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

December 6, 2000

Mr. Richard Trewyn
Purdue Corporation
2101 W. Purdue St.
Milwaukee, WI 53209

Subject: Final Closure for Purdue Corporation, 2101 W. Purdue St., Milwaukee, WI

FID: 241283790
BRRTS: 03-41-000674
BRRTS: 03-41-003979

Dear Mr. Trewyn:

I have received the filed groundwater use and deed restriction for the above-named site on this date from Claudia Jordan of Michael Best & Friedrich LLP. Based on the investigation and remedial documentation provided to the Department, it appears that the above-named site is in compliance with the requirements of Chs. NR 700 to 724, Wis. Admin. Code. Therefore, the Department considers the case closed and tracked as such, having determined that no further action is necessary at the site at this time. However, the case may be reopened pursuant to S. NR 726.09, Wis. Admin. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, 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 programs assistant (263-8680) at the above address.

Sincerely,

John J. Hnat
Hydrogeologist
Remediation and Redevelopment

C: Claudia Jordan, M. Best & Friedrich
Wayne Fassbender, GAS
WDNR SER Files

7992203

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WDNR MILWAUKEE HQ
FEB 2000

Document Number | GROUNDWATER USE RESTRICTION

REGISTER'S OFFICE | SS
Milwaukee County, WI
RECORDED AT 1:03 PM
11-21-2000
WALTER R. BARCZAK
REGISTER OF DEEDS
AMOUNT 14.00

Recording Area

Name and Return Address
Purdue Corporation
c/o Pamela L. Gergens, Esquire
MICHAEL BEST & FRIEDRICH LLP
100 E. Wisconsin Avenue, Suite 2800
Milwaukee, Wisconsin 53202-4108

231-0486-1
Parcel Identification Number (PIN)

Declaration of Restrictions

In re: **2201 W. Purdue Street, Milwaukee, WI**
(The property described in the attached Attachment A, which is hereby made a part of this Restriction.)

STATE OF WISCONSIN)
) ss
COUNTY OF MILWAUKEE)

WHEREAS, Purdue Corporation, is the owner of the above-described property.

WHEREAS, one or more petroleum contaminated soil discharges have occurred at this property. Benzene, 1,2-dichloroethane, vinyl chloride, and methylene chloride are present in the groundwater at monitoring wells, above the NR 140, Wis. Adm. Code, Enforcement Standards within a portion of the parcel as referenced on Graef, Anhalt, Schloemer and Associates, Inc. ("GAS") Figure 1, attached and hereby made a part of this Restriction. Specifically, the most recent groundwater monitoring event at the site occurred on October 29, 1998. In that monitoring event, the laboratory detected 7 parts per billion (ppb) benzene, 7.6 ppb 1,2-dichloroethane, and 1.9 ppb of vinyl chloride in the groundwater sample collected from monitoring well MW-101. In the same groundwater sampling event, the groundwater sample from monitoring well MW-301 contained 5.7 ppb of methylene chloride.

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

WHEREAS, natural attenuation has been approved by the Department of Natural Resources to remediate groundwater contamination exceeding ch. NR 140, Wis. Adm. Code, groundwater standards within the boundaries of this property.

WHEREAS, construction of wells where water quality exceeds the drinking water standards in ch. NR 809, Wis. Adm. Code, is restricted by chs. NR 811, Wis. Adm. Code, and NR 812, Wis. Adm. Code; therefore, special well construction standards or water treatment requirements, or both or well construction prohibitions may apply.

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 restrictions:

> Anyone who proposes to construct or reconstruct a water supply well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific requirements are applicable, prior to constructing or reconstructing a well on this property. No water supply well may be constructed or reconstructed on this property unless applicable requirements are met.

3

If construction is proposed on this property that will require dewatering, or if groundwater is to be otherwise extracted from this property, while this groundwater use restriction is in effect, the groundwater shall be sampled and analyzed for contaminants that were previously detected on the property and any extracted groundwater shall be managed in compliance with applicable statutes and rules.

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 benefits and is enforceable by, the Wisconsin Department of Natural Resources, its successors and 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 violations 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 restrictions set forth in this covenant are no longer required. Upon receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, with a copy of the Department's written determination, may be recorded to give notice that this groundwater use restriction is no longer binding.

By signing this document, ~~Robert A.~~ Donald G. McNamara, President, asserts that he is duly authorized to sign this document on behalf of Purdue Corporation.

IN WITNESS WHEREOF, the owner of the Property have executed this Declaration of Restrictions, this 30 day of October, 2000.

Signature: _____
Printed Name: ~~Robert A.~~ Donald G. McNamara
Title: President

ACKNOWLEDGEMENT

State of Wisconsin)
) s.s.
County of Milwaukee

Personally came before me this 30 day of October, 2000, the above-named ~~Robert A.~~ Donald G. McNamara to me known to be the person who executed the foregoing instrument and acknowledge the same.

_____
Notary Public, Milwaukee County, WI

_____
My Commission Expires: March 4, 2001

[Notary Stamp or Seal Required]

NOTARY PUBLIC WISCONSIN

This document was drafted by:
Pamela L. Gergens, Esquire; Michael Best & Friedrich LLP; 100 East Wisconsin Ave., Ste. 2800; Milwaukee, WI 53202-4108 based upon information provided by the Wisconsin Department of Natural Resources.

