June 27, 1997

Mr. Alan Nass
Wisconsin Department of Natural Resources
1125 N. Military Ave.
Green Bay, Wisconsin 54307

RECEIVED
JUN 30 1997
LMD SOLID WASTE

RE: Ultra Plating - Site Investigation Work Plan

Dear Mr. Nass:

RMT, Inc. (RMT) is pleased to submit this Work Plan for a Site Investigation at the Ultra Plating plant in Green Bay, Wisconsin. We have reviewed information obtained from the Wisconsin Department of Natural Resources (WDNR) and a study conducted for Ultra Plating by Environmental Drilling Services, Inc. (EDS) earlier this year.

We are prepared to begin implementation of the scope of work presented in the proposal upon your approval. We anticipate that field activities can begin within two to three weeks of your approval, and that they can be completed in approximately one to two weeks. Data evaluation and report preparation will take approximately three weeks, and will begin upon receipt of the laboratory results (generally within three weeks of submittal). The investigation will therefore take approximately ten weeks to complete.

If you have questions regarding this proposal, please contact Janeen in our Appleton office at (414) 830-0209, or Kathy in our Milwaukee office at (414) 879-1212.

Sincerely,

Janeen McMurtrie, P.G.
Senior Project Hydrogeologist

Kathy Huibregtse, P.E.
Senior Project Manager

RMT, INC. – FOX VALLEY
RENAISSANCE PLAZA - SUITE 210
4351 WEST COLLEGE AVENUE
APPLETON, WI - 54914-3928
414/830-0209 - 414/830-1996 FAX

RECEIVED
JUN 30 1997
LMD SOLID WASTE

WORKPLAN FOR A SITE INVESTIGATION AT ULTRA PLATING CORPORATION GREEN BAY, WISCONSIN

PREPARED FOR
ULTRA PLATING CORPORATION
GREEN BAY, WISCONSIN

PREPARED BY
RMT, INC.
APPLETON, WISCONSIN

June 1997

Kathy Huibregtse, P.E.
Senior Project Manager

Janeen McMurtrie, P.G.
Senior Project Hydrogeologist

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RMT INC.

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Final Copy

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Section 1
Background

Ultra Plating Corporation (Ultra Plating) is a specialty plating company located at 345 South Pearl Street in Green Bay, Wisconsin (Figure 1). They coat various metal parts with chromium, cadmium, and nickel finishes. The facility has been in operation as a plater since the 1950s. Ultra Plating employs approximately 20 people at their Green Bay facility which is located adjacent to a vacant, city-owned property.

The Ultra Plating site is located adjacent to a vacant property owned by the City of Green Bay (City). The City property is east of the Ultra Plating site, between Ultra Plating and the Fox River. The City purchased the property from the Fort Howard Corporation in December of 1994. The Wisconsin Department of Natural Resources (WDNR) conducted a Phase I Environmental Site Assessment (ESA) of the City property in August of 1996 as part of a Brownfields Environmental Assessment Pilot designed to assist local governments with the redevelopment of abandoned or under-used properties of known or suspected contamination.

The results of the Phase I ESA indicated that the City property had historically been used for the storage and redistribution of coal, coke and salt. A Shell Oil Company product distribution tank farm where gasoline, diesel, kerosene and solvents were stored was also formerly located on the southwest portion of the City property. The tanks were removed from the city property in 1985. There is no documentation of the closure on file at the WDNR. According to the WDNR's Phase I ESA, the City property was also historically used as a lumber yard; planing mill; sash, door and blind factory; and for steel products manufacturing. Surficial coal fill material was also observed over much of the surface of the City property.

Based on the results of the Phase I ESA, a Phase II ESA for the City property is now being conducted by the WDNR. RMT reviewed the draft Phase II ESA at the WNDR's Green Bay office on June 6, 1997. The Phase II ESA included the advancement of seven Geoprobe soil borings on the city property, and collection and analysis of soil and groundwater samples. Three areas of concern were identified in the draft Phase II ESA:

- Elevated concentrations of chromium and halogenated volatile organic compounds in groundwater sample SS24, collected east (suspected downgradient) of the Ultra Plating plant.
- Free product observed in surficial soils in the immediate vicinity of the former Shell Oil Company tank farm. Volatile and semi-volatile organic compounds were

detected in groundwater samples collected in the area assumed to be downgradient (east, toward the Fox River) of the former tank farm.

