	MG/KG	28.5	13.1	52.0	69.7	6010	10-18-94	ELZ
CADMIUM	MG/KG	< 0.50	< 0.50	< 0.50	1.96	6010	10-18-94	ELZ
CHROMIUM	MG/KG	11.1	7.50	21.7	21.2	6010	10-18-94	ELZ
LEAD	MG/KG	10.5	12.3	45.4	13.4	6010	10-18-94	ELZ
TCLP METALS								
BARIUM	MG/L	0.630	0.520	0.439	0.690	6010	10-12-94	ELZ
CADMIUM	MG/L	< 0.005	< 0.005	< 0.005	0.035	6010	10-12-94	ELZ
CHROMIUM	MG/L	< 0.010	< 0.010	< 0.010	< 0.010	6010	10-12-94	ELZ
LEAD	MG/L	< 0.050	< 0.050	< 0.050	< 0.050	6010	10-12-94	ELZ

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

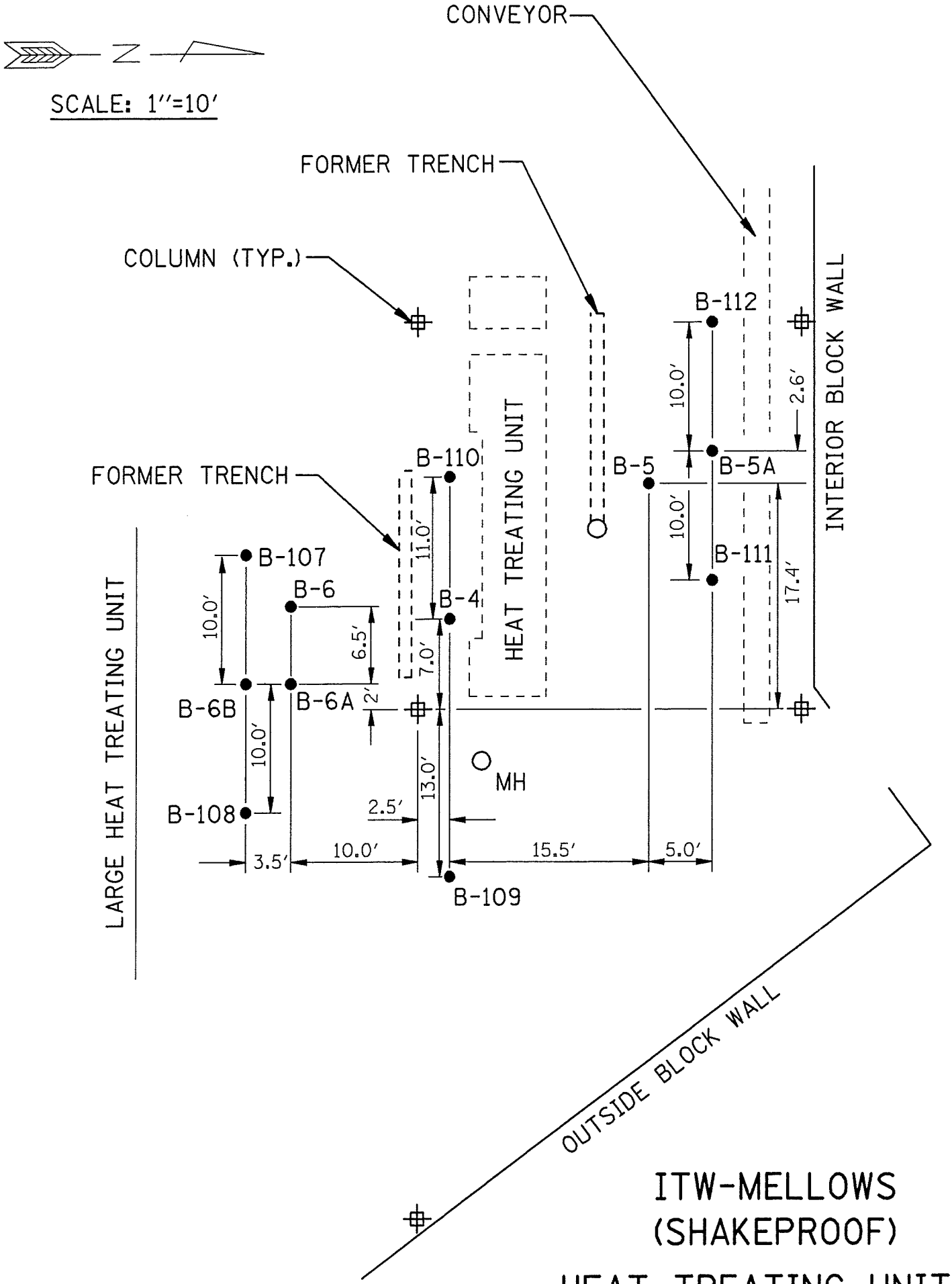
REPORT DATE: 10-25-94
DATE RECEIVED: 10-06-94
PROJECT NUMBER: 591-5103

TO: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
8901 N. INDUSTRIAL ROAD
PEORIA, IL 61615
ATTN: MR. TONY WLODARSKI

CLIENT PROJECT NAME: ITW - SHAKEPROOF
CLIENT PROJECT NUMBER: 593-5267

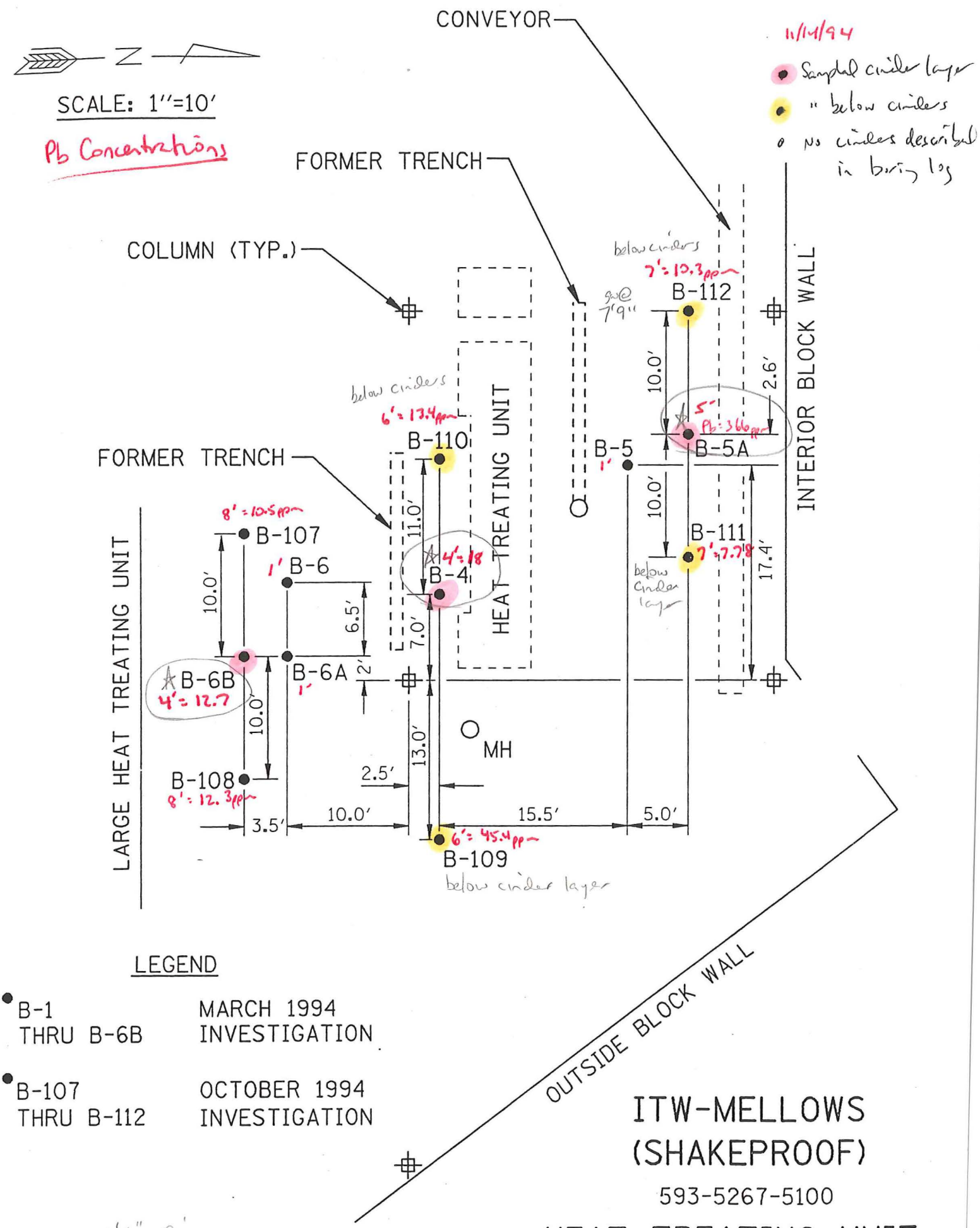
ESE SAMPLE		19078*5	19078*6			
SAMPLE DATE		10/05/94	10/05/94			
DESCRIPTION	UNITS	B-111 7FT SOIL	B-112 7FT SOIL	METHOD NO.	DATE ANALYZED	ANALYST
TOTAL METALS						
BARIUM	MG/KG	18.5	23.9	6010	10-18-94	ELZ
CADMIUM	MG/KG	1.15	< 0.50	6010	10-18-94	ELZ
CHROMIUM	MG/KG	10.7	12.3	6010	10-18-94	ELZ
LEAD	MG/KG	7.78	10.3	6010	10-18-94	ELZ
TCLP METALS						
BARIUM	MG/L	0.513	0.534	6010	10-12-94	ELZ
CADMIUM	MG/L	< 0.005	< 0.005	6010	10-12-94	ELZ
CHROMIUM	MG/L	< 0.010	< 0.010	6010	10-12-94	ELZ
LEAD	MG/L	< 0.050	< 0.050	6010	10-12-94	ELZ

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager



ITW-MELLOWS
(SHAKEPROOF)

HEAT TREATING UNIT
BORING LAYOUT



LEGEND

● B-1 THRU B-6B	MARCH 1994 INVESTIGATION
● B-107 THRU B-112	OCTOBER 1994 INVESTIGATION

ITW-MELLOWS (SHAKEPROOF)

593-5267-5100

HEAT TREATING UNIT BORING LAYOUT

gw @ 8'6" - 9'

Environmental
Science &
Engineering, Inc.
A CILCORP Company

FID 241 282030
ERR/ERP
MILW CO.

June 24, 1994

Ms. Pamela A. Mylotta
State of Wisconsin
Department of Natural Resources
Southeast District
P.O. Box 12436
4041 N. Richards Street
Milwaukee, WI 53212

Re: Illinois Tool Works (ITW)/Former Charter Manufacturing Facility
3704 N. Palmer Street
Milwaukee, Wisconsin

Dear Ms. Mylotta:

This letter is in response to your June 8, 1994 letter to legal counsel for both ITW and Charter and the April 5, 1994 letter to Mr. Phil Dallosto at ITW. Specifically, this letter responds to the information requests in both letters as follows:

April 5 Letter

1) Environmental Science & Engineering, Inc., on behalf of ITW, will perform additional investigations interior to the building to characterize the nature and extent of the metals identified in the preliminary investigation. The results of this additional investigation will identify activities which ITW and/or Charter will undertake. Mr. Michael Hoffman and Mr. Tony Wlodarski will be contacts at ESE.

   Independent to ESE's efforts related to the metals issue, Charter Manufacturing will be addressing the petroleum residue issue identified exterior to the building.

2) The additional investigation of the metals issues will be initiated by August 1, 1994. The proposed additional sampling locations are currently being identified. These will be coordinated with plant management to designate locations which will not interfere with production and which cannot be accessed due to equipment locations.

3) In terms of additional information related to the existing investigation, the enclosed sketch identifies the sampling locations for the March 1994 samples.

June 8, 1994 Letter

The only comment regarding the metals issue requests a location map and rationale for the locations and parameters. The general location was selected based on the historic operation of mechanical plating in this area. Specific sample locations were selected based on access - equipment locations and floor space restrictions. No significant access restrictions were encountered. The primary parameters were selected as the TCLP metals with several deleted as uncommon in plating operations (arsenic, selenium). Nickel was added because it is commonly associated with plating and is often targeted as a cleanup constituent in plating operations. Volatile organic compounds (VOC) were added to the parameter list based on elevated field PID readings. Based on the results of the investigation, we anticipate deleting analysis for nickel, silver, and VOCs in subsequent sampling.

With regard to the subsequent investigation at the facility, please inform us whether WDNR requires pre-approval of the investigation work plan. Specifically, are the sample locations, sample intervals, and parameters subject to your review and approval prior to implementation? In addition, do you need to be informed of specific dates for the performance of sampling activities?

We would appreciate your response to these questions by telephone, fax, or letter so that these investigations can be completed. If there are any questions, please contact the undersigned or Mr. Tony Wlodarski in our Peoria office.

Sincerely,

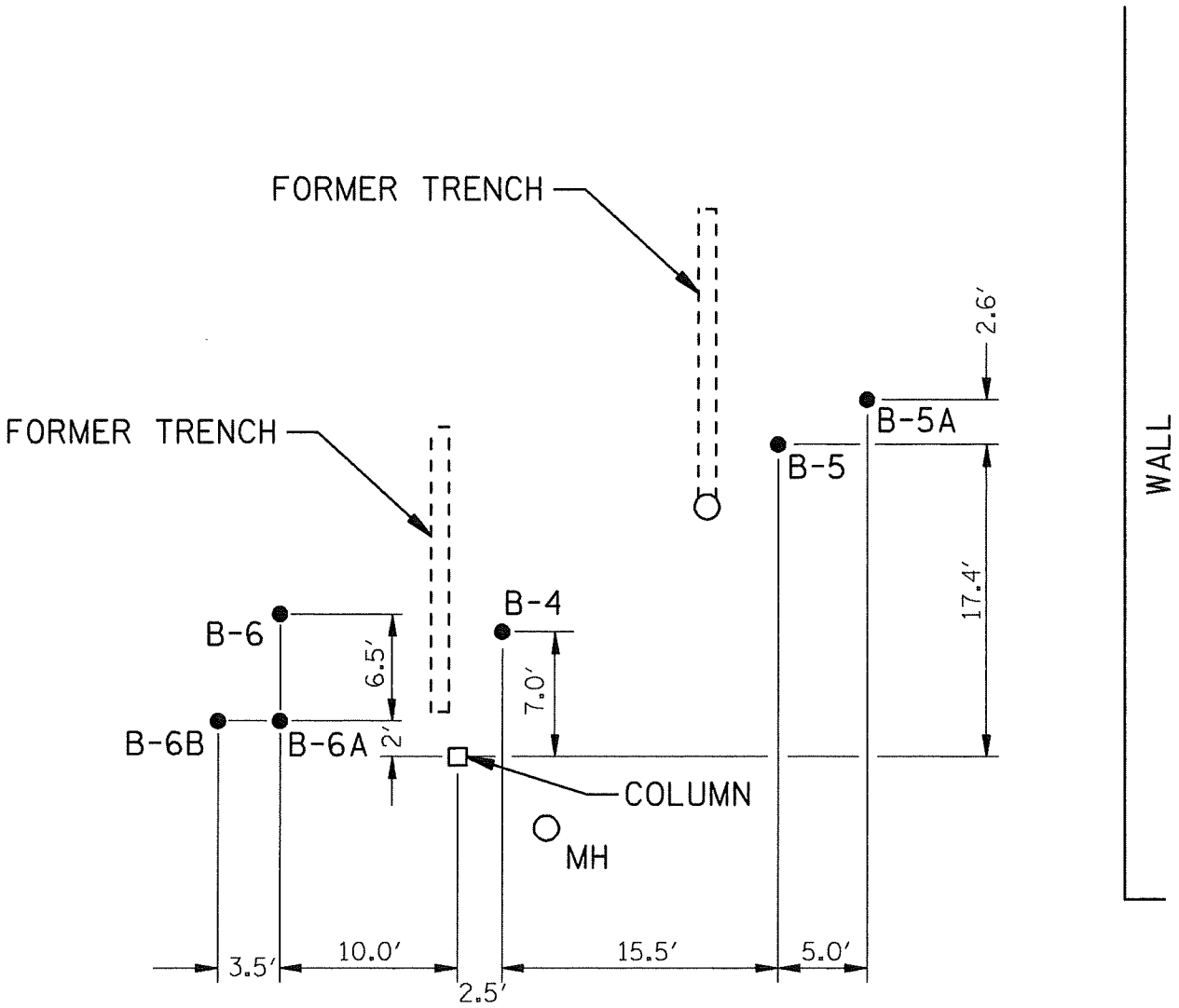
ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Michael J. Hoffman, P.E.
Senior Environmental Engineer

MJH.ldw_ltr_ITW_Mellowes_062094

cc: Mr. Phil Dallosto

SCALE: 1"=10'



ITW-MELLOWS
(SHAKEPROOF)

HEAT TREATING AREA
BORING LAYOUT

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Southeast District - Annex Building
Post Office Box 12436
4041 N. Richards St.
Milwaukee, Wisconsin 53212
TELEPHONE: 414-961-2727
TELEFAX #: 414-961-2770

George E. Meyer
Secretary

June 8, 1994

File Ref: FID# 241282030
ERR/ERP
Milwaukee Co.