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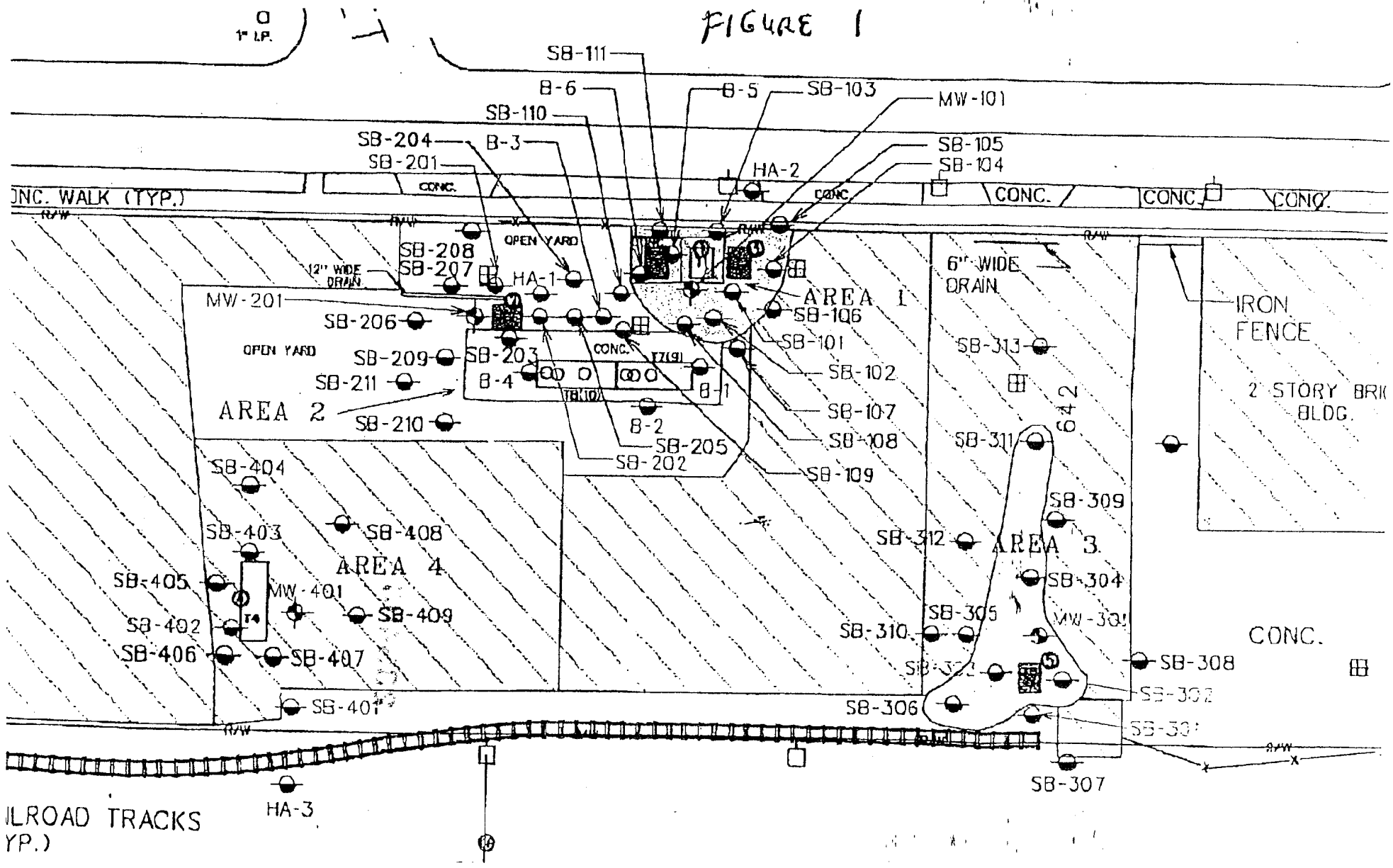
By

ESTIMATED EXTENT OF GROUNDWATER CONTAMINATION WITH COMPOUNDS EXCEEDING NR640 ENFORCEMENT STANDARDS

PURDUE CORPORATION
7101-2701 PURDUE STREET
MILWAUKEE, WISCONSIN

PROJECT NUMBER
DATE
PROJECT MGR
DRAWN BY
FILE NAME
SCALE
REVISION DATE

GRAEF ANHALT SCHLOEMER
ENVIRONMENTAL SERVICES DIVISION



Attachment A

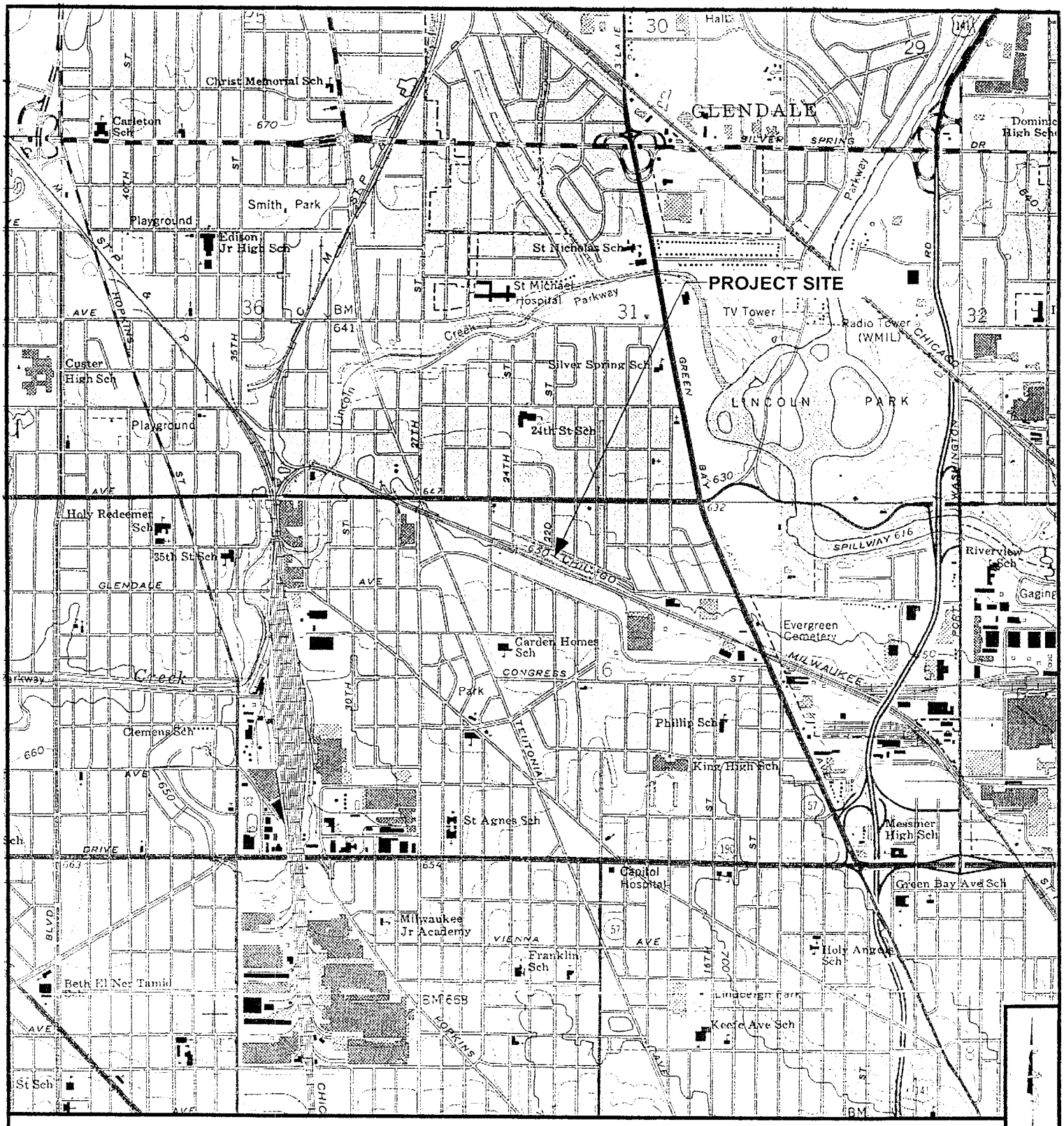
Legal Description
2201 W. Purdue Street, Milwaukee, WI