- Positive detections of arsenic and semi-volatile organic compounds detected in surficial soils containing coal on the City property.
- Drums with unknown contents observed in abandoned buildings on the City property.

Copies of maps and summary tables of analytical data obtained from the WDNR's Draft Phase II ESA are included in Appendix A.

The owner is interested in expanding the Ultra Plating facility to the north and requested subsurface exploration in the area being considered for expansion. In December of 1996, Environmental Drilling Services, Inc. (EDS) of DePere, Wisconsin drilled three Geoprobe® soil borings on the north side of Ultra Plating's property . De-commissioned tanks had been stored in this area in the past, and there was some concern that residues from the tanks may have impacted surficial soils in the area.

The EDS soil boring locations are shown on Figure 2. One composite soil sample was collected from each of the borings. Groundwater samples were collected from soil borings B-1 and B-2, but not from B-3. The soil and groundwater samples were submitted to Enchem Laboratories, Inc. of Green Bay, Wisconsin (Enchem) for analysis of cadmium, chromium, cyanide, copper, and nickel. The groundwater samples were preserved with acid in the field, laboratory filtered, and then analyzed for total metals. Data indicated that the total concentrations of chromium, cadmium and nickel in the groundwater sample collected from B-1 exceeded the NR 140 Preventive Action Limit. Copies of the analytical data obtained from the EDS soil boring locations are included in Appendix B.

The results of these analyses were submitted to Mr. Alan Nass of the Wisconsin Department of Natural Resources (WDNR) for review and comment. Mr. Nass suggested that Ultra Plating collect additional, discrete soil samples from the surface and from the water table elevation in the area of concern. He further indicated that the City of Green Bay had performed limited soil and groundwater testing on the adjacent City property and that they had detected metals and chlorinated solvents in groundwater in a supposed downgradient direction (east) from the Ultra Plating facility. Ultra Plating wishes to obtain additional data to evaluate the significance of the City of Green Bay groundwater data, and to evaluate potential costs related to handling and disposal of soils and/or groundwater during construction of the proposed addition. RMT has prepared this work plan to address these issues.

Section 2
Proposed Approach

2.1 Investigation Objectives

The investigation objectives are as follows:

- Obtain information suggested by the WDNR to evaluate the significance of the soil and groundwater analytical results obtained from samples collected from the adjacent City of Green Bay property
- Evaluate whether soil and groundwater quality in the proposed building addition footprint will impact handling and disposal options for soil excavated during construction of the proposed addition.
- Evaluate whether impacts detected on the adjacent City of Green Bay property are related to activities at the Ultra Plating facility.
- Request site closure from the WDNR as quickly as possible.

2.2 Investigation Approach

RMT proposes to advance two Geoprobe® soil borings (W-1 and W-2) north of the existing building in the vicinity of the proposed building addition near the locations of EDS borings B-1 and B-2. A third soil boring (W-3) will be advanced near the southeast corner of the Ultra Plating building, and west of WDNR groundwater sample location SSO5. The proposed Geoprobe locations are shown on Figure 3. Soil samples will be collected continuously in each of the soil borings. The samples will be examined and logged according to the Unified Soil Classification System (USCS) by an RMT geologist. Discrete soil samples will be selected from the near-surface and from at or just above the water table in each soil boring. A temporary, one-inch diameter, PVC well will be installed in each soil boring. A groundwater sample will be collected from each temporary well. The groundwater samples will be field-filtered and preserved according to standard procedures. The soil and groundwater samples will be submitted to Enchem for analysis of cadmium, chromium, cyanide, copper, and nickel.

RMT will measure the top-of-casing elevations of the temporary wells with reference to a site datum. We will also measure the horizontal location of each of the wells with reference to the building and other existing structures. A minimum of one round of groundwater depths will be measured in the monitoring wells. This data will be used to prepare a