Mr. Thomas McElligott
Quarles & Brady
411 E. Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497

Mr. Arthur Harrington
Godfrey & Kahn
780 N. Water Street
Milwaukee, Wisconsin 53202-3590

Dear Mr. McElligott and Mr. Harrington:

RE: Illinois Tool Works (ITW)/Former Charter Manufacturing facility
3704 N. Palmer Street, Milwaukee, Wisconsin

I am sending you this letter as a follow-up to our telephone conversation today regarding environmental investigations done at the ITW facility. As I explained, the Department would require additional action (to address the requirements of s. 144.76, Stats.) at this site. The following issues need to be addressed:

1. With regard to the recent sampling under the floor (April '94), one soil sample was found to contain 366 mg/kg lead, indicating contamination by this substance. Additional subsurface samples should be taken in the area of this sample to evaluate the extent and degree of any lead contamination and to make recommendations for remedial actions. To assess this area, the Department also requires that a map be submitted, showing the locations of the samples taken in April (as well as subsequent sampling), and that rationale be provided for the sample locations and analytical parameters.

2. With regard to the 1991 work done on the east side of the building:

a. The rationale for the use of TRPH as an analytical parameter in the areas identified as "D" and "E" should be provided. The areas are adjacent to a concrete pad used for "drum storage" and "machine parts storage". The nature of the materials stored in this area was not described or compared to the choice of analyte.

b. Sample C-3A, in the Area "C", found 5000 mg/kg TRPH, indicating an increasing level of contamination with depth in this area. Additional sampling should be done to determine the extent and degree of contamination in this area. The WDNR recommends the use of both the "extended" DRO analysis and the TRPH analysis on each sample taken.

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I hope our conversation and this letter have provided you with the information you need to move toward a resolution of the environmental issues at this site. If you have any further questions, please contact me at (414) 961-2726.

Sincerely,

Pamela A. Mylotta

Pamela A. Mylotta
Hydrogeologist, Environmental Repair Program

c: Mr. Joe Musuraca - ITW, Inc.
Mr. Phil Gallosto - ITW, Inc.
SED Casefile

ITW Shakeproof Industrial Products
An Illinois Tool Works Company
Mellowes Plant
PO Box 12345
3704 N. Palmer Street
Milwaukee, Wisconsin 53212
Phone 414.264.5090 Fax 414.264.5171

ITW Shakeproof

May 3, 1994

Ms. Pamela Mylotta
c/o ERRP/ERP
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53212

Re: PID #241282030
ITW Mellowes
3704 N. Palmer Street
Milwaukee, WI 53212

Dear Ms. Mylotta:

This letter is in response to your letter of April 5, 1994 regarding the above-referenced facility. The subject property is currently leased to ITW. The compounds identified at the facility predate ITW's ownership of the Mellowes Company. The investigation performed at the property, a copy of which was provided to WDNR, was for the purposes of identifying environmental issues at the property within the provisions of the acquisition by ITW. As such, ITW is currently in discussion with the landlord and the former owners of the business regarding the lead role for the further investigation to be performed at the property.

By this letter, we would like to request a 60-day extension of the submittal requirements to July 5, 1994. This time extension is required to allow these arrangements to be resolved, to develop the appropriate work plans, and to achieve a consensus of the parties involved.

We would appreciate a timely, favorable response to this request.

Very truly ycurs,

J Musuraca

Joseph F. Musuraca
General Manager

JFM/lle

FILE

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

George E. Meyer
Secretary

Southeast District - Annex building
Post Office Box 12436
4041 N. Richards St.
Milwaukee, Wisconsin 53212
TELEPHONE: 414-961-2727
TELEFAX #: 414-961-2770

April 5, 1994

File Ref: FID# 241282030
ERRP/ERP

ITW
Attn: Mr. Phil Gallosto
3600 West Lake Avenue
Glenview, Illinois 60025

Dear Mr. Gallosto:

RE: ITW Mellowes facility, 3704 North Palmer Street, Milwaukee 53212

The Wisconsin Department of Natural Resources (WDNR) has been notified that soil contamination was discovered at the above referenced location. The purpose of this letter is to inform you of your legal responsibilities to address this situation.

The WDNR proceeds in contamination cases under the authority of s. 144.76, Wisconsin Statutes, commonly referred to as Wisconsin's Hazardous Substance Spill Law. The definition of "hazardous substance" as found in s. 144.01(4m), Wisconsin Statutes, includes any discharged solid, semisolid, liquid or gaseous substance, such as heavy metals, that can cause harm to the environment or human health.

> **Wisconsin Statute 144.76(2a) states:** "A person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance shall notify the Department immediately of any discharge not exempt under sub. (9)."
>
> **Wisconsin Statute 144.76(3) states:** 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 this state."

Because you are the legal owner of a property where a hazardous substance has been released to the environment, the WDNR identifies you as the party responsible for taking the actions necessary to restore the environment. You are required to:

1. Conduct an investigation to determine the extent of contamination, the potential for groundwater impacts and the remedial action(s) necessary to clean up contaminated soil and groundwater.

2. Develop and carry out a remedial action plan for the site in accordance with state laws, regulations and guidance.

3. Treat or dispose of all remediation residuals (products, soils, air emissions, wastewater or sludges) in compliance with all applicable federal, state and local laws and regulations.

The soil analysis data which was received by the WDNR today indicates that there are elevated levels of cadmium and lead present at depths of four and five feet beneath the building floor, but that no groundwater had been encountered to the

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boring depths of six feet. The extent of the contamination has not yet been delineated.

Due to the WDNR workload, it is necessary to rank all contamination cases for review priority. The highest priority sites have assigned WDNR project managers who are actively reviewing and approving investigation and remediation plans. Lower priority cases do not always have assigned WDNR project managers, however, responsible parties are required to proceed with investigation and clean-up efforts. Based on the information currently known about this site, the WDNR has assigned it a lower priority status. Although your case will not likely receive direct WDNR oversight, you should proceed to submit all plans and reports, as well as quarterly status updates, to this office. The WDNR will notify you if active oversight is to be given to your site.

The WDNR suggests that you have a qualified environmental engineer or hydrogeologist direct the remedial investigation, assess the environmental impact and coordinate the implementation of a clean-up program. A document titled "Selecting an Environmental Consultant" and a consultant listing are enclosed for your convenience. Your investigation should follow the requirements contained in the WDNR's latest "Remedial Investigation Checklist" (enclosed). You or your consultant may also request additional remedial response guidance documents from this office.

Within 30 days of receiving this letter, you should provide the WDNR with the following information:

1. The name of the individual/firm who will be directing the remedial actions at this site.

2. The date the remedial investigation will begin (or the date the next work phase will begin, if applicable).

3. Any existing investigation or remediation documentation that you have not already submitted to the WDNR.

Please be advised that, if you fail to respond within the time period stated above, or if you fail to take appropriate action, the WDNR has the authority to proceed with any of the following actions:

1. The WDNR may pursue further enforcement actions to require the appropriate remedial response to comply with s. 144.76, Wis. Stats. Violation of s. 144.76, Wis. Stats. may ultimately result in forfeitures of up to $5,000 per day of violation.

2. The WDNR has the authority, under s.144.76(7), Wis. Stats., to take actions necessary to remediate the site and to seek reimbursement for all actual and necessary expenditures from responsible parties.

3. The WDNR may recommend that the site be included on the CERCLIS, for evaluation through the federal Superfund program. The EPA has the authority to carry out investigation and remediation at sites which meet the program criteria, and to seek reimbursement for its expenditures from responsible parties.

You should send the information requested in this letter and future submittals to:

Ms. Pamela Mylotta
c/o ERRP/ERP
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, Wisconsin 53212

Your cooperation in this matter will be appreciated. If you have any questions about this letter, please contact me at (414) 961-2773. **In addition, please reference all correspondence on this site to the FID# (Facility Identification number) indicated at the top of this letter.**

Sincerely,

Linda Michalets

Linda Michalets
Environmental Repair Specialist

Enclosures: Selecting an Environmental Consultant
Consultants Listing
Remedial Investigation Checklist

c: SED Case File
Mr. Art Harrington

FID# 241282030

INSIDE BLDG

CHARTER/MELLOWES/ITW #2
3704 N PALMER
MILWAUKEE

Site Screening Worksheet

Answering yes to any of the questions below indicates the site has a high potential of causing or threatening to cause environmental pollution (mark yes in Box V. on form 4430-4).

1. Evidence (attributable to site) of groundwater within 1200 feet exceeding a preventive action limit (PAL) for any substance of public health concern or public welfare concern listed in ss. NR 140.10 and 140.12. — Yes [] No [X]

2. Evidence (attributable to site) of surface water within 1200 feet exceeding water quality standards contained in chs. NR 102, 103 and 104. — Yes [] No [X]

3. Evidence (attributable to site) of air within 1200 feet exceeding air quality standards contained in chs. NR 400 to 499. — Yes [] No [X]

4. Qualitative analysis of: Size of site, depth to groundwater, surface and underlying soils, distance to nearest private or public water supply, population within ¼ mile, type or characteristics and volume of waste, proximity to protected natural resources or environments, or any other appropriate factors. Some examples:

Soils
Pb 366 mg/kg
Cd 2.37 + 6.05 mg/kg

   a. Waste disposal area is less than 5 acres and nearest water supply used for human consumption is within 600 feet.

No gw encountered

   b. Waste disposal area is between 5 and 10 acres and nearest water supply used for human consumption is within 1200 feet.

   c. There is insufficient (less than 5 feet) confining layer of silt or clay separating the bottom of the site from bedrock or groundwater table.

   d. There is a significant amount of hazardous material at the site.

   e. There is a protected natural resource or environment nearby.

Based on the above, is there a reason to believe the environment and/or public health is at risk of contamination at this site? — Yes [] No [X] Unknown []

If Yes, then site shall be classified High Potential under ss.144.442 or ss.144.76. Unanticipated environmental consequences at a landfill fall under ss.144.442. Most other significant releases of hazardous materials fall under 144.76.

ss.144.442 []
ss.144.76 []

Environmental
Science &
Engineering, Inc.
A CILCORP Company

DEPARTMENT OF
NATURAL RESOURCES
SED
1994 APR 5 PM 2:27

April 4, 1994

VIA: UPS Overnight

Ms. Linda Michalets
Wisconsin Department of Natural Resources
Environmental Response Fund
4041 North Richards Street
Milwaukee, Wisconsin 53212

RE: Soil Sampling Results
ITW Mellowes facility
Palmer Street
Milwaukee, Wisconsin

Dear Ms. Michalets:

Our firm has been retained by ITW for the environmental analysis of the Mellows facility located in Milwaukee, Wisconsin. ITW purchased the Mellowes business from Charter Manufacturing, Inc. in April of 1991. In connection with this purchase, ITW entered into a long-term sublease of the property at this location.

As per your discussion with Mr. Harrington on April 1, 1994, this correspondence has been prepared to summarize the results of soil sampling conducted at the above referenced facility.

Soil sampling was conducted below the floor of the facility, adjacent to a floor drain system in the heat treating area of the facility on March 4, 1994. The floor drain system in this area was formerly utilized as part of a plating operation that was terminated prior to ITW's acquisition of the Mellowes operation. Access to the soil below the floor was accomplished by coring through the floor with a 6-inch diameter concrete core. Samples were collected using a hand auger and necessary extensions to reach the completion depth. Samples were collected in 6-inch increments from below the floor to the completion depth of approximately 6 feet.

One soil sample from sample location B-4 (4-foot depth) and B-5A (5-foot depth), and two samples from B-6B (2 and 4 feet), were submitted for laboratory analysis based on one of the following screening criteria: elevated photoionization detector (PID) response; a visual indication of contamination; or without a PID response or visual indication, the sample was collected at logical changes in lithology. Samples from B-4, B-5A, and B-6B were submitted for the analysis of total and TCLP metal concentrations of barium, cadmium, chromium, lead, silver, and nickel (EPA Method No. 6010). Volatile organic compound analysis (EPA Method 8240)was conducted on the sample from B-4 and both increments from boring B-6B.

PID readings of the sample increments indicated elevated readings from a few increments which is represented by the sample from the two foot increment in B-6B. No visual indications of contamination were noted in the samples. The remaining samples submitted for analysis were chosen based on the changes in the soil lithology which indicated the transition from fill material beneath the building to the natural soil.

Acetone was the only volatile organic compound detected in the soil samples submitted for laboratory analysis. The acetone concentrations ranged from 14 ug/kg (ppb) in the two foot increment of boring B-6B to 32 ppb in the four foot increment of B-6B. The acetone concentrations detected are qualified since acetone was also detected in the laboratory method blank. Laboratory Analytical Data Reporting Forms for the samples are provided in Attachment 1.

Barium, cadmium, chromium, lead, and nickel were detected in both the total and TCLP fractions of the samples submitted for analysis. As summarized in Table 1, the TCLP metal concentrations detected in the samples were below the RCRA TCLP concentrations. Laboratory Analytical Data Reporting Forms for the samples are provided in Attachment 1.

If you have any questions about the enclosed data or the sampling conducted at the facility, please do not hesitate to contact me at 309-692-4422. In any event, we understand that the Department will be sending a letter describing our client future responsibilities as they relate to this matter.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Anthony Wlodarski

Anthony Wlodarski, P.G.
Senior Hydrogeologist

attachments

cc: P. Dallosto (ITW)
A. Harrington (G&K)
M. Graefe (WDNR)
M. Hoffman (ESE)

TABLE 1
SOIL SAMPLE ANALYTICAL DATA SUMMARY
MARCH 4, 1994

ITW Mellowes facility
Milwaukee, Wisconsin

Sample Designation Laboratory Designation		PT-1 16802*1	PT-2 16802*3	PT-3 16802*4	
Total Metals	Units				
Barium	mg/kg	14.3	50.8	163	
Cadmium	mg/kg	6.05	<0.50	2.37	
Chromium	mg/kg	7.01	19.3	18.6	
Lead	mg/kg	18	12.7	366	
Nickel	mg/kg	7.99	22.1	13.1	
TCLP Metals					RCRA Limit
Barium	mg/l	0.593	0.873	1.94	100
Cadmium	mg/l	0.361	<0.005	0.076	1.0
Chromium	mg/l	0.025	<0.010	0.025	5.0
Lead	mg/l	0.205	<0.050	3.12	5.0
Nickel	mg/l	0.095	0.069	0.129	NS

Notes: NS - No applicable standard.