Tax Parcel No. 231-0486-1

That part of Block numbered Four (4) in Homestead Terrace, being a Subdivision of a part of the North West ¼ of Section 6, Town 7 North, of Range 22 East in the City of Milwaukee, described as follows: Commencing at a point in the Northerly line of Block 4 of Homestead Terrace, 321.84 feet Southeasterly of the North West corner of said Block 4; thence Southeasterly on and along the Northerly line of said Block 4, 65 feet to a point; thence Southwesterly and at right angles to the Northerly line of said Block 4, 150 feet to the Southerly line of said Block 4; thence Northwesterly on and along the Southerly line of said Block 4, 65 feet to a point; thence Northeasterly 150 feet to the place of beginning.

Ref: Warranty Deed dated 2/14/51, Vol. 2849, Page 602, Document No. 3005800, recorded 2/14/51.

32098\0003\A0066716.doc



SOURCE: USGS, 7.5 MINUTE SERIES, MILWAUKEE QUADRANGLE, WISCONSIN, PHOTOREVISED 1971

GENERAL SITE LOCATION MAP

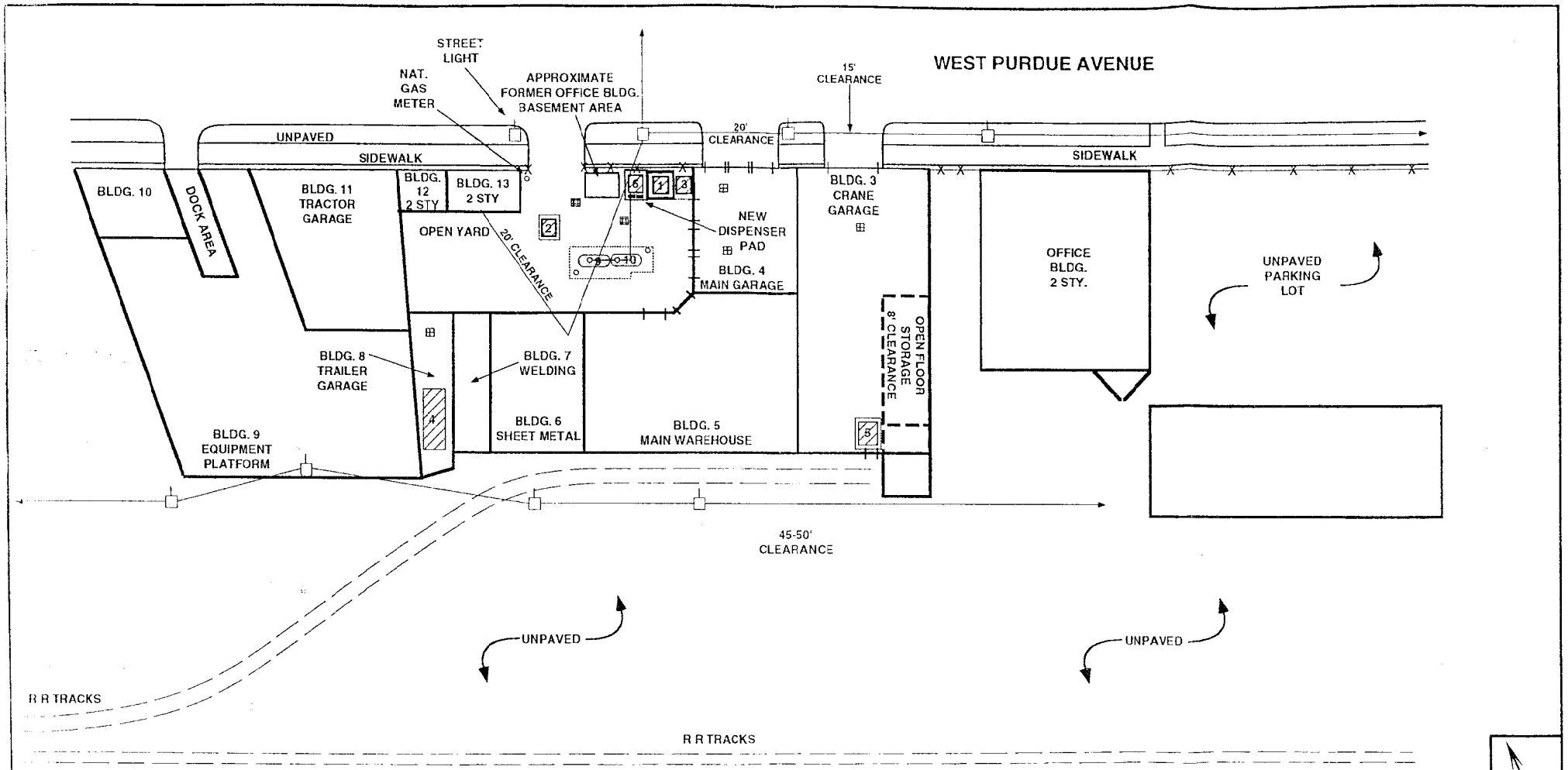
PURDUE CORPORATION
2101-2201 PURDUE STREET
MILWAUKEE, WISCONSIN

SCALE:	1" = 2,000'
DATE:	09-07-99
PROJECT MGR:	WPF
DRAWN BY:	JZ
JOB NUMBER:	948507
REVISION DATE:	

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

507QUAD.CV5

FIGURE 1



KEY

- EXISTING UNDERGROUND STORAGE TANK
- DROP BASIN
- FLOOR DRAIN
- OVERHEAD UTILITY POLES
- UNDERGROUND STORAGE TANK WITH APPROXIMATE EXCAVATION LIMIT

1	1,000 GAL UNLEADED GASOLINE - ABANDONED 1993
2	1,000 GAL WASTE OIL - REMOVED 1993 (SAME ORIENTATION AS FORMER TANKS)
3	1,000 GAL UNLEADED GASOLINE - REMOVED 1993
4	9,000 GAL WASTE OIL - ABANDONED 1993
5	750 GAL WASTE OIL - REMOVED 1990
6	1,000 GAL UNLEADED GASOLINE - REMOVED 1990 (CURRENTLY, FUEL OIL DISPENSER PAD)
7,8	7,200 GAL DIESEL FUEL - REMOVED 1990
	10,000 GAL UNLEADED GASOLINE - REMOVED 1990 REPLACED WITH 2 10,000 GAL FUEL OIL (9,10)

NOTE: ALL BUILDINGS ARE ONE STORY (APPROX. 16-17' INTERNAL CLEARANCE) ON GRADE, UNLESS NOTED.

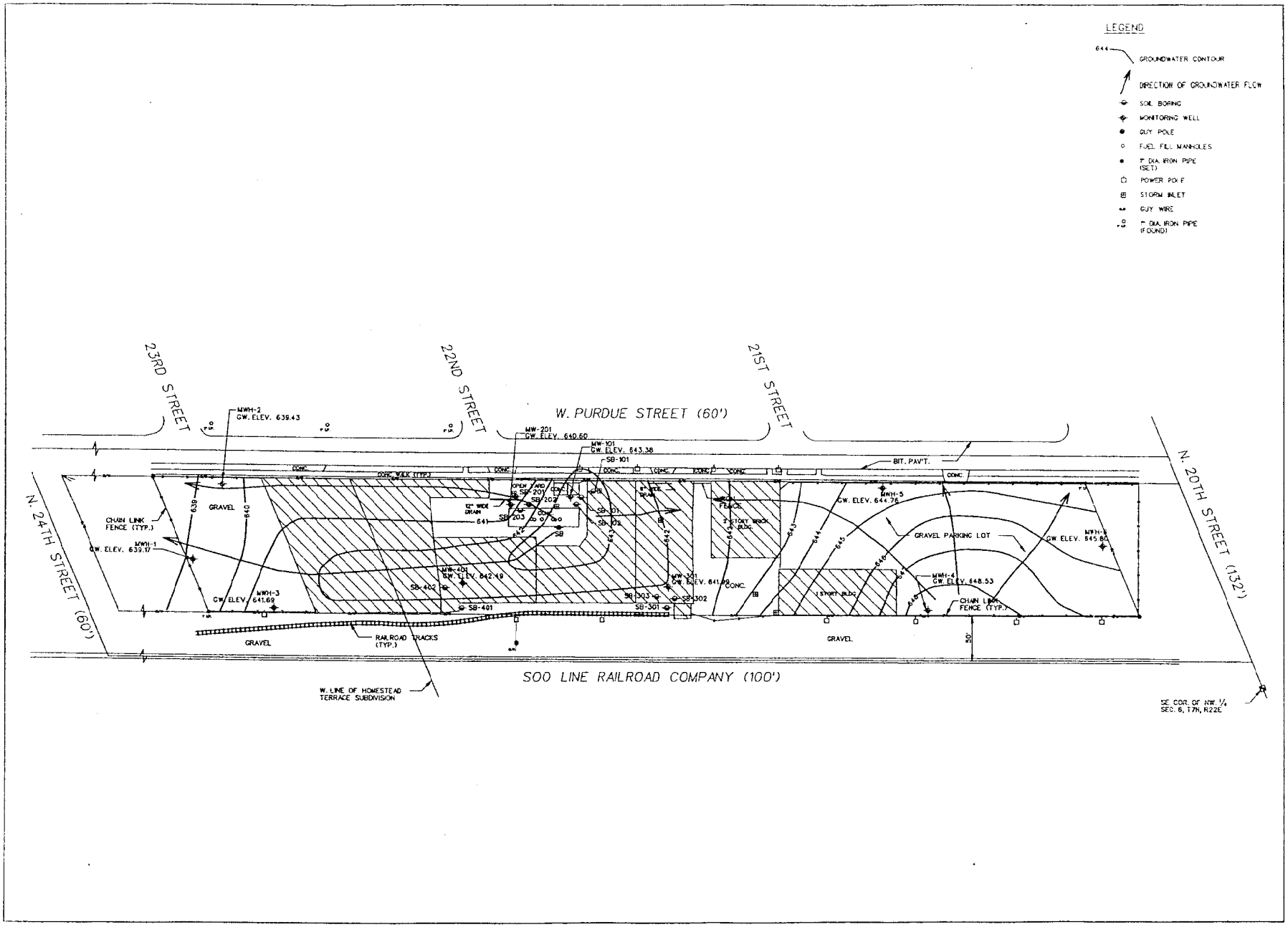
SITE LAYOUT MAP

PURDUE CORPORATION
2101-2201 PURDUE STREET
MILWAUKEE, WISCONSIN

SCALE:	N.T.S.
DATE:	3-22-94
PROJECT MGR:	SDM / DK
DRAWN BY:	TMW
JOB NUMBER:	
REVISION DATE:	3-30-94

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS & SCIENTISTS

FIGURE 1



GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS & SCIENTISTS

ENVIRONMENTAL SERVICES DIVISION

OTHER OFFICES LOCATED AT:

GREEN BAY, WISCONSIN
MADISON, WISCONSIN
CHICAGO, ILLINOIS

PROJECT NAME:

PURDUE CORPORATION
2101-2201 PURDUE STREET
MILWAUKEE, WISCONSIN

SHEET TITLE:

GROUNDWATER CONTOUR MAP

PROJECT NUMBER: 948507
DATE: 05-31-96
PROJECT MGR: WPF
DRAWN BY: TMW/JZ
FILE NAME: CONTOUR.DGN
SCALE: 1" = 100'
REVISION DATE: 09-07-99

FIGURE 10

RECEIVED
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ESTIMATED EXTEND OF GROUNDWATER CONTAMINATION WITH COMPOUNDS EXCEEDING NR640 ENFORCEMENT STANDARDS