ATTACHMENT 1

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An **IEPA** Contract Laboratory

PAGE NUMBER: 1
REPORT DATE: 03-22-94
DATE RECEIVED: 03-05-94
PROJECT NUMBER: 591-5103

RONMENTAL SCIENCE & ENGINEERING, INC.
N. INDUSTRIAL ROAD
IA, IL 61615
MIKE HOFFMAN

IENT PROJECT NAME: ITW - MELLOWES
IENT PROJECT NUMBER: 593-5267

E SAMPLE		16802*1	16802*3	16802*4			
MPLE DATE		03/04/94	03/04/94	03/04/94			
SCRIPTION	UNITS	B-4 4' SOIL	B-6B 4' SOIL	B-5A 5' SOIL	METHOD NO.	DATE ANALYZED	ANALYST
LP METALS							
RIUM	MG/L	0.593	0.873	1.94	6010	03-10-94	ELZ
DMIUM	MG/L	0.361	< 0.005	0.076	6010	03-10-94	ELZ
ROMIUM	MG/L	0.025	< 0.010	0.025	6010	03-10-94	ELZ
AD	MG/L	0.205	< 0.050	3.12	6010	03-10-94	ELZ
LVER	MG/L	< 0.010	< 0.010	< 0.010	6010	03-10-94	ELZ
CKEL	MG/L	0.095	0.069	0.129	6010	03-10-94	ELZ
TAL METALS							
RIUM	MG/KG	14.3	50.8	163	6010	03-17-94	ELZ
DMIUM	MG/KG	6.05	< 0.50	2.37	6010	03-17-94	ELZ
ROMIUM	MG/KG	7.01	19.3	18.6	6010	03-17-94	ELZ
AD	MG/KG	18.0	12.7	366	6010	03-17-94	ELZ
LVER	MG/KG	< 1.00	< 1.00	< 1.00	6010	03-17-94	ELZ
CKEL	MG/KG	7.99	22.1	13.1	6010	03-17-94	ELZ

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

RONMENTAL SCIENCE & ENGINEERING, INC.
N. INDUSTRIAL ROAD
IA, IL 61615
MIKE HOFFMAN

PAGE NUMBER: 2
REPORT DATE: 03-22-94
DATE RECEIVED: 03-05-94
PROJECT NUMBER: 591-5103

IENT PROJECT NAME: ITW - MELLOWES
IENT PROJECT NUMBER: 593-5267

E SAMPLE		16802*8	16802*9	16802*10			
MPLE DATE		03/04/94	03/04/94	03/04/94			
SCRIPTION	UNITS	B-4 4' SOIL	B-6B 2' SOIL	B-6B 4' SOIL	METHOD NO.	DATE ANALYZED	ANALYST
LATILE ORGANIC COMPOUNDS							
LOROMETHANE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
OMOMETHANE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
NYL CHLORIDE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
LOROETHANE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
THYLENE CHLORIDE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
ETONE	UG/KG	18B	14B	32B	8240	03-15-94	NEB
RBON DISULFIDE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1-DICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1-DICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
ANS-1,2-DICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
LOROFORM	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
2-DICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
BUTANONE	UG/KG	< 10	< 10	10	8240	03-15-94	NEB
1,1-TRICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
RBON TETRACHLORIDE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
NYL ACETATE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
OMODICHLOROMETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB

= Compound also found in blank.

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Lab Fax (309) 692-5232

An IEPA Contract Laboratory

RONMENTAL SCIENCE & ENGINEERING, INC.
N. INDUSTRIAL ROAD
IA, IL 61615
MIKE HOFFMAN

PAGE NUMBER: 3
REPORT DATE: 03-22-94
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PROJECT NUMBER: 591-5103

IENT PROJECT NAME: ITW - MELLOWES
IENT PROJECT NUMBER: 593-5267

E SAMPLE		16802*8	16802*9	16802*10			
MPLE DATE		03/04/94	03/04/94	03/04/94			
SCRIPTION	UNITS	B-4 4' SOIL	B-6B 2' SOIL	B-6B 4' SOIL	METHOD NO.	DATE ANALYZED	ANALYST
LATILE ORGANIC COMPOUNDS (CONT'D)							
2-DICHLOROPROPANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
S-1,3-DICHLOROPROPENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
ICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
BROMOCHLOROMETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,2-TRICHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
NZENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
ANS-1,3-DICHLOROPROPENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
OMOFORM	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
METHYL-2-PENTANONE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
HEXANONE	UG/KG	< 10	< 10	< 10	8240	03-15-94	NEB
TRACHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
1,2,2-TETRACHLOROETHANE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
LUENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
LOROBENZENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
HYLBENZENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
YRENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
LENES,TOTAL	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB
S-1,2-DICHLOROETHENE	UG/KG	< 5	< 5	< 5	8240	03-15-94	NEB

Report Approved by: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Senior Project Manager

Environmental Science & Engineering, Inc.
A GILCORP Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 591-5103
Due Date: 3-17-94

Chain of Custody R

№

Company: ESE - PEORIA (HISCHKE)
Address:
Phone #: ( ) - Fax #: ( ) -
P.O. #:
Client Contact: M.J. HOFFMAN
Project # / Location: ITW - MELLOWES

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other :

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH

Analyses

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	VOCs 8020	Total & Trip Metals *											Have for Di	Con
MW-1	2	1oz	G	1	3/03/94		1	16802-5													✓	
MW-1	2	8oz		1			1	-7 JK													✓	
MW-2	2	1oz		1			1	-6													✓	
MW-2	2	8oz		1			1														✓	
MW-3	2	1oz		1			1	-9													✓	
MW-3	2	8oz		1			1														✓	
B-4, 4'	2	1oz		1	3/04/94		1	-1	✓											A		Poss.
B-6b, 2'	2	1oz		1			1	-2	✓											B		"
B-6b, 4'	2	1oz		1			1	-3	✓											A		"
B-4, 4'	2	8oz		1			1	-1		✓										A		
B-5a, 5'	2	8oz		1			1	-4		✓										B C		
B-6b, 4'	2	8oz		1			1	-3		✓										A		

login per M. Hoffman 3/15/94 BQ

Relinquished By:	Date: 3-05-94 Time: 10:45	Received By:	Date: -- -- Time: :
Relinquished By:	Date: -- -- Time: :	Received For Lab By: James Conyers	Date: 3-5-94 Time: 10:45

TURNAROUND TIME:
☐ RUSH: _____ day turnaround
☑ ROUTINE

FOR LAB USE
Samples Receiv
☐ Yes
☐ No

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained

SPECIAL INSTRUCTIONS: * BARIUM, CADMIUM, CHROMIUM, LEAD, NICKEL, ZINC.

411 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497
414/277-5000
FAX 414/277-5591

Attorneys at Law in
Milwaukee and Madison, Wisconsin
West Palm Beach, Naples and
Fort Lauderdale, Florida
Phoenix, Arizona

Quarles & Brady

RECEIVED
NOV 25 1991
D.N.R. SED Hqtrs.
Milwaukee, WI

November 21, 1991

Ms. Margaret M. Graefe
Wisconsin Department of Natural Resources
2300 N. Martin Luther King, Jr. Drive
Milwaukee WI 53212

Re: Former Mellowes Division Site
3704 N. Palmer Street

Dear Ms. Graefe:

Enclosed is a report from E&K Hazardous Waste Services, Inc. regarding the above-referenced site.

As discussed in detail in the report, there were five isolated areas at the site which appeared to be impacted by petroleum products. Impacted soils were excavated in each of these areas. However, it was impractical to remove all of the potentially impacted soils at two locations. E&K's opinion is that the soils do not present a significant risk to human health or the environment. Consequently, we are requesting issuance of a "No Further Action" letter with respect to this site.

If you have any questions, please call. Your cooperation is appreciated.

Very truly yours,

QUARLES & BRADY

Thomas P. McElligott

280:mp
enc.

RECEIVED

NOV 25 1991

D.N.R. SED Hqtrs.
Milwaukee, WI

Final Report
Remedial Action of Contaminated Soils
Charter Manufacturing, Co., Inc.
Mellowes Division Site
3704 N. Palmer Street
Milwaukee, WI 53201

November 7, 1991

Christopher M. Hohol
Project Manager

Jerome Raeder, C.H.M.M.
General Manager

Final Report
Remedial Action of Contaminated Soils
Charter Manufacturing Co., Inc.
Mellows Division Site
3704 N. Palmer Street
Milwaukee, WI 53201

Prepared for:

Quarles & Brady
411 E. Wisconsin
Milwaukee, WI 53202-4497

Prepared by:

E & K Hazardous Waste Services, Inc.
2905 Paine Avenue
Sheboygan, WI 53081
E & K Project #11872

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2.1 Site Location 1
2.2 Site Description 1

3.0 Regional Setting
3.1 Geology 1
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8.1 Laboratory Results E & K
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b. 7/31/91
8.2 Wastestream 7.062 Contaminated Soils
8.3 Field Procedures - Monitoring and Sampling
8.4 Shipping Documents

Ownership of Documents

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of E & K Hazardous Waste Services, Inc., and Quarles & Brady and is not to be used in whole or in part without the written authorization from E & K Hazardous Waste Services, Inc. and/or Quarles & Brady.

1.0 Project Background

On May 13, 1991, E & K Hazardous Waste Services, Inc. was retained by Mr. Thomas P. McElligott of Quarles & Brady to perform remediation of contaminated soils for Charter Manufacturing Co., Inc. at the Mellowes Division Site, 3704 N. Palmer Street, Milwaukee, Wisconsin. The site had been the subject of a Phase II Environmental Audit performed by Environmental Science and Engineering,Inc. (ESE). The audit established areas of contamination based on nine (9) soil samples collected in April 1991 by ESE. On June 24, E & K conducted a site investigation and established a scope of work to remediate the site of oil contaminated soils.

2.0 Physical Setting

2.1 Site Location

The Mellowes Division Site is located at 3704 N. Palmer Street, Milwaukee, Wisconsin. The site is located in the SE 1/4, NE 1/4, Sect. 8, T7N-R22E, City of Milwaukee.

2.2 Site Description

The site is bordered to the north and east by railroad tracks, to the south by a residential area and a dairy, and to the west by North palmer Street.

The property contains one building, the 80,000 square foot Mellowes Company facility. A tank system, consisting of two (2) above ground tanks, is located on the northeast side of the building. Also located on the northeast side of the building is a concrete pad containing two (2) electrical transformers. Along the east side of the building is a large paved area and loading dock. (See Map II on Page 9 for locations.)

3.0 Regional Setting

3.1 Geology

The engineering qualities of soils for this area are primarily heavy clay which are not capable of good drainage. Classification from SCS is that this area is an Ozaukee-Morley-Mequon silt loam. The unified soil classification is CH CL for clays below the surface[1]. These clay soils tend to prevent water from percolation into glacial till subsoils. Soils encountered during excavation were mixed fill for the first eight to twelve inches and natural clays from twelve inches down to four feet deep. None of the excavations on site went beyond four feet deep.

[1]Source Information: (SCS soils report 1971 and Mr. Dave Roberts, Soil Scientist for the City of Milwaukee.)

3.2 Hydrogeology

Map III, UW USGS Hydrological Map shows water well levels at 600 ft. above sea level and ground elevations at 680 ft. above sea level. Drinking water for the City of Milwaukee is drawn from Lake Michigan. Lake Michigan is 2.5 miles east of this site.

4.0 Scope of Work

The scope of work that was established to remediate the contaminated soils consisted of:

- Excavation of the contaminated soils
- Field screening of the excavated areas to determine the extent that the excavation need be continued
- Verification samples collected from the excavation and taken to a state certified laboratory to quantify the amount of contamination, if any, that remained in the excavated areas
- Removal of any additional soils that laboratory results indicated as having more than 10 ppm total petroleum hydrocarbon levels
- Resampling of excavated areas to confirm that all the contaminated soil had been removed
- Approval and transportation of contaminated soil to Parkview Disposal Facility, Menomonee Falls, Wisconsin

5.0 Remediation

On June 25, 1991 excavation work began. The first area to be excavated was the northeast corner of Area "A" located near the concrete pad and where the quench oil tanks were located. The excavation in this area was 4 feet wide by 9 feet long by 4 feet deep. The excavation followed north along the tracks next to the building. Approximately 5.3 cubic yards of contaminated soil were removed from this excavation area. (See Map II on Page 8 for the location of the excavated area.)

On June 25 excavation began on Area "B", located to the northeast of the quench oil tanks. The excavation in this area was 2 feet wide by 12 feet long by 16 inches deep. Area "B" was bordered by an active main railroad line. Due to the possible disturbance of the integrity of the railroad bed, the excavation was limited. Approximately 1.2 cubic yards of contaminated soil were removed from this excavation. (See Map II on Page 8 for location of the excavated area.)

On June 26, 1991, excavation began on Area "C". Area "C" was located south of the oil quenching tank. The excavation was 4 feet wide by 15 feet long by 4 feet deep. Approximately 8.8 cubic yards of contaminated soil were removed from this excavation. (See Map II on Page 8 for location of the excavation.)

On June 26 excavation began on Area "D", which was located to the north and east of the concrete pad along the outer wall south of the electrical transformers. The excavation was 2 feet deep by 15 feet wide by 25 feet long. The excavation continued south of the pallet storage area northeast of the spur track. It was decided during excavation that the contamination extended under the tracks. Due to the fact that the spur was no longer used, a section was removed and facilitated excavation of contaminated soil. Approximately 27.2 cubic yards of contaminated soil were removed from this excavation. (See Map III on Page 8 for location of the excavated area.)

On June 27, 1991, excavation began on area "E", which was located north of the loading dock and east of the concrete pad which was used to store parts and machines. The area excavated was 6 feet wide by 21 feet long by 4 feet deep. A small pocket of contamination was located and removed about midway up the east side of this excavation, the pocket was 6 feet wide by 5 feet long by 4 feet deep. The railroad spur was removed to facilitate excavation throughout this area. Some low level contamination was evident under the concrete pad west of Area "E". Excavation in this area was not pursued due to unsafe work conditions which would result from digging under the pad. Approximately 23.0 cubic yards of contaminated soil were removed from this excavation. (See Map III on page 8 for location of the excavated area.)

For all of the areas of excavation, field screening and headspace samples were taken continuously to determine the extent of contamination and expand the excavation where needed. For a full description of the procedures used by E & K for field screening of soils, see attachment 7.5.

On June 28, 1991, the areas of excavation were sampled for laboratory analysis. The samples were forwarded to the laboratory for TPH analysis. The results are shown in Table 1 on page 4. (See attachment 8.1a for chain of custody and analytical results.)

Table 1

Field ID	Area	Sample Location	Sample #	Test	ppm	Depth
C-1	Area A	3' from east wall of excavation 2' from north wall of the excavation	7683	TPH-IR	12.0	4'
C-2	Area B	14" from tank pad and 3' from north excavation wall	7684	TPH-IR	480.0	16"
C-3	Area C	3' from plant wall and 4' from south excavation wall	7685	TPH-IR	21.0	4'
C-4	Area D	3' from pad and 5' from north excavation wall	7686	TPH-IR	330.0	14"
C-5	Area E	3' from pad and 6' from north excavation wall	7687	TPH-IR	12.0	5'
C-6	Area E	3' from pad and 5' from south excavation wall	7688	TPH-IR	14.0	4'

Samples Collected: June 28, 1991
Laboratory: ORTEK Environmental Laboratory, Green Bay, Wisconsin
State Certification: 114375
Type of test: TPH-IR, July 11, 1991

On July 31, 1991, E & K returned to the site to excavate the areas that the samples taken on June 28 indicated to have high concentrations of contamination. All of the areas were excavated to the point where field screening indicated that no contamination was present. On September 5, 1991, E & K technicians resampled the areas of excavation to determine the effectiveness of the soil remediation. The samples were forwarded to laboratory for TPH analysis. The results are in Table 2 on page 5. (See attachment 8.1b for chain of custody forms and analytical results.)

Table 2

Field ID	Area	Sample Location	Sample #	Test	ppm	Depth
C-1A	Area A	3' from east wall of excavation 2' from north wall of the excavation	7919	TPH-IR	11.0	5'
C-2A	Area B	14" from tank pad and 3' from north excavation wall	7920	TPH-IR	15.0	28"
C-3A	Area C	3' from plant wall and 4' from south excavation wall	7921	TPH-IR	5000.0	5'
C-4A	Area D	3' from pad and 5' from north excavation wall	7922	TPH-IR	< 5.9	26"
C-5A	Area E	3' from pad and 6' from north excavation wall	7923	TPH-IR	< 5.8	5'
C-6A	Area E	3' from pad and 5' from south excavation wall	7924	TPH-IR	< 5.8	5'

Samples Collected: July 31, 1991
Laboratory: ORTEK Environmental Laboratory, Green Bay Wisconsin
State Certification: 115473
Type of test: TPH-IR August 15, 1991

The new sample readings were all considerably lower with the exception of C3-A, Sample 7921, which read 5000 ppm. Table 3 shows the difference in ppm reading between Sample C-3 taken on June 28, 1991 and Sample C-3A taken on July 31, 1991.

Table 3

Field ID	Sample Location	Area	Sample #	Date	ppm	Depth
C-3	3' from plant wall and 4' from south excavation	Area C	7685	6/28/91	21.0	4'
C-3A	3' from plant wall and 4' from south excavation	Area C	7921	7/31/91	5000.0	5'

On September 6, 1991, the excavation sites were restored to grade with clean fill and crushed stone.

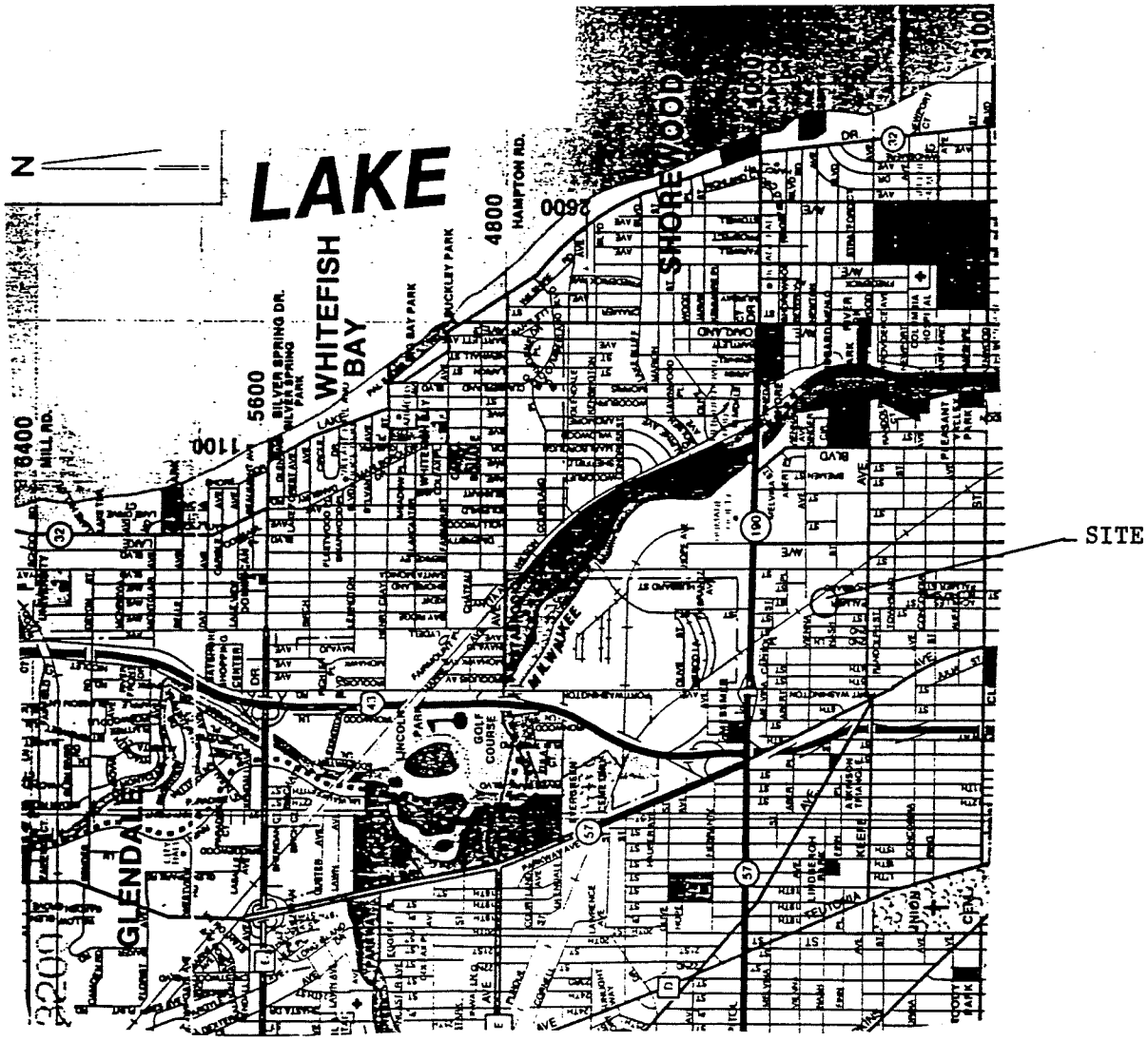
All of the contaminated soil excavated from the site, approximately 66 cubic yards, was placed into three 20 yard rolloff containers. The containers were covered with supported tarps and stored until they were profiled into a suitable disposal site. E & K wastestream 7.062 was approved into Parkview Landfill under approval code WMA 154225, and the contaminated soil was transported to this facility. (See Attachment 8.4 for shipping documents.)

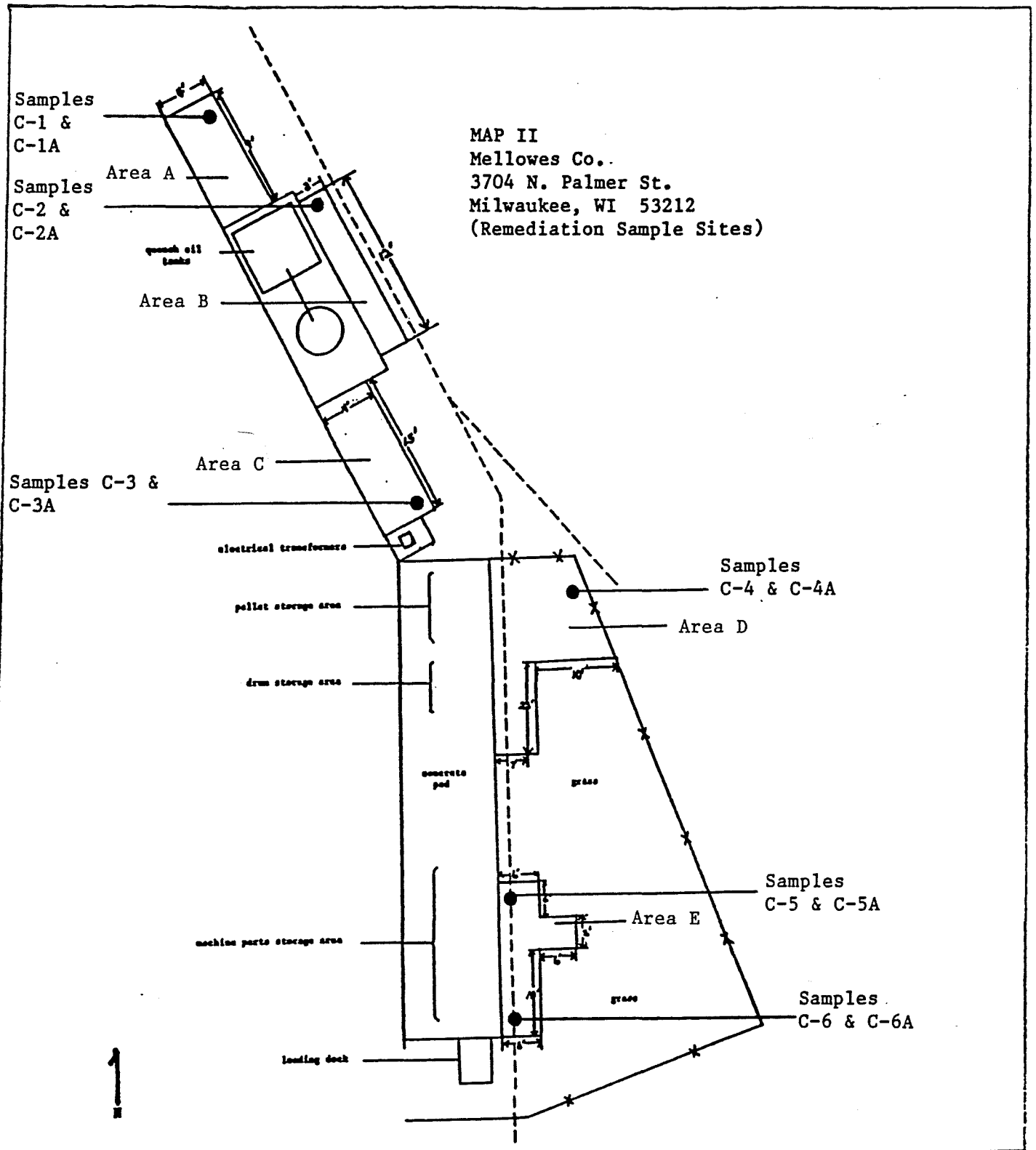
6.0 Findings and Conclusions

Based on the results of analysis received, E & K views all of the areas of excavation at this site as clean with the exception of Area "C" which was excavated to the greatest extent possible. The excavation was limited by the railroad tracks and the adjacent building foundation.

The potential future effects of the remaining low level contaminated soil are viewed as minimal and would not present a significant threat to human health or the environment. The low permeability of the clay soils underlying the property will limit any migration of contaminants yet present. Because the immediate area is largely industrial; the low concentrations remaining are not unusual. Therefore, E & K recommends clean closure of the affected area.

MAP I
Area Communities
Mellowes Company





scale: not to scale
------ railroad tracks
security fence

Soils

SCS - Associations Ozaukee-Morley-Mequon loam over silty clay over silty clay loam. Engineering class CH CL

(Milwaukee Soil Scientist, Dave Roberts, 9/19/91)

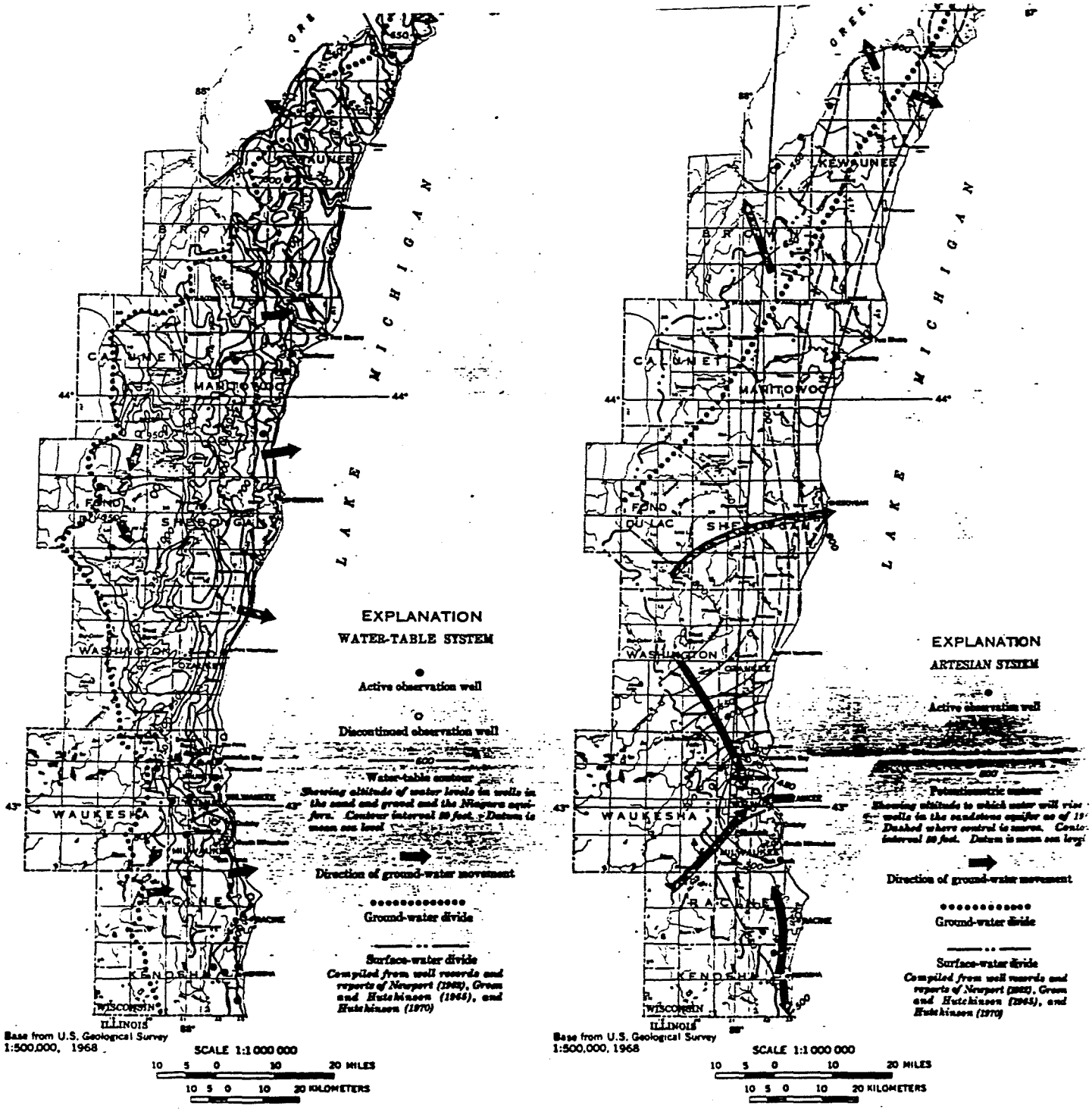
Sample Depths

C-1 4' dp	C-1A 5' dp
C-2 16" dp	C-2A 28" dp
C-3 4' dp	C-3A 5' dp
C-4 14" dp	C-4A 26" dp
C-5 4' dp	C-5A 5' dp
C-6 4' dp	C-6A 5' dp

dp= deep

MAP III
UW USGS Hydrological Map

HYDROLOGIC INVESTIGATIONS ATLAS HA-432 (SHEET 2 OF 4)



POTENTIOMETRIC SURFACES AND OBSERVATION WELL NETWORK

Ground water in the basin moves within the water-table system above the Maquoketa Shale and the artesian system, which is confined beneath the Maquoketa Shale. In the water-table system the ground-water divides generally correspond to the surface-water divides except in the southern part of the basin, where the ground-water divide is as much as 12 miles west of the surface-water divide. The ground-water basin of the artesian system does not conform to the surface drainage basin. Instead, the western limits of this system extend 15 to 20 miles west of the surface-water divide.

The water-table system is present in all parts of the basin, and its surface is described by the water-table contours. Ground water moves from high points on the water table, as arrows show, toward low areas where it discharges into streams, wetlands, and Lake Michigan. Locally ground water moves toward wells in areas of pumpage. Flow paths are short except in the southern part of the basin, where the system is confined. In the numerous areas of local confinement, nearby wells may have very different water levels.

The artesian system underlies all of the basin, and most of the recharge is from the area west of the basin. Flow paths are long, and discharge is at wells located mainly in the areas of Milwaukee and Chicago and into Lake Michigan. Some recharge also takes place by leakage through the Maquoketa Shale and through wells open to both the Niagara and sandstone aquifers.

HAZARDOUS WASTE SERVICES, INC.
GENERAL HAULING, INC.
2905 Paine Avenue P.O. Box 1249 Sheboygan, WI 53082-1249
Phone 414/458-6030 FAX 414/452-7254

SHIPPING DOCUMENT
CHAIN OF CUSTODY RECORD

SHIP TO:
Name: ORTEK
Street:
Destination:
State: Zip:
Carrier
Date:

Client: mellons
Project No.: 11872
Sampling Site: Rail Road Track Siding
Sampler: Eric Benn

Analytical Requested: T.P.H. T.R.