PURDUE CORPORATION
1101-2201 PURDUE STREET
MILWAUKEE, WISCONSIN

GRAEF ANHALT SCHLOEMER
ENVIRONMENTAL SERVICES DIVISION

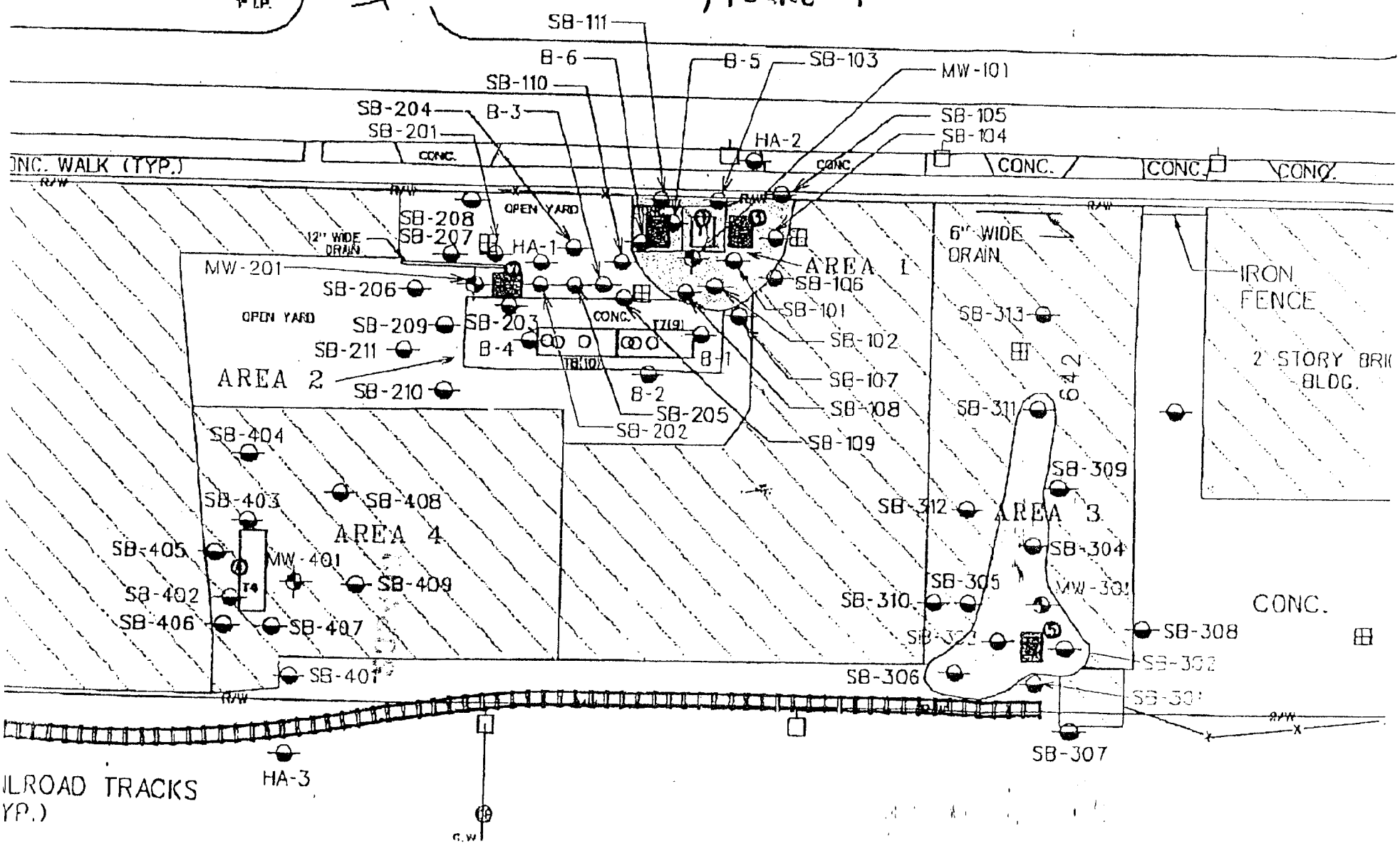

FIGURE 1

Received Aug-14-00 10:25 From-414 263 8483 To-MICHAEL BEST & FRIED Page 11

TABLE 6

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS -F.J.A. CHRISTIANSEN ROOFING COMPANY

PURDUE CORPORATION
2101 PURDUE STREET
MILWAUKEE, WISCONSIN

Analytical Parameters	NR 140* PAL	NR 140* ES	MW-101 (well inst. 5/2/94)										MW-201 (well inst. 5/3/94)								MW-301 (well inst. 5/5/94)							
	(in ug/L)		05/10/1994 (NET)	D-1 (duplicate)	08/29/1994 (NET)	02/06/1995 (NET)	Duplicate (NET)	04/25/1996 (U.S. OIL)	02/03/1997 (EN CHEM)	Duplicate (EN CHEM)	05/21/1998 (NET)	10/29/1998 (U.S. OIL)	05/10/1994 (NET)	08/29/1994 (NET)	Duplicate #2	02/06/1995 (NET)	04/25/1995 (U.S. OIL)	02/04/1997 (EN CHEM)	05/21/1998 (NET)	10/29/1998 (U.S. OIL)	05/10/1994 (NET)	08/29/1994 (NET)	02/06/1995 (NET)	04/25/1996 (U.S. OIL)	DUP-1	02/04/1997 (EN CHEM)	05/21/1998 (NET)	10/29/1998 (U.S. OIL)
Diesel Range Organics (DRO) Analytical Method: WDNR modified DRO	**	**	150	120	170	1,400	1,200	NA	NA	NA	NA	NA	ND	ND	ND	240	NA	NA	NA	NA	ND	ND	720	NA	NA	NA	NA	NA
Gasoline Range Organics (GRO) Analytical Method: WDNR modified GRO	**	**	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Lead - dissolved Analytical Method: US EPA 239.2	1.5	15	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	ND	2.3	12	ND	ND	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Polynuclear Aromatic Hydrocarbons (PAHs) Analytical Method: US EPA 8310					(9/1/94)									(9/1/94)+	field filtered													
Acenaphthene	**	**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	**	**	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	0.33	0.22	ND	ND	0.8	ND	0.031	ND	ND	ND	ND	0.028	0.04	ND	ND	ND
Benzo (a) anthracene	**	**	ND	ND	0.46	ND	ND	0.3	ND	ND	ND	ND	0.29	0.40	ND	ND	1.8	0.03	0.12	ND	ND	ND	ND	0.034	0.09	ND	ND	ND
Benzo (b) fluoranthene	.02	.2 **	ND	ND	0.21	ND	ND	0.29	ND	ND	ND	ND	0.32	0.31	ND	ND	1.8	0.03	0.22	ND	ND	ND	ND	0.13	0.12	ND	ND	ND
Benzo (k) fluoranthene	**	**	ND	ND	0.12	ND	ND	0.21	ND	ND	ND	ND	0.08	0.23	ND	ND	0.9	0.01	0.095	0.055	ND	ND	ND	0.04	0.06	ND	ND	ND
Benzo (a) pyrene	0.02	0.2	ND	ND	0.37	ND	ND	0.28	ND	ND	ND	ND	0.27	0.55	ND	ND	1.2	0.03	0.48	ND	ND	ND	ND	0.09	0.11	ND	ND	ND
Benzo (ghi) perylene	**	**	ND	ND	0.53	ND	ND	0.4	ND	ND	ND	ND	0.35	0.63	ND	ND	ND	0.03	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	**	**	ND	ND	0.27	ND	ND	ND	ND	ND	ND	ND	0.47	0.42	ND	ND	1.7	0.07	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	**	**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	**	**	ND	ND	0.38	ND	ND	ND	ND	ND	ND	ND	0.92	0.98	ND	ND	6	0.06	0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**	**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	**	**	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	0.24	0.30	ND	ND	ND	0.04	0.59	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	**	**	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	**	**	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND
Naphthalene	8	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**	**	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	1.0	0.70	ND	ND	2.7	ND	0.074	ND	ND	ND	ND	0.06	0.11	ND	ND	ND
Pyrene	**	**	ND	ND	0.43	ND	ND	0.31	ND	ND	ND	ND	0.9	1.1	ND	ND	3	0.05	0.4	0.21	ND	ND	ND	0.07	0.14	ND	ND	ND
Volatile Organic Compounds (VOCs) Analytical Methods: US EPA 5030/8260																												
Benzene	0.5	5	ND	ND	5.6	2.7	3.0	9.8	17	13	10	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**	**	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
sec-Butylbenzene	**	**	ND	ND	NA	NA	NA	0.58	ND	ND	ND	ND	ND	NA	NA	NA	0.79	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Chlorobenzene	20	100	ND	ND	NA	NA	NA	ND	0.6	0.4	ND	0.77	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Chloroethane	80	400	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	5.4
Chloroform	0.6	6	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	1.3
Chloromethane	0.3	3	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	6.1	5.5	ND	ND	ND
Ethylbenzene	140	700	ND	ND	ND	ND	ND	0.76	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2 Dichlorobenzene	60	600	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.2	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
1,3 Dichlorobenzene	125	1250	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	0.3	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Dichlorodifluoromethane	200	1000	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	12	9.2	23	10	22
1,2-Dichloroethane (1,2-DCA)	0.5	5	2.5	1.7	NA	NA	NA	4.9	4.9	4.9	5.3	7.6	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
cis 1,2-Dichloroethene	**	**	ND	ND	NA	NA	NA	0.65	1.0	0.8	0.75	1.2	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Di-isopropyl ether	**	**	NA	NA	NA	NA	NA	4.4	3.9	4.0	3.2	3.9	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
p-Isopropyltoluene	**	**	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Methylene chloride	0.5	5	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	7.6	6.0	40	4.4	5.7
Methyl-t-butyl ether (MTBE)	12	60	32	27	24	24	28	28	40	40	32	36	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.3	2
Naphthalene	8	40	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
n-Propylbenzene	**	**	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Toluene	68.6	343	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68
Trichlorofluoromethane CFC5	698	3,490	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	NA	270	NA	34	ND	ND	5,500	3,100	3,400
1,2,4-Trimethylbenzene	**	**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**	**	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.02	0.2	ND	ND	NA	NA	NA	ND	1.7	1.6	ND	1.9	ND	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND
Xylenes, total	124	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	D	ND	ND	ND
Natural Attenuation Parameters																												
Methane (ppb)			NA	NA	NA	NA	NA	NA	NA	NA	1800	1400	NA	NA	NA	NA	NA	NA	7.8	53	NA	NA	NA	NA	NA	NA	110	89
Dissolved Iron (field filtered) (ppm)			NA	NA	NA	NA	NA	NA	NA	NA	0.45	0.54	NA	NA	NA	NA	NA	NA	< 0.019	< 0.14	NA	NA	NA	NA	NA	NA	< 0.019	< 0.14
Nitrate & Nitrite as N (ppm)			NA	NA	NA	NA	NA	NA	NA	NA	< 0.017	< 0.014	NA	NA	NA	NA	NA	NA	0.44	1.3	NA	NA	NA	NA	NA	NA	< 0.017	< 0.014
Sulfate (ppm)			NA	NA	NA	NA	NA	NA	NA	NA	17	17	NA	NA	NA	NA	NA	NA	56	52	NA	NA	NA	NA	NA	NA	19	26
Dissolved Oxygen (ppm)			NA	NA	NA	NA	NA	NA	NA	NA	0.3	0.6	NA	NA	NA	NA	NA	NA	8.38	4.2	NA	NA	NA	NA	NA	NA	0.27	0.6
Redox (mV)			NA	NA	NA	NA	NA	NA	NA	NA	-1.4	-0.5	NA	NA	NA	NA	NA	NA	-12.4	-21.6	NA	NA	NA	NA	NA	NA	-35.9	-15.3
Indicator Parameters																												
pH	**	**	7.7		7.3	6.9		7.4	6.8		7.02	7.01	7.4	7.6		7.3	7.6	7.2	7.23	7.37	7.37	7.76	7.16	7.63		7.5	7.62	7.26
Temperature (degrees C)	**	**	10.7		16.2	10.3		11.7	7.8		11.6	17.2	12.1	16.3		11.1	10.4	9.2	11.9	17.9	14.2	19.5	16.7	16.5		15.6	16.9	21.1
Specific Conductivity (umhos/cm)	**	**	4840		4470	5160		5570	1207		5230	1109	4050	1938		4520	9320	650	4470	715	578	651	738	582		99.7	501	129

EXPLANATION:

All analytical results presented in parts per billion (ppb), except were noted for Natural Attenuation Parameters

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

\+ = The groundwater sample collected on 8/29/94 and labeled "MW-201" was mislabeled and not submitted for analysis, however the duplicate sample labeled "Duplicate-2" was analyzed.

NA = Not analyzed.

ND = No detectable analyte at or above listed detection limit.

NET = National Environmental Testing, Inc., Watertown, WI, Certification #128053530.