Date	Time	Sample I.D.:/Description	T.P.H.	T.R.					Bottle Total	Sample source	Sample procedure	No. shipping units	Proper Shipping Descrip.	wgt.
6/28	12:40 p.m.	Area C-1 North Side Quench oil Tank Pad 7683	X											
6/28	12:50 pm	Area C-2 EAST SIDE Quench oil Tank Pad 7684	X											
11	1:00 pm.	Area C-3 South Side Quench oil tank Pad 7685	X											
11	1:20 pm.	Area C-4 North end Railroad TRACKS INSIDE Fence 7686	X											
11	1:40 pm	Area C-5 North of Loading Dock 7687 IN MAJOR EXCAVATION AREA	X											
11	1:50 pm.	Area C-6 7688 North of Loading Dock IN MAJOR Excavation Area	X											

EMERGENCY CONTACT # 1-800-688-4005

Custody Transfers

	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
1.	Eric Benn	6/28/91	P.M.	Eric Heitz		
2.						
3.						
4.						

Received for Laboratory:

Additional Comments:
Soil samples collected on site were placed in a cooler with bagged ice. The samples were stored in a refrigerator at 36° until picked up by a Laboratory and then shipped in a cooler.

Shipping Details

Shipper:
Per:
Date: Time:

Received as described above-Exemptions on rear

Carrier:	Consignee:
Per:	Per:
Date:	Date:

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

11872/C.H.
7-15-91

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9106337
Our Lab # : 114370 Report Date: 07/11/91
Your Sample ID: E & K 7683
Sample Matrix : SOIL

COLLECTION INFORMATION
Date/Time/By: 06/28/91 12:40 ERIC B
Location : RAILROAD TREEK SIDING

Lab#	test	Result	Units
114370	Total Recoverable Petroleum Hydrocarbons	12.0	MG/KG

Signed D. J. DeCalo Date 7/11/91

Signed _____ Date _____

11672/C.H.
7-15-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9106337
Our Lab # : 114371
Your Sample ID: E & K 7684
Sample Matrix : SOIL

Report Date: 07/11/91

COLLECTION INFORMATION
Date/Time/By: 06/28/91 12:50 ERIC B
Location : RAILROAD TREEK SIDING

Lab#	test	Result	Units
114371	Total Recoverable Petroleum Hydrocarbons	480.0	MG/KG

Signed D. J. DeCarlo Date 7/11/91

Signed _____ Date _____

11872/CH
7-15-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9106337
Our Lab # : 114372
Your Sample ID: E & K 7685
Sample Matrix : SOIL

Report Date: 07/11/91

COLLECTION INFORMATION
Date/Time/By: 06/28/91 13:00 ERIC B
Location : RAILROAD TREEK SIDING

Lab#	test	Result	Units
114372	Total Recoverable Petroleum Hydrocarbons	21.0	MG/KG

Signed D. J. DeCarlo Date 7/11/91

Signed _____ Date _____

11872/CH
7-15-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9106337
Our Lab # : 114374
Your Sample ID: E & K 7687
Sample Matrix : SOIL

Report Date: 07/11/91

COLLECTION INFORMATION
Date/Time/By: 06/28/91 13:40 ERIC B
Location : RAILROAD TREEK SIDING

Lab#	test	Result	Units
114374	Total Recoverable Petroleum Hydrocarbons	12.0	MG/KG

Signed D. J. DeCarlo Date 7/11/91

Signed _____ Date _____

11872/CH
7-15-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9106337
Our Lab # : 114375
Your Sample ID: E & K 7688
Sample Matrix : SOIL

Report Date: 07/11/91

COLLECTION INFORMATION
Date/Time/By: 06/28/91 13:50 ERIC B
Location : RAILROAD TREEK SIDING

Lab#	test	Result	Units
114375	Total Recoverable Petroleum Hydrocarbons	14.0	MG/KG

Signed D. J. DeCarlo Date 7/11/91

Signed _____ Date _____

HAZARDOUS WASTE SERVICES, INC.
GENERAL HAULING, INC.
2905 Paine Avenue P.O. Box 1249 Sheboygan, WI 53082-1249
Phone 414/458-6030 FAX 414/452-7254

SHIPPING DOCUMENT

CHAIN OF CUSTODY RECORD

Client: Mellowes 43984
Project No.: 11872
Sampling Site: Railroad Track
Sampler: Eric Bennin

Analytical Requested

SHIP TO:
Name: OCTEC 8-2-91
Street:
Destination:
State: Zip:
Carrier
Date:

Date	Time	Sample I.D.:/Description	T.P.H.						Bottle Total	Sample source	Sample procedure	No. shipping units	Proper Shipping Descrip.	wgt.
7/31	9:30 AM	Soil from Exc. 7919 C1A							1	Exc. Bottom	Grab			
	9:50 AM	" 7920 " C2A							1	"	"			
	10:15 AM	" 7921 " C3A							1	"	"			
	12:30 PM	" 7922 " C4A							1	"	"			
	1:15 pm	" 7923 " C5A							1	"	"			
	1:30 pm	" 7924 " C6A							1	"	"			

EMERGENCY CONTACT # 1-800-688-4005

Custody Transfers

	Relinquished by:	Date:	Time:	Received by:
1.	Eric Bennin	7/31/91	3:30pm	Bruce Stertz
2.				
3.				
4.				

Received for Laboratory:

Additional Comments:
Soil samples collected on site were placed in a cooler with bagged ice. The samples were stored in a refrigerator at 36° until picked up by a Laboratory and then shipped in a cooler.

Shipping Details

Shipper:
Per:
Date: Time:

Received as described above-Exemptions on rear

Carrier:	Consignee:
Per:	Per:
Date:	Date:

11812 CH 8/15/91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9108028
Our Lab # : 115437
Your Sample ID: #7919
Sample Matrix : SOIL

Report Date: 08/15/91

COLLECTION INFORMATION
Date/Time/By: 07/31/91 09:30 E B
Location : MELLONES

Lab#	test	Result	Units
115437	Total Recoverable Petroleum Hydrocarbons	11.0	MG/KG
	Total Solids	88.9	%

Signed David J. DeCalo Date 8/15/91

Signed _____ Date _____

172/Ext. 8-16-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9108028
Our Lab # : 115438
Your Sample ID: #7920
Sample Matrix : SOIL

Report Date: 08/15/91

COLLECTION INFORMATION
Date/Time/By: 07/31/91 09:50 E B
Location : MELLONES

Lab#	test	Result	Units
115438	Total Recoverable Petroleum Hydrocarbons	15.0	MG/KG
	Total Solids	84.8	%

Signed David J. DeCarlo Date 8/15/91

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9108028
Our Lab # : 115439
Your Sample ID: #7921
Sample Matrix : SOIL

Report Date: 08/15/91

COLLECTION INFORMATION
Date/Time/By: 07/31/91 10:15 E B
Location : MELLONES

Lab#	test	Result	Units
115439	Total Recoverable Petroleum Hydrocarbons	5000.0	MG/KG
	Total Solids	95.3	%

Signed David J. DeCalb Date 8/15/91

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9108028
Our Lab # : 115440
Your Sample ID: #7922
Sample Matrix : SOIL

Report Date: 08/15/91

COLLECTION INFORMATION
Date/Time/By: 07/31/91 12:30 E B
Location : MELLONES

Lab#	test		Result	Units
115440	Total Recoverable Petroleum Hydrocarbons	<	5.9	MG/KG
	Total Solids		85.4	%

Signed David J. DeCarlo Date 8/15/91

Signed _____ Date _____

11877/641 8/16

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9108028
Our Lab # : 115441 Report Date: 08/15/91
Your Sample ID: #7923
Sample Matrix : SOIL

COLLECTION INFORMATION
Date/Time/By: 07/31/91 13:15 E B
Location : MELLONES

Lab#	test		Result	Units
115441	Total Recoverable Petroleum Hydrocarbons	<	5.8	MG/KG
	Total Solids		86.5	%

Signed David J. DeCarlo Date 8/15/91

Signed _____ Date _____

11872/641 876 +1

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9108028
Our Lab # : 115442 Report Date: 08/15/91
Your Sample ID: #7924
Sample Matrix : SOIL

COLLECTION INFORMATION
Date/Time/By: 07/31/91 13:30 E B
Location : MELLONES

Lab#	test		Result	Units
115442	Total Recoverable Petroleum Hydrocarbons	<	5.8	MG/KG
	Total Solids		86.1	%

Signed David J. DeCalo Date 8/15/91

Signed _____ Date _____

Waste Stream Approval Packet
Cover Sheet

Project #: 11872/C.H.

Generator: Cust #: 43984

Mellowes Co.
3704 N. Palmer St.
Milwaukee, WI 53212

E&K Waste Stream #: 7062

US EPA ID #:

Waste Name: Fuel Oil Contaminated Soil

DOT Shipping Name: Non-Regulated Special Waste

EPA Code:

ERG#:
PPI:
HI:

Restricted Waste Forms Required: Yes ____ No ____

Spent Solvent |__|, California List Waste |__|, First Third |__|,

Second Third |__|, Third, Third |__|, Soft Hammer Certification |__|

Date Sent to Generator: 8-28-91 Date Returned: 9-5-91

Date Submitted	Disposal Facility	Date Approved	Disposal Cost	E & K Pricing	Approval Code
9-11-91	Parkview (64832) Copy to Mindy 8-30				

Recertification Date: _____

Comments: 9/17/91 TCLP Lead ordered from Ortek

ENTERED

LR/#40/3-24-89
Revised: 3-16-90

E & K WASTE STREAM ANALYSIS FORM

I. GENERATOR

US EPA ID# _____

Name of Company Mellowes Company

Facility Address 3704 N. Palmer Street
P.O. Box 12345
Milwaukee, WI 53212

Customer Number 43984

Technical Contact Tom McElligott

General Contact Same

Project # 11872 E & K Waste Stream # 7.062

State ID# _____

Name of Company Quarles and Brady

Mailing Address 411 East Wisconsin Avenue
Milwaukee, WI 53202-4497

Fax Number 414-277-5591

Title Attorney Phone 414 - 277-5000

Title -------- Phone ----------

II. WASTE STREAM GENERAL INFORMATION

Common Waste Name Fuel Oil Contaminated Soil

Process Producing Waste spills over the years

Anticipated Volume 50 - 70 yards

Frequency One Time

Current Inventory 60 yards

E&K Sample # 7672 MSDS Available no

III. HAZARDOUS CHARACTERISTICS (FROM 40-CFR)

U.S. EPA Code(s) NR

Is the waste ( ) Pyrophoric ( ) Dioxin Bearing ( ) Water Reactive ( ) Radioactive

( ) Explosive ( ) Pesticides/Herbicides ( ) Biological ( ) Shock Sensitive ( ) None of the above

IV. SHIPPING INFORMATION (FROM 49-CFR)

Proper DOT Shipping Name Nonregulated Special Waste

DOT Hazard Class NR UN/NA Number NA Reportable Quantity NA

Method of Shipment ( ) Bulk Liquids ( ) Drums - Size _____ Type _____ Weight _____ (X) Bulk Solids

RUSH PRIORITY: Yes ___ No x Date Received by Technical Services Dept. 8-23-91

SAMPLE IN LAB: Yes ___ No ___

SAMPLE BEING SENT: Yes ___ No ___

ANALYSIS: Yes X No ___

PREVIOUS WS#: Yes ___ No X If yes, WS# _____

DISPOSAL FACILITY: RVW/PVW ___ ENVIRITE ___ CYANOKEM ___ ETI ___ CWM ___

ENSCO ___ PCII ___ CHMET ___ CMC ___ HES ___ CLEAN HARBORS ___

METRO ___ MILSOLV ___ AVGANICS ___ WDI/MDI ___ OTHER _____

Parkview

Phil180 Revised: 9-3-91

V. WASTE PROPERTIES

		Layers	Free Liquids
(X) Solid	% Solid____	(X) Single Phase	( ) Yes
( ) Liquid	% Liquid____	( ) Bi-Layered	(X) No
( ) Sludge		( ) Multi-Layered	% _____
( ) Other _____			

Chemical Composition ( )% ( )PPM
(List all known, accounting for 100%)

Soil	>99%
Fuel Oil	< 1

pH 7 to 9 Actual _____

Specific Gravity NA to _____
Actual _____

Viscosity @ 70°F NA
(L=Low, M=Medium, H=High)

BTU <1000 to _____ Actual _____

Flash Point >210 to _____
Actual _____

Color Brown

Odor _____

Phenol _____

Sulfide _____

Cyanide _____

PCB's _____

Water Reactivity ( ) Yes (X) No

Acid Reactivity ( ) Yes (X) No

Oxidizer ( ) Yes (X) No

Pumpable ( ) Yes (X) No

METALS Test	Total	TCLP	Regulatory Limits
Arsenic			5.0
Barium			100.0
Cadmium			1.0
Chromium			5.0
Copper			
Lead			5.0
Mercury			0.2
Nickel			
Selenium			1.0
Silver			5.0
Zinc			
Benzene			0.5
Carbontetrachloride			0.5
Chlordane			0.03
Chlorobenzene			100.0
Chloroform			6.0
O-Cresol			200.0
M-Cresol			200.0
P-Cresol			200.0
Cresol			200.0
2,4-D			10.0
1,4-Dichlorobenzene			7.5
1,2-Dichloroethane			0.5
1,1-Dichloroethylene			0.7
2,4-Dinitrotoluene			0.13
Endrin			0.02
Heptachlor			0.008
Hexachlorobenzene			0.13
Hexachlorobutadiene			0.5
Hexachloroethane			3.0
Lindane			0.4
Methoxychlor			10.0
Methyl Ethyl Ketone			200.0
Nitrobenzene			2.0
Pentachlorophenol			100.0
Pyridine			5.0
Tetrachloroethylene			0.7
Toxaphene			0.5
Trichloroethylene			0.5
2,4,5-Trichlorophenol			400.0
2,4,6-Trichlorophenol			2.0
2,4,5-TP(Silvex)			1.0
Vinyl Chloride			0.2

Submitted by _____ Date _____

HAZARDOUS WASTE SERVICES, INC.
GENERAL HAULING, INC.
2905 Paine Avenue P.O. Box 1249 Sheboygan, WI 53082-1249
Phone 414/458-6030 FAX 414/452-7254

SHIPPING DOCUMENT

CHAIN OF CUSTODY RECORD

SHIP TO:
Name: ORTEK
Street:
Destination:
State: Zip:
Carrier
Date:

Client: Mellowes Inc.
Project No.: 11872/CXL
Sampling Site: 720. N. Palmer
Sampler: Eric

Analytical Requested

Date	Time	Sample I.D.:/Description	T.C.L.P. Sterio						Bottle Total	Sample source	Sample procedure	No. Shipping Units	Proper Shipping Descrip.	wgt.
6/26	P.M.	Cont. Dirt To Disposal Ecl# 7672	X						1	Rolloff	GRAB			

EMERGENCY CONTACT # 1-800-688-4005

Custody Transfers

	Relinquished by:	Date:	Time:	Received by:
1.	Eric Bamin	6-26-91	3:30 Pm	Janice Hintz
2.				
3.				
4.				

Received Laboratory:

Additional Comments:
Soil samples collected on site were placed in a cooler with bagged ice. The samples were stored in a refrigerator at 36° until picked up by a Laboratory and then shipped in

Shipping Details

Shipper:
Per:
Date: Time:

Received as described above-Exemptions on rear

Carrier:	Consignee:
Per:	Per:
Date:	Date:

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

8-22-91

CLIENT: E & K HAZARDOUS
ADDRESS: P O BOX 1249
SHEBOYGAN WI 53082-1249

ATTENTION: JANICE HINTZ
TELEPHONE: (414) 458-6030

Wisconsin Certification No. 405099530

Sample ID: EK7672
Sample Desc: SOIL
Date Collected: 06/26/91
Date Received: 06/28/91
Job #: 11872 C.H.

TCLP SEMIVOLATILE ORGANIC LEACHATE ANALYSIS RESULTS

PARAMETERS	DETECTION LIMIT	CONCENTRATION mg/l	REGULATORY LIMITS
o-Cresol	0.02	ND	200
m-Cresol	0.02	ND	200
p-Cresol	0.02	ND	200
2,4-Dinitrotoluene	0.10	ND	0.13
Hexachlorobenzene	0.02	ND	0.13
Hexachlorobutadiene	0.02	ND	0.5
Hexachloroethane	0.02	ND	3
Nitrobenzene	0.02	ND	2
Pentachlorophenol	0.10	ND	100
Pyridine	0.10	ND	5
2,4,5-Trichlorophenol	0.10	ND	400
2,4,6-Trichlorophenol	0.10	ND	2

ND = Not Detected

Comment: Lab Sample ID: 9106290 - 114237
Date Extracted: 07/10/91
Date Analyzed: 07/28/91
Analyzed by Modified GC/MS Method 8270.

Signed: [signature] Date: 8-19-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

ORTEK
2496 West Mason Street
P.O.Box 12435
Green Bay, WI 54307-2435
Telephone No.: (414) 498-2222

LABORATORY ANALYSIS RESULTS

Client: E & K Hazardous
Address: 2905 Paine Avenue
Sheboygan WI 53082-1249

Attn.: J. Hintz
Telephone No.: (414) 458-6030
FAX No. (414) 452-7254

Sample ID: 7672
Sample Desc: cont. dirt/Melloues Inc.
Date Collected: 06/26/91
Date Received: 06/28/91
Sampled By:
Report to: J. Hintz
Batch Number #: 9106290
Results Sheet #: 429300
Job #: 11872

TCLP ZERO-HEADSPACE VOLATILE ORGANIC ANALYSIS

PARAMETER	DETECTION LIMIT	CONCENTRATION	REGULATORY LIMITS	UNITS
Benzene	0.04	ND	0.5	mg/L
Carbon Tetrachloride	0.04	ND	0.5	mg/L
Chlorobenzene	0.04	ND	100	mg/L
Chloroform	0.04	ND	6.0	mg/L
1,4-Dichlorobenzene	0.04	ND	7.5	mg/L
1,2-Dichloroethane	0.04	ND	0.5	mg/L
1,1-Dichloroethene	0.04	ND	0.7	mg/L
Methyl Ethyl Ketone	0.20	ND	200	mg/L
Tetrachloroethene	0.04	ND	0.7	mg/L
Trichloroethene	0.04	ND	0.5	mg/L
Vinyl Chloride	0.04	ND	0.2	mg/L

ND = Not Detected

Comments: Lab Sample ID: 9106290 - 114237
:Date Analyzed: 07/11/91
:Analyzed by GC/MS Method 8240 on a DB624 Capillary Column

Signed : _____ Date: 7-21-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: E & K HAZARDOUS
2905 PAINE AVE
P O BOX 1249
SHEBOYGAN WI 53082-1249

Attn: JANICE HINTZ

Batch ID : 9106290
Our lab # : 114237
Your sample ID: E&K 7672
Sample Matrix : WASTE

Report Date: 07/22/91

COLLECTION INFORMATION

Date/Time/By: 06/26/91 ERIC
Location : MELLOURS INC-11872/CH

Lab#	Test	Result	Units
114237	Free Liquids	NO	
	Flash Point	> 210	o F
	Non-Volatile TCLP Extraction	EXTRACTED	
	Lead	47	MG/KG
	pH	8.0	S.U.
	Total Solids	94.60	%
	Volatile TCLP Extraction	EXTRACTED	

Signed [signature] Date 8-5-91

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CLIENT: E & K HAZARDOUS
ADDRESS: 2905 PAINE AVENUE
SHEBOYGAN WI 53082-1249

ATTENTION: JANICE HINTZ
TELEPHONE: (414) 458-6030

Wisconsin Certification No.
405099530

Sample ID: EK #7672
Sample Desc: GRAB (SOIL)
Date Collected: 06/26/91
Date Received: 06/27/91
Job #: 11872/CH

TPH AS DIESEL FUEL

Solvent Extraction Gas Chromatographic Method
(A California Method)

PARAMETER	DETECTION LIMIT	CONCENTRATION mg/kg*
Diesel Fuel	5.0	ND

ND = Not Detected
* = Dry Weight Basis

Comments: Lab Sample ID: 9106290 - 114237
Date Extracted: 07/01/91
Date Analyzed: 07/06/91
Analyzed by GC/FID.

Signed: _____ Date: 7-12-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CLIENT: E & K HAZARDOUS
ADDRESS: 2905 PAINE AVENUE
P O BOX 1249
SHEBOYGAN WI 53082-1249

ATTENTION: ERIC BENNIN
TELEPHONE: (414) 458-6030

Wisconsin Certification No. 405099530

Sample ID: EK7672
Sample Desc: CONT. DIRT
Date Collected: 06/26/91
Date Received: 06/28/91
Job #: 11872/CH

VOLATILE ORGANIC SOIL ANALYSIS

PARAMETER	DETECTION LIMIT	CONCENTRATION ug/kg*
Benzene	1.0	ND
Ethylbenzene	1.0	ND
Toluene	1.0	ND
Total Xylenes	3.0	ND

* = Dry Weight Basis
ND = Not Detected

Comments: Lab Sample ID: 9106290 - 114237
Date Analyzed: 07/10/91
Analyzed by GC Method 8020

Signed: D. [illegible] Date: 7-17-91

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CLIENT: E & K HAZARDOUS
ADDRESS: 2905 PAINE AVENUE
P O BOX 1249
SHEBOYGAN WI 53082-1249

ATTENTION: JANICE HINTZ
TELEPHONE: (414) 458-6030

Wisconsin Certification No. 405099530

Sample ID: EK7672
Sample Desc: MELLOWES INC
Date Collected: 06/26/91
Date Received: 06/28/91
Job #: 11872

TPH AS GASOLINE

Heated Headspace Gas Chromatographic Method
(A California Method for Gasoline)

PARAMETER	DETECTION LIMIT	CONCENTRATION mg/kg*
Gasoline	5.0	ND

ND = Not Detected
* = Dry Weight Basis

Comments: Lab Sample ID: 9106290 - 114237
Date Analyzed: 07/11/91
Analyzed by GC/FID.

Signed: _____ Date: 7-18-91

E&K HAZARDOUS WASTE SERVICES, INC.

"YOUR WASTE HANDLING ALTERNATIVE"

2905 PAINE AVENUE • P.O. BOX 1249
SHEBOYGAN, WISCONSIN 53082-1249 • (414) 458-6030

August 28, 1991

Mr. Tom McElligott
Quarles & Brady
411 East Wisconsin Avenue
Milwaukee, WI 53202-4497

RE: Fuel Oil Contaminated Soil

Dear Mr. McElligott:

Please find enclosed the forms required for the approval of your Fuel Oil Contaminate Soil at Parkview Recycling & Disposal Facility. Please review this information, sign where highlighted, and return them to my attention as soon as possible.

If you have any questions or need additional information, please call your, E & K Representative, Chris Hohol, at (414) 458-6030.

Sincerely,

Phillip Ditter
Technical Coordinator

PD/mw

Enclosure

E&K HAZARDOUS WASTE SERVICES, INC.

"YOUR WASTE HANDLING ALTERNATIVE"

2905 PAINE AVENUE • P.O. BOX 1249
SHEBOYGAN, WISCONSIN 53082-1249 • (414) 458-6030

September 10, 1991

Ms. Peggy Slind
PARKVIEW RECYCLING AND DISPOSAL FACILITY
N96 W13475 County Line Road
Menomonee Falls, WI 53051

Re: Waste Profile WMA154225

Dear Ms. Slind:

The enclosed Waste Profile and associated attachments for Contaminated Soil from Mellowes Company is being submitted for your review and approval.

If you have any questions or need additional information, please give me a call at (414) 458-6030.

Sincerely,

Phillip Ditter
Technical Coordinator

PD/mw

Enclosure

411 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497
414/277-5000
FAX 414/277-5591

Attorneys at Law in
Milwaukee and Madison, Wisconsin
West Palm Beach, Naples and
Fort Lauderdale, Florida
Phoenix, Arizona

Quarles & Brady

September 4, 1991

Mr. Phillip Ditter
Technical Coordinator
E&K Hazardous Waste Services, Inc.
2905 Paine Avenue
P.O. Box 1249
Sheboygan WI 53082-1249

Re: Mellowes Company

Dear Mr. Ditter:

Enclosed are the Waste Management forms for the disposal of the contaminated soils from the former Mellowes Company facility. This letter will authorize E&K to execute the "witness verification" and "representative data certification" on our behalf.

If you have any other questions, please call.

Very truly yours,

QUARLES & BRADY

Thomas P. McElligott

325:mp
enc.

Waste Management of North America
GENERATOR'S SPECIAL WASTE PROFILE SHEET
TYPE A Waste
PLEASE PRINT IN INK OR TYPE

☐ WMA154225
Waste Profile Sheet Code

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For WMNA Use Only)

Renewal Date of Service Agreement: **WMNA Sales Rep#:**

A. WHERE IS THE WASTE GENERATED?
1. Generator Name: Mellowes Company
2. Facility Address (site of waste generation): 3704 N. Palmer Street
3. Generator City, State/Province: Milwaukee, WI 4. Zip/Postal Code: 53212
5. Generator USEPA/Federal ID:
6. Generator State/Province ID:
7. Technical Contact: Tom McElligott 8. Phone: (414) 277 - 5000

B. WHERE ARE WASTE MANAGEMENT, INC. INVOICES SENT?
1. ☐ Generating Facility (A, above), or
2. Company Name: E&K Hazardous Waste Services, Inc. 3. Phone: (414) 458 - 6030
4. Address: 2905 Paine Ave., P.O. Box 1249
5. Generator City, State/Province: Sheboygan, WI 6. Zip/Postal Code: 53082-1249

C. PHYSICAL CHARACTERISTICS OF WASTE (See Instructions)
1. Name of Waste: Fuel Oil Contaminated Soil
2. Process Generating Waste: Spills Over The Years
3. Special Handling Instructions:

4. Color	5. Does the waste have a strong incidental odor?	6. Physical State @ 70°F/21°C:	7. Layers	8. Specific Gravity:	9. Free Liquids:
Brown	☒ No ☐ Yes if so, describe:	☒ Solid ☐ Semi-Solid ☐ Liquid ☐ Powder Other:	☐ Multi-layered ☐ Bi-layered ☒ Single Phased	Range - NA	☐ Yes ☒ No Volume: %

10. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☒ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range ☐ NA

11. Flash Point: ☐ None ☐ <140°F/60°C ☐ 140°-199°F/60°-83°C ☒ ≥ 200°F/93°C ☐ Closed Cup ☐ Open Cup

D. TRANSPORTATION INFORMATION
1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other
2. Annual Amount/Units: 50-70 Cubic Yards/One Time
3. Supplemental Information:

4. Is this a DOT hazardous material? ☒ No ☐ Yes (If so, complete 5, 6 &7) 5. Hazard Class/ID #:
6. Reportable Quantity/ Units (lb/kg): 7. Shipping Name:

☒ Check this box if additional information is attached.

Turn Page and Complete Side 2

Form WMNA-0089A (2/89) Waste Management Of North America

Printed on recycled paper

Waste Management of North America

GENERATOR'S SPECIAL WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

E. CHEMICAL COMPOSITION

1.

	RANGE MIN.-MAX.
Soil	>99 %
Fuel Oil	<1 %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. Total: 100 %

2. Does this waste contain any of the following (provide concentration if known):

	NO or	LESS THAN or	ACTUAL
PCB's	☒	☐ <50 ppm	____ ppm
Cyanides	☐	☒ <50 ppm	____ ppm
Sulfides	☐	☒ <50ppm	____ ppm
Phenolics	☐	☒ <50 ppm	____ ppm

F. METALS

1. Does this waste contain any of the following metals (provide concentration if known):

Arsenic	☒ <5 or ____ ppm	Barium	☒ <100 or ____ ppm	Cadmium	☒ <1 or ____ ppm
Chromium	☒ <5 or ____ ppm	Lead	☐ <5 or 47 ppm	Mercury	☒ <0.2 or ____ ppm
Selenium	☒ <1 or ____ ppm	Silver	☒ <5 or ____ ppm	Copper	☐ ____ ppm
Nickel	☐ ____ ppm	Zinc	☐ ____ ppm		____ ppm

2. Indicate method used to determine concentration (if provided): ☐ EP TOX ☒ TCLP, or ☐ Total

G. GENERATOR CERTIFICATION

By signing this profile sheet, the generator certifies that unless clearly stated above or in attachments:

1. This waste is not a "Hazardous Waste" as defined by USEPA or Canadian Federal regulation and/or the state/province.
2. This waste does not contain regulated quantities of PCB's (Polychlorinated Biphenyls).
3. This sheet and its attachments contain true and accurate descriptions of the waste material. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.
4. The Contractor's Definition of Special Waste (Form WMNA 0038 AD) has been read, signed and attached.

5. Signature: Henry J. Loos

6. Title: Secretary

7. Name (Type or Print): Henry J. Loos

8. Date: 8-31-91

WASTE MANAGEMENT OF NORTH AMERICA

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE

WMA154225

(Shaded area for WMNA use only) WMNA Sales Rep. #:

Waste Profile Sheet Code

This completed form must be returned, with the representative sample, to:

Parkview Recycling & Disposal Facility
N96 W13475 County Line Rd.
Menomonee Falls, WI 53051

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Waste Management of North America (WMNA) can accept the Special Waste described in the Generator's Special Waste Profile Sheet referenced above, you must supply a representative sample of the waste, or sign Part E below certifying that analytical data presented to Waste Management were derived from testing of a representative sample. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in Federal, State or Provincial Regulations. If you collect a representative sample of your waste, apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions, please refer to the instructions for this form, or contact your WMNA sales representative.

A. SAMPLING METHOD (Indicate the method used and sign line 5 in Section C to certify a representative sample was taken)

1. [X] I have obtained a representative sample of the waste material described in the Generator's Special Waste Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I or equivalent Canadian rules.
2. [ ] I have obtained a representative sample of the waste material described in the Generator's Special Waste Profile Sheet referenced above by an equivalent method.

B. SAMPLING SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Rolloff Container

C. REPRESENTATIVE SAMPLE CERTIFICATION AND SAMPLE LABEL (COMPLETE LABEL BEFORE REMOVING)

1. Waste Profile Sheet Code:	WMA154225	1. Waste Profile Sheet Code:
2. Generator's Name:	Mellowes Co.	2. Generator's Name:
3. Name of Waste:	Fuel Oil Contaminated Soil	3. Name of Waste:
4. Sample Hour/Date:	P.M. 6/26/91	4. Sample Hour/Date:
5. Sampler's Signature:	X Eric Bennin	5. Sampler's Signature:

6. Print Sampler's Name: Eric Bennin
7. Sampler's Title: Field Technician
8. Sampler's Employer (if other than generator, see D. below): E&K Hazardous Waste Services, Inc.

D. WITNESS VERIFICATION (if required) In most circumstances the customer will obtain the sample. However, in those cases in which WMNA or another contractor obtains the sample, one of the customer's employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: Phillip Ditter
2. Witness' Name: Phillip Ditter
3. Witness' Title: Technical Coordinator
4. Witness' Employer: E&K Hazardous Waste Services
5. Date: 6/26/91

E. REPRESENTATIVE DATA CERTIFICATION (Complete Parts A, B, & C to the extent possible)

By signing below the customer is certifying that:
The analytical data presented to Waste Management of North America were derived from testing of a representative sample taken in accordance with one of the methods listed in Part A of this form.

Signature: Phillip Ditter
Title: Technical Coordinator
Name: Phillip Ditter
Date: 9/10/91

Form WMNA-0089C (2/90) Waste Management of North America

Printed on recycled paper

GENERATOR DECLARATION LETTER

By signing this document, I Tom McElligott/Mellowes Co.
(Generator's Name)
hereby certify that the waste stream as described on Waste Management Generator's Waste Material Profile Sheet # WMA154225 does not contain the compounds identified in the groupings below. I reviewed the compounds in each group, and marked each box if the compounds are not present.

Pesticide/Herbicide Compounds (Pursuant to EPA Hazardous Waste Regulations)

[X] The pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its hydroxide), Lindane, Methoxychlor, Toxaphene, 2,4-D, 2,4,5-TP (Silvex).

F-500 Hazardous Waste Listing (Pursuant to Wisconsin Hazardous Waste Regulations)

[X] The halogenated compounds: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichloroethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration of the sum of the concentrations of the individual compounds exceeds 1% or 10,000 ppm on a weight to weight basis.

Generator's Signature

Title

8/31/91
Date

RLP/del/120501RP

CONTRACTOR'S DEFINITION OF SPECIAL WASTE

1. "Special Waste" means Type A or Type B Special wastes as defined below.

WMA154225
WASTE PROFILE CODE

2. "Type A Special Waste" means any waste, from a commercial or industrial activity meeting any of the following descriptions.
   - __ a. A containerized waste (e.g., a drum, portable tank, lugger box, roll-off box, pail, bulk tanker, etc.) listed in b.-g. below.
   - __ b. A waste containing free liquids.
   - __ c. A sludge waste.
   - __ d. A waste from an industrial process.
   - __ e. A waste from a pollution control process.
   - X f. Residue and debris from the cleanup of a spill of a chemical substance or commercial product or a waste listed in a.-e. or g.
   - __ g. Contaminated residuals, or articles from the cleanup of a facility generating, storing, treating, recycling, or disposing of wastes listed in a.-f.

3. **Incidental Amounts of Special Waste**
   The Contractor recognizes that many customers will produce some "Type B Special Waste," as defined below. Incidental quantities of "Type B Special Waste," do not require a Generator's Type B Special Waste Profile Sheet (Form WMNA-0089B) to be signed by the customer. However, the customer must identify the type and amount of Type B Special Wastes which will be provided to the Contractor in incidental amounts by completing the box in the lower right corner.

4. "Type B Special Waste" means any waste from a commercial or industrial activity meeting the descriptions which follow:
   - __ a. **Friable asbestos waste from building demolition or cleaning;** wall board, wall spray coverings, pipe insulation, etc. Nonfriable asbestos is not a special waste unless it has been processed, handled or used in such a way that asbestos fibers may be freely released. Asbestos-bearing industrial process waste is a "Type A Special Waste.
   - __ b. **Commercial products or chemicals which are off-specification, outdated, unused or banned.** Out-dated or off-specification, uncontaminated food or beverage products in original consumer containers are not included in this category, however, containers which once held commercial products or chemicals are included unless the container is empty. A container is empty when:
     All wastes have been removed that can be removed using the practices commonly employed to remove materials from the type of container, e.g., pouring, pumping or aspirating, and an end has been removed (for containers in excess of 25 gallons), and no more than 1 inch (2.54 centimeters) of residue remains on the bottom of the container or inner liner, or no more than 3% by weight of the total capacity of the container remains in the container (containers $\leq$ 110 gallons), or no more than 0.3% by weight of the total capacity of the container remains in the container (containers > 110 gallons.) Containers which once held **ACUTELY HAZARDOUS WASTES** must be triple rinsed with an appropriate solvent or cleaned by an equivalent method. Containers which once held substances regulated under the Federal Insecticide, Fungicide, and Rodenticide Act must be empty according to label instructions or triple rinsed.
   - __ c. **Untreated bio-medical waste - Any waste capable of inducing infection due to contamination with infectious agents from a bio-medical source including but not limited to a medical practitioner, hospital, medical clinic, nursing home, university medical laboratory, mortuary, taxidermist, veterinarian, veterinary hospital or animal testing laboratory.** Sharps from these sources must be rendered harmless or placed in needle puncture proof containers. Residue from incineration of infectious wastes is a "Type A Special Waste."
   - __ d. **Treated bio-medical wastes - Any wastes from a bio-medical source including but not limited to a hospital, medical clinic, nursing home, medical practitioner, mortuary, taxidermist, veterinarian hospital, animal testing laboratory, or university medical laboratory which has been autoclaved or otherwise heat treated or sterilized so that it is no longer capable of inducing infection.** Any sharps from these sources must be rendered harmless or placed in needle puncture-proof containers.
   - __ e. **Liquids and sludges** from septic tanks, food service grease traps, or washwater and wastewaters from commercial laundries, laundromats and car washes unless these wastes are managed at commercial or public treatment works.
   - __ f. **Chemical-containing equipment removed from service.** Examples: filters, cathode ray tubes, lab equipment, acetylene tanks, fluorescent light tubes, etc.
   - __ g. **Waste produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemicals from the industrial process** Chemicals or wastes removed or drained from such equipment or facility are "Type A Special Wastes."

CUSTOMER ACKNOWLEDGES THAT HE HAS READ THE FOREGOING DEFINITION AND HAS IDENTIFIED THE TYPES OF SPECIAL WASTES GENERATED, IF ANY, BY CHECKING THE APPLICABLE CATEGORIES ABOVE.

Charta Manufacturing Co. Inc.
CUSTOMER

Secretary
AUTHORIZED SIGNATURE

8-31-91
DATE

LIST TYPE B WASTE CATEGORY AND AMOUNTS:
CONTAINS NO TYPE B WASTES
General Manager of WMNA Division concurs that the above amounts of "Type B Special Wastes" are incidental to the load. Signature:

Form WMNA-0038AD (2/89) Waste Management of North America
White - WMNA Division Canary - Customer
Revised 5/90

Printed on recycled paper

SERVICE AGREEMENT
NON-HAZARDOUS WASTE DISPOSAL

The above-named disposal facility and corporation are referred to herein as "Facility" and "Contractor," respectively.

CUSTOMER'S BILLING NAME
Mellowes Co.

CUSTOMER'S BILLING ADDRESS
3704 N. Palmer Street

CITY, STATE/PROVINCE, ZIP/OSTAL CODE
Milwaukee, WI 53212

CUSTOMER CONTACT
Tom McElligott

PHONE NUMBER
(414) 277-5000

BANK REFERENCE
Bill E&K

BANK CONTACT

PHONE NUMBER
( )

Credit may be extended to Customer after appropriate credit information, in a form acceptable to Contractor, has been presented to and reviewed by Contractor. Contractor may, in its sole discretion, require a collateral deposit (in the form of cash, letter of credit or surety bond) acceptable to Contractor. It is the responsibility of the Customer to keep said collateral deposit current. Collateral deposits, where utilized, may be adjusted when there is an increase in disposal tonnage and/or rates. Collateral deficiencies must be corrected within 30 days of notice of required adjustment.

This is a legally binding contract, and Contractor agrees to provide and Customer agrees to accept the waste disposal services subjeact to the tems and conditions specified in this contract.

ESTIMATED MONTHLY AMOUNT OF WASTE FOR LAND DISPOSAL:

_____
(Include units e.g., cubic yards, pounds, kilograms)

SPECIAL INSTRUCTIONS:

THE TERMS AND CONDITIONS ON REVERSE SIDE ARE PART OF THIS AGREEMENT

CUSTOMER

Authorized Signature

Secretary
Title

CONTRACTOR

Representative

Date

Printed on recycled paper

Field Screening Method for Petroleum Affected Soils

In an effort to standardize our field screening of petroleum affected soils the following procedure has been developed. The devices ususally used to conduct field screening (HNU, OVA, OVM) are best suited for gasoline contamination. Other fuels (diesel, heating oil, Jet A) and heavier petroleum products (motor oils, hydraulic oil, transmission fluid et .) do not contain a signifcant portion of volatile organic compounds (VOC's) to be detected by the HNU-PID. Regulatory agencies therefore require confirmation samples to be analyzed by a certified laboratory to verify field results for all petroleum contaminants.

Equipment

Wide-mouth mason jars (1 quart) with lids and bands
Aluminum foil
Pocket thermometer
Photoionization detection device (HNU-PID)
Heat source

Field Screening Procedure of Petroleum Affected Soils

Step 1: Use a clean, one quart, wide-mouth mason jar. Fill it loosely, half full, with the soil to be tested. Insert pocket thermometer half the depth of the soil.

Step 2: Cover the jar opening with clean aluminum foil and affix the jar band over the foil.

Step 3: Let the sample sit for one minute, then read soil temperature through the glass jar (do not open the jar). If the soil temperature is less than 70 degrees Fahrenheit slowly heat the sample to 70 degrees Fahrenheit.

Step 4: When the soil temperature reaches 70 degrees Fahrenheit, insert the probe end of the device through the foil lid into the space above the soil in the jar. Be careful not to bring the probe into contact with the soil. Read the metering device for a minimum of 60 seconds.

Step 5: Record the maximum reading and the sample identification information. (Record meter scale settings, date, time, sample location, soil description, depth of excavation)

Step 6: Clear meter settings, discard soil from jar, recycle jar and other equipment.

Step 7: From the same area where screened sample was taken, take a four ounce soil sample for laboratory confirmation (if necessary).

SPECIAL WASTE MANIFEST DISPOSAL TICKET

190360

PARKVIEW RECYCLE and DISPOSAL FACILITY

NORTH _____

EAST _____

ELEVATION _____

B10 658

A Waste Management Company

LOOP #21
10-23-91 8:43AM ID
79340 lb IN

DATE: _____

TRANSPORTER: Edk Hauling

GENERATOR: Mellows Company

GENERATORS SIGNATURE: x Thomas Cadwalder 10/23/91 Date

WASTE DESCRIPTION: Oil contaminated Soil (Non.-Reg.)

PROFILE # WMA 154225 QUANTITY _____

ACCEPTED BY: R Palmquist 10/23/91 Date

DRIVERS SIGNATURE: Warren A. Mitchell 10/23/91 Date

TRUCK NO. 60 _____ TONS/YARDS

LOOP #21
10-23-91 9:09AM ID
79340 lb GR
44240 lb TA
35100 lb NT

WHITE & YELLOW - TRANSPORTER COPY/PINK - DISPOSAL SITE COPY/GOLD - GENERATOR COPY

DCE-009-90

SPECIAL WASTE MANIFEST DISPOSAL TICKET

190359

PARKVIEW RECYCLE and DISPOSAL FACILITY

NORTH _____

EAST _____ LOOP #10

ELEVATION _____ 10-23-91 11:39AM ID

A Waste Management Company

78260 lb IN

DATE: 10-23-91

TRANSPORTER: E&K Hauling

GENERATOR: Mellowes Company

GENERATORS SIGNATURE: x [signature] 10/23/91 Date

LOOP #10

10-23-91 11:53AM ID

WASTE DESCRIPTION: O:1 contamirated soil (non reg.)

78260 lb GR

34380 lb TA

43880 lb NT

PROFILE # WMA 154225 QUANTITY _____

ACCEPTED BY: RP August 10/23/91 Date

DRIVERS SIGNATURE: Brian Capell 10/23/91 Date

TRUCK NO. 38 _____ TONS/YARDS

WHITE & YELLOW - TRANSPORTER COPY/PINK - DISPOSAL SITE COPY/GOLD - GENERATOR COPY

DCE-009-90

SPECIAL WASTE MANIFEST DISPOSAL TICKET

190362

PARKVIEW RECYCLE and DISPOSAL FACILITY

NORTH _____

EAST _____

ELEVATION _____

A Waste Management Company

LOOP #30
10-23-91 12:31PM ID
77760 lb IN

DATE: _____

TRANSPORTER: E&K Hauling

GENERATOR: Mellows Company

GENERATORS SIGNATURE: Larry Kruse 10/23/91 Date

LOOP #30
10-23-91 12:59PM ID

WASTE DESCRIPTION: Oil Contaminated Soil (non-Reg)

77760 lb GR
44140 lb TA
33620 lb NT

PROFILE # WMA 154225 QUANTITY _____

ACCEPTED BY: R Palmquist 10/23/91 Date

DRIVERS SIGNATURE: Warren A. Mitchell 10/23/91 Date

TRUCK NO. 60 _____ TONS/YARDS

WHITE & YELLOW - TRANSPORTER COPY/PINK - DISPOSAL SITE COPY/GOLD - GENERATOR COPY

DCE-009-90

411 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497
414/277-5000
FAX 414/277-5591

Attorneys at Law in
Milwaukee and Madison, Wisconsin
West Palm Beach, Naples and
Fort Lauderdale, Florida
Phoenix, Arizona

Quarles & Brady

May 20, 1991

Ms. Margaret Graefe
Department of Natural Resources
P.O. Box 14326
Milwaukee, WI 53212

RE: Charter Manufacturing
Former Mellowes Division

Dear Ms. Graef:

This letter is a follow up to our discussion on May 16, 1991 regarding the clean up of the isolated areas of stained soil at the former Mellowes Division facility, 3704 North Palmer Street, Milwaukee, Wisconsin

As we discussed, we have selected E&K Hazardous Waste Services, Inc. to perform the remediation. Our plan is to have E&K excavate and properly dispose of the stained soils. Samples of the remaining soil will be taken to confirm the clean-up. Results of these samples and a report will be provided to the Department.

If you have any questions or comments, please call. Your cooperation is appreciated.

Very truly yours,

QUARLES & BRADY

Thomas P. McElligott

325:mp

cc: Mr. Greg Bowen

411 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497
414/277-5000
FAX 414/277-5591

Attorneys at Law in
Milwaukee and Madison, Wisconsin
West Palm Beach and Naples, Florida
Phoenix, Arizona

Quarles & Brady

May 7, 1991

Ms. Margaret M. Graefe
Department of Natural Resources
P.O. Box 12436
Milwaukee WI 53212

Dear Ms. Graefe:

This letter is a follow-up to our telephone conversation of May 3, 1991 regarding the property located at 3704 N. Palmer Street, Milwaukee, Wisconsin.

As we discussed, we represent Charter Manufacturing Company. Charter recently completed the sale of certain assets of its Mellowes Division to Illinois Tool Works Inc. The former Mellowes Division had conducted its operations at the above-referenced address. The property is owned by First Financial Realty Advisors, 234 S. Executive Drive, Suite 130, Brookfield, Wisconsin 53005.

In the course of the sale, a review of the environmental condition of the property was undertaken. In the course of that review, several isolated, small areas of soil staining were observed along the eastern boundary of the property. Preliminary indications are that the staining does not extend beyond a depth of 3 feet and that a total of approximately 25 yards may be impacted. Enclosed are copies of the laboratory analysis from samples taken from the areas of stained soil.

We are in the course of soliciting proposals to undertake a more definitive assessment of on-site conditions. We will be in touch with the Department as soon as a consultant has been selected.

Please direct any further inquiries regarding this matter to my attention.

Very truly yours,

QUARLES & BRADY

Thomas P. McElligott

325:mp
enc.

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Fax (309) 692-9364

An IEPA Contract Laboratory

TO: Environmental Science & Engineering, Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

REPORT DATE: 4-11-91
DATE RECEIVED: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE	---	3053-1	3053-2	3053-3	3053-4	3053-5			
SAMPLE DATE	---	4-3-91	4-3-91	4-3-91	4-3-91	4-3-91			
DESCRIPTION	QUANT. LIMIT	S-1 SOIL	S-2 SOIL	S-3 SOIL	S-4 SOIL	S-5 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Aroclor-1016	80	< 80	< 80	< 80	< 80	< 80	8080	4-9-91	RDU
Aroclor-1221	80	< 80	< 80	< 80	< 80	< 80			
Aroclor-1232	80	< 80	< 80	< 80	< 80	< 80			
Aroclor-1242	80	< 80	< 80	< 80	< 80	< 80			
Aroclor-1248	80	< 80	< 80	< 80	< 80	< 80			
Aroclor-1254	160	< 160	< 160	< 160	< 160	< 160			
Aroclor-1260	160	< 160	< 160	< 160	< 160	< 160			

Results reported in ug/kg, unless otherwise indicated.

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:141

CHARTER MFG.
3704 N. PALMERS
MILWAUKEE
ERR/ERP

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Fax (309) 692-9364

An IEPA Contract Laboratory

TO: Environmental Science & Engineering, Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

REPORT DATE: 4-11-91
DATE RECEIVED: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE	---	3053-6			
SAMPLE DATE	---	4-3-91			
DESCRIPTION	QUANT. LIMIT	S-6 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Aroclor-1016	800	< 800	8080	4-9-91	RDU
Aroclor-1221	800	< 800			
Aroclor-1232	800	< 800			
Aroclor-1242	800	< 800			
Aroclor-1248	800	< 800			
Aroclor-1254	1,600	< 1,600			
Aroclor-1260	1,600	< 1,600			

Results reported in ug/kg, unless otherwise indicated.

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:141

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Fax (309) 692-9361

An IEPA Contract Laboratory

TO: Environmental Science & Engineering, Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

REPORT DATE: 4-11-91
DATE RECEIVED: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE	---	3053-7	3053-8	3053-9			
SAMPLE DATE	---	4-3-91	4-3-91	4-3-91			
DESCRIPTION	QUANT. LIMIT	S-7 SOIL	S-8 SOIL	S-9 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Aroclor-1016	80	< 80	< 80	< 80	8080	4-9-91	RDU
Aroclor-1221	80	< 80	< 80	< 80			
Aroclor-1232	80	< 80	< 80	< 80			
Aroclor-1242	80	< 80	< 80	< 80			
Aroclor-1248	80	< 80	< 80	< 80			
Aroclor-1254	160	< 160	< 160	< 160			
Aroclor-1260	160	< 160	< 160	< 160			

Results reported in ug/kg, unless otherwise indicated.

Report Approved By: Barbara G. Raya-Nash
Barbara G. Raya-Nash
Manager of Laboratory Operations

SDF/L:141

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Fax (309) 692-9364

An IEPA Contract Laboratory

TO: Environmental Science & Engineering, Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

REPORT DATE: 4-11-91
DATE RECEIVED: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE	---	3053-4	3053-5	3053-6	3053-7	3053-8			
SAMPLE DATE	---	4-3-91	4-3-91	4-3-91	4-3-91	4-3-91			
DESCRIPTION	QUANT. LIMIT	S-4 SOIL	S-5 SOIL	S-6 SOIL	S-7 SOIL	S-8 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
TCLP Metals, mg/l									
Barium	10	< 10	< 10	< 10	< 10	< 10	6010	4-8-91	WBG
Cadmium	0.10	0.11	< 0.10	< 0.10	< 0.10	< 0.10			
Chromium	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			
Lead	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			
Total Petroleum Hydrocarbon, mg/kg	10	53,900	940	3,920	1,760	154	418.1/ 9071	4-5-91	NAO

Samples 3053-7 and 3053-8 were analyzed for TPH on 4-8-91.

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:141

Environmental Science & Engineering, Inc.
8901 North Industrial Road Peoria, IL 61615-1589
Phone (309) 692-4422 Fax (309) 692-9364

An IEPA Contract Laboratory

TO: Environmental Science & Engineering, Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

REPORT DATE: 4-11-91
DATE RECEIVED: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE	---	3053-9			
SAMPLE DATE	---	4-3-91			
DESCRIPTION	QUANT. LIMIT	S-9 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
TCLP Metals, mg/l					
Barium	10	< 10	6010	4-8-91	WBG
Cadmium	0.10	< 0.10			
Chromium	0.50	< 0.50			
Lead	0.50	< 0.50			
Total Petroleum Hydrocarbon, mg/kg	10	2,850	418.1/ 9071	4-8-91	NAO

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:141

Environmental
Science &
Engineering, Inc.

8901 N. Industrial Road
Peoria, Illinois 61615-1589
(309) 692-4422
Fax (309) 692-9364

An IEPA Contract Laboratory

VOLATILE ORGANIC COMPOUNDS -- Target Compound List

TO: Environmental Science & Eng., Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

DATE: 4-15-91
DATE REC'D: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE NO.:	---	3053-4			
SAMPLE DATE:	---	4-3-91			
DESCRIPTION:	Quant. Limit	S-4 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Chloromethane	10	< 10	8240	4-9-91	JAB
Bromomethane	10	< 10			
Vinyl Chloride	10	< 10			
Chloroethane	10	< 10			
Methylene Chloride	5	9 J			
Acetone	10	< 10			
Carbon Disulfide	5	7			
1,1-Dichloroethene	5	< 5			
1,1-Dichloroethane	5	< 5			
1,2-Dichloroethene (total)	5	< 5			
Chloroform	5	< 5			
1,2-Dichloroethane	5	< 5			
2-Butanone	10	< 10			
1,1,1-Trichloroethane	5	< 5			
Carbon Tetrachloride	5	< 5			
Vinyl Acetate	10	< 10			
Bromodichloromethane	5	< 5			
1,2-Dichloropropane	5	< 5			
cis-1,3-Dichloropropene	5	< 5			
Trichloroethene	5	< 5			
Dibromochloromethane	5	< 5			
1,1,2-Trichloroethane	5	< 5			
Benzene	5	< 5			
trans-1,3-Dichloropropene	5	< 5			
Bromoform	5	< 5			
4-Methyl-2-Pentanone	10	< 10			
2-Hexanone	10	< 10			
Tetrachloroethene	5	< 5			
1,1,2,2-Tetrachloroethane	5	< 5			
Toluene	5	< 5			
Chlorobenzene	5	< 5			
Ethylbenzene	5	< 5			
Styrene	5	< 5			
Xylene (Total)	5	< 5			

J = Estimated concentration.

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:153

Environmental
Science &
Engineering, Inc.

8901 N. Industrial Road
Peoria, Illinois 61615-1586
(309) 692-4422
Fax (309) 692-9364

An IEPA Contract Laboratory

VOLATILE ORGANIC COMPOUNDS -- Target Compound List

TO: Environmental Science & Eng., Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

DATE: 4-15-91
DATE REC'D: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE NO.:	---	3053-5			
SAMPLE DATE:	---	4-3-91			
DESCRIPTION:	Quant. Limit	S-5 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Chloromethane	10	< 10	8240	4-9-91	JAB
Bromomethane	10	< 10			
Vinyl Chloride	10	< 10			
Chloroethane	10	< 10			
Methylene Chloride	5	31			
Acetone	10	< 10			
Carbon Disulfide	5	18			
1,1-Dichloroethene	5	< 5			
1,1-Dichloroethane	5	< 5			
1,2-Dichloroethene (total)	5	< 5			
Chloroform	5	< 5			
1,2-Dichloroethane	5	< 5			
2-Butanone	10	< 10			
1,1,1-Trichloroethane	5	< 5			
Carbon Tetrachloride	5	< 5			
Vinyl Acetate	10	< 10			
Bromodichloromethane	5	< 5			
1,2-Dichloropropane	5	< 5			
cis-1,3-Dichloropropene	5	< 5			
Trichloroethene	5	< 5			
Dibromochloromethane	5	< 5			
1,1,2-Trichloroethane	5	< 5			
Benzene	5	< 5			
trans-1,3-Dichloropropene	5	< 5			
Bromoform	5	< 5			
4-Methyl-2-Pentanone	10	< 10			
2-Hexanone	10	< 10			
Tetrachloroethene	5	< 5			
1,1,2,2-Tetrachloroethane	5	< 5			
Toluene	5	< 5			
Chlorobenzene	5	< 5			
Ethylbenzene	5	< 5			
Styrene	5	< 5			
Xylene (Total)	5	< 5			

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:153

Environmental
Science &
Engineering, Inc.

8901 N. Industrial Road
Peoria, Illinois 61615-1589
(309) 692-4422
Fax (309) 692-9364

An IEPA Contract Laboratory

VOLATILE ORGANIC COMPOUNDS -- Target Compound List

TO: Environmental Science & Eng., Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

DATE: 4-15-91
DATE REC'D: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE NO.:	---	3053-6			
SAMPLE DATE:	---	4-3-91			
DESCRIPTION:	Quant. Limit	S-6 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Chloromethane	10	< 10	8240	4-9-91	JAB
Bromomethane	10	< 10			
Vinyl Chloride	10	< 10			
Chloroethane	10	< 10			
Methylene Chloride	5	93			
Acetone	10	< 10			
Carbon Disulfide	5	55			
1,1-Dichloroethene	5	< 5			
1,1-Dichloroethane	5	< 5			
1,2-Dichloroethene (total)	5	< 5			
Chloroform	5	< 5			
1,2-Dichloroethane	5	< 5			
2-Butanone	10	< 10			
1,1,1-Trichloroethane	5	< 5			
Carbon Tetrachloride	5	< 5			
Vinyl Acetate	10	< 10			
Bromodichloromethane	5	< 5			
1,2-Dichloropropane	5	< 5			
cis-1,3-Dichloropropene	5	< 5			
Trichloroethene	5	< 5			
Dibromochloromethane	5	< 5			
1,1,2-Trichloroethane	5	< 5			
Benzene	5	< 5			
trans-1,3-Dichloropropene	5	< 5			
Bromoform	5	< 5			
4-Methyl-2-Pentanone	10	< 10			
2-Hexanone	10	< 10			
Tetrachloroethene	5	< 5			
1,1,2,2-Tetrachloroethane	5	< 5			
Toluene	5	< 5			
Chlorobenzene	5	< 5			
Ethylbenzene	5	< 5			
Styrene	5	< 5			
Xylene (Total)	5	< 5			

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:153

Environmental
Science &
Engineering, Inc.

8901 N. Industrial Road
Peoria, Illinois 61615-1589
(309) 692-4422
Fax (309) 692-9364

An IEPA Contract Laboratory

VOLATILE ORGANIC COMPOUNDS -- Target Compound List

TO: Environmental Science & Eng., Inc.
8901 N. Industrial Road
Peoria, IL 61615
ATTN: Mr. Ted W. Nehrkorn

DATE: 4-15-91
DATE REC'D: 4-4-91
PROJECT NO.: 591-5103

PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE NO.:	---	3053-7			
SAMPLE DATE:	---	4-3-91			
DESCRIPTION:	Quant. Limit	S-7 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Chloromethane	10	< 10	8240	4-9-91	JAB
Bromomethane	10	< 10			
Vinyl Chloride	10	< 10			
Chloroethane	10	< 10			
Methylene Chloride	5	37			
Acetone	10	< 10			
Carbon Disulfide	5	13			
1,1-Dichloroethene	5	< 5			
1,1-Dichloroethane	5	< 5			
1,2-Dichloroethene (total)	5	< 5			
Chloroform	5	< 5			
1,2-Dichloroethane	5	< 5			
2-Butanone	10	< 10			
1,1,1-Trichloroethane	5	< 5			
Carbon Tetrachloride	5	< 5			
Vinyl Acetate	10	< 10			
Bromodichloromethane	5	< 5			
1,2-Dichloropropane	5	< 5			
cis-1,3-Dichloropropene	5	< 5			
Trichloroethene	5	< 5			
Dibromochloromethane	5	< 5			
1,1,2-Trichloroethane	5	< 5			
Benzene	5	< 5			
trans-1,3-Dichloropropene	5	< 5			
Bromoform	5	< 5			
4-Methyl-2-Pentanone	10	< 10			
2-Hexanone	10	< 10			
Tetrachloroethene	5	< 5			
1,1,2,2-Tetrachloroethane	5	< 5			
Toluene	5	< 5			
Chlorobenzene	5	< 5			
Ethylbenzene	5	< 5			
Styrene	5	< 5			
Xylene (Total)	5	< 5			

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:153

Environmental
Science &
Engineering, Inc.

8901 N. Industrial Road
Peoria, Illinois 61615-1589
(309) 692-4422
Fax (309) 692-9364

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PROJECT NAME: ITW/Mellowes Co.

ESE SAMPLE NO.:	---	3053-8			
SAMPLE DATE:	---	4-3-91			
DESCRIPTION:	Quant. Limit	S-8 SOIL	METHOD NO.	DATE ANALYZED	ANALYST
Chloromethane	10	< 10	8240	4-9-91	JAB
Bromomethane	10	< 10			
Vinyl Chloride	10	< 10			
Chloroethane	10	< 10			
Methylene Chloride	5	74			
Acetone	10	< 10			
Carbon Disulfide	5	18			
1,1-Dichloroethene	5	< 5			
1,1-Dichloroethane	5	< 5			
1,2-Dichloroethene (total)	5	< 5			
Chloroform	5	< 5			
1,2-Dichloroethane	5	< 5			
2-Butanone	10	< 10			
1,1,1-Trichloroethane	5	< 5			
Carbon Tetrachloride	5	< 5			
Vinyl Acetate	10	< 10			
Bromodichloromethane	5	< 5			
1,2-Dichloropropane	5	< 5			
cis-1,3-Dichloropropene	5	< 5			
Trichloroethene	5	< 5			
Dibromochloromethane	5	< 5			
1,1,2-Trichloroethane	5	< 5			
Benzene	5	< 5			
trans-1,3-Dichloropropene	5	< 5			
Bromoform	5	< 5			
4-Methyl-2-Pentanone	10	< 10			
2-Hexanone	10	< 10			
Tetrachloroethene	5	< 5			
1,1,2,2-Tetrachloroethane	5	< 5			
Toluene	5	< 5			
Chlorobenzene	5	< 5			
Ethylbenzene	5	< 5			
Styrene	5	< 5			
Xylene (Total)	5	< 5			

Report Approved By: Barbara G. Raya-Hash
Barbara G. Raya-Hash
Manager of Laboratory Operations

SDF/L:153

Department of Natural Resources

LEAKING UNDERGROUND STORAGE TANK (Case Tracking)
Form 4400-146 Rev. 2-93

Check this

UID Number: | **FID Number:** 241282030 | **PMN Number:**

County: Milwaukee
Site Name: CHARTER / Mellowes / ITW #2
Address: 3704 N. Palmer
Milw., WI

Municipality:

Legal Descript.: ___ 1/4 ___ 1/4 sec. ___ T ___ N R ___ (E/W)

Lat.: ___ Long.: ___

Initial Contact Date: 4/1/94
Date RPLetter Sent: __/__/__
Date Closure Approved: __/__/__

Person/Firm Reporting:

Phone Number: ( )

Priority Screening	Scoring Criteria	Funding Source	Effective Date	LUST Trust Eligible
___ 1 = High	1.	___ 1 = RP	__/__/__	___ 1 = Federal
___ 2 = Medium	2.	___ 2 = LTF	__/__/__	___ 2 = Non-Federal
___ 3 = Low	3.	___ 3 = EF	__/__/__	
___ 4 = Unknown	4.	___ 4 = Other	__/__/__	
	5.			

Score: ___ Init.: ___ Date: __/__/__

Case Status

	Start Date	End Date
___ (F) Free Product Removal	__/__/__	__/__/__
___ (E) RP Emergency Response	__/__/__	__/__/__
___ (R) LTF Emergency Response	__/__/__	__/__/__
___ (L) Long Term Monitoring	__/__/__	__/__/__

Responsible Party

Company Name: ITW
Contact Person: Phill Gallosto
Address: 3600 W. Lake Ave.
Glenview Ill. 60025-5816

Phone Number: ( )

CC's: Art Hennington 273-3500
Godfrey + Kahn
Fax - 273-5198

Impacts

Enter "P" for potential and "K" for known

___ (1) Fire/Explosion Threat
___ (2) Contaminated Private Well(s) ___ # of Wells
___ (3) Contaminated Public Well
___ (4) Groundwater Contamination
✓ (5) Soil Contamination
___ (6) Other: ___
___ (7) Surface Water Impacts
___ (9) Floating Product

Consultant

Company Name:: ESE
Contact Name: Tony Wlodarski
Address: 8901 N. Industrial Rd
Peoria Ill
Telephone: (309) 692-9422

Substances	# Tank(s)	Size
___ (1) Leaded Gas		
___ (2) Unleaded Gas		
___ (3) Diesel		
___ (4) Fuel Oil		
___ (5) Unkwn Hydrocrbn		
___ (8) Other		
___ (12) Waste Oil		