Exceedances of the Wisconsin groundwater quality standards are shaded.

TABLE 6, cont.

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS -F.J.A. CHRISTIANSEN ROOFING COMPANY

PURDUE CORPORATION
2101 PURDUE STREET
MILWAUKEE, WISCONSIN

Analytical Parameters	NR 140* PAL	NR 140* ES	MW-401 (well inst. 5/6/94)							MWH-1 (inst. 2/21/96)	MWH-2 (well inst. 2/20/96)			MWH-3 (inst. 2/21/96)	MWH-4 (inst. 2/20/96)	MWH-5 (inst. 2/19/96)	MWH-6 (well inst. 2/19/96)		
	(in ug/L)		06/15/1994 (NET)	05/29/1994 (NET)	02/06/1995 (NET)	04/25/1996 (U.S. OIL)	02/04/1997 (EN CHEM)	05/21/1998 (NET)	10/29/1998 (U.S. OIL)	02/03/1997 (EN CHEM)	02/03/1997 (EN CHEM)	05/21/1998 (NET)	10/29/1998 (U.S. OIL)	02/03/1997 (EN CHEM)	02/03/1997 (EN CHEM)	02/03/1997 (EN CHEM)	02/03/1997 (EN CHEM)	05/21/1998 (NET)	10/29/1998 (U.S. OIL)
Diesel Range Organics (DRO) Analytical Method: WDNR modified DRO	**	***	120	ND	290	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics (GRO) Analytical Method: WDNR modified GRO	**	***	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead - dissolved Analytical Method: US EPA 239.2	1.5	15	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polynuclear Aromatic Hydrocarbons (PAHs) Analytical Method: US EPA 8310																			
Acenaphthene	**	**	ND	ND	ND	ND	ND	ND	ND	0.7	ND	NA	NA	ND	ND	ND	ND	NA	NA
Anthracene	**	**	ND	ND	ND	0.28	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Benzo (a) anthracene	**	**	ND	ND	ND	0.03	0.03	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Benzo (b) fluoranthene	**	**	ND	ND	ND	0.11	0.03	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Benzo (k) fluoranthene	**	**	ND	ND	ND	0.032	0.01	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Benzo (a) pyrene	0.02	0.2	ND	ND	ND	0.09	0.03	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Benzo (ghi) perylene	**	**	ND	ND	ND	ND	0.04	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Chrysene	**	**	ND	ND	ND	ND	0.06	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Dibenzo (a,h) anthracene	**	**	ND	ND	ND	ND	0.03	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Fluoranthene	**	**	ND	ND	ND	ND	0.06	ND	ND	ND	ND	NA	NA	ND	ND	0.01	ND	NA	NA
Fluorene	**	**	ND	ND	ND	ND	ND	ND	ND	0.34	ND	NA	NA	ND	ND	ND	ND	NA	NA
Indeno (1,2,3-cd) pyrene	**	**	ND	ND	ND	ND	0.04	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
1-Methylnaphthalene	**	**	NA	NA	NA	ND	ND	ND	ND	0.5	ND	NA	NA	ND	ND	ND	ND	NA	NA
2-Methylnaphthalene	**	**	NA	NA	NA	ND	ND	ND	ND	0.6	ND	NA	NA	ND	ND	ND	ND	NA	NA
Naphthalene	8	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Phenanthrene	**	**	ND	ND	ND	0.1	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Pyrene	**	**	ND	ND	ND	0.08	0.04	ND	ND	ND	ND	NA	NA	ND	ND	0.01	ND	NA	NA
Volatile Organic Compounds (VOCs) Analytical Methods: US EPA 5030/8260																			
Benzene	0.5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**	**	ND	NA	NA	ND	ND	NA	NA	12	ND	NA	NA	0.4	ND	ND	ND	NA	NA
sec-Butylbenzene	**	**	ND	NA	NA	ND	ND	NA	NA	0.8	ND	NA	NA	ND	ND	ND	ND	NA	NA
Chlorobenzene	20	100	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Chloroethane	80	400	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Chloroform	0.6	6	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Chloromethane	0.3	3	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Ethylbenzene	140	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2 Dichlorobenzene	60	600	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
1,3 Dichlorobenzene	125	1250	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Dichlorodifluoromethane	200	1000	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
1,2-Dichloroethane (1,2-DCA)	0.5	5	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
cis 1,2-Dichloroethene	**	**	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Di-isopropyl ether	**	**	NA	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
p-Isopropyltoluene	**	**	ND	NA	NA	ND	ND	NA	NA	5.5	ND	NA	NA	ND	ND	ND	ND	NA	NA
Methylene chloride	0.5	5	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Methyl-t-butyl ether (MTBE)	12	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	8	40	ND	NA	NA	ND	ND	NA	NA	1.1	ND	NA	NA	ND	ND	ND	ND	NA	NA
n-Propylbenzene	**	**	ND	NA	NA	ND	ND	NA	NA	0.4	ND	NA	NA	ND	ND	ND	ND	NA	NA
Toluene	68.6	343	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	698	3490	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
1,2,4-Trimethylbenzene	**	**	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**	**	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.02	0.2	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
Xylenes, total	124	620	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Natural Attenuation Parameters																			
Methane (ppb)			NA	NA	NA	NA	NA	3.5	< 0.6	NA	NA	1.8	0.81	NA	NA	NA	NA	< 1.0	< 0.5
Dissolved Iron (field filtered) (ppm)			NA	NA	NA	NA	NA	< 0.019	< 0.14	NA	NA	< 0.019	< 0.14	NA	NA	NA	NA	< 0.019	< 0.14
Nitrate & Nitrite as N (ppm)			NA	NA	NA	NA	NA	< 0.017	0.03	NA	NA	< 0.017	0.046	NA	NA	NA	NA	1.5	0.072
Sulfate (ppm)			NA	NA	NA	NA	NA	99	90	NA	NA	98	82	NA	NA	NA	NA	98	120
Dissolved Oxygen (ppm)			NA	NA	NA	NA	NA	0.28	0.6	NA	NA	2.46	7.5	NA	NA	NA	NA	1.5	3.8
Redox (mV)			NA	NA	NA	NA	NA	-19.6	-2.2	NA	NA	-14.3	-16.9	NA	NA	NA	NA	1.6	-2.3
Indicator Parameters																			
pH	**	**	7.5	7.5	7.1	7.8	7.1	7.34	7.04	7.6	7.4	7.19	7.29	7.1	7.2	6.8	7.2	6.95	7.04
Temperature (degrees C)	**	**	12.9	18.2	13.1	11.2	14.6	14.9	18.2	6.9	8.8	10.4	15.6	7.2	6.9	6.9	6.2	9.8	15.1
Specific Conductivity (umhos/cm)	**	**	3140	1044	1221	1090	160	811	184	207	229	884	179	216	227	292	726	934	209

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

\+ = The groundwater sample collected on 8/20/04 and labeled "MW-201" was mis-labeled and

NA = Not analyzed.

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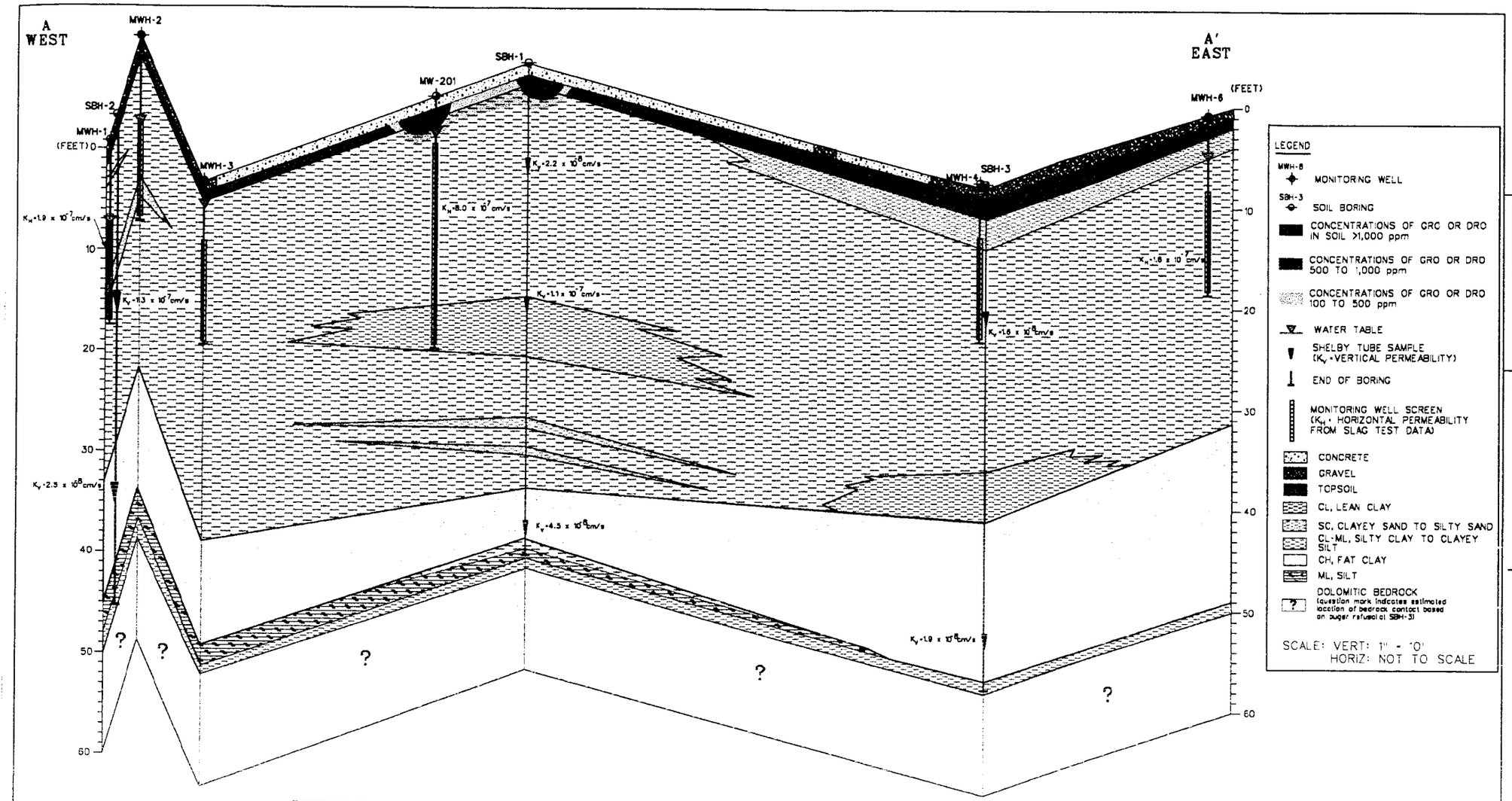

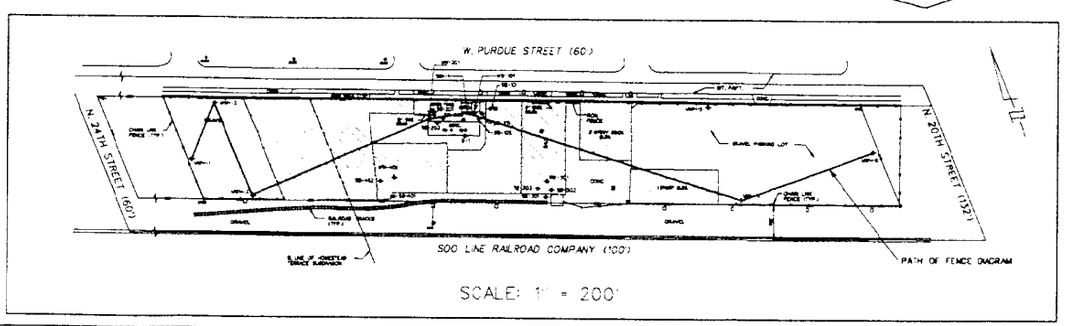

GRAEF ANHALT SCHLOEMER
and Associates Inc.
ENGINEERS & SCIENTISTS

ENVIRONMENTAL SERVICE DIVISION

OTHER OFFICES LOCATED AT:

GREEN BAY, WISCONSIN
MADISON, WISCONSIN
CHICAGO, ILLINOIS

PROJECT NAME:

PURDUE CORPORATION
2101-2201 PURDUE STREET
MILWAUKEE, WISCONSIN

SHEET TITLE:

GEOLOGICAL FENCE DIAGRA

PROJECT NUMBER:	948507
DATE:	05-01-96
PROJECT MGR:	WPF
DRAWN BY:	TMW/JZ
FILE NAME:	GEFEN-REID
SCALE:	AS SHOWN
REVISED:	04-15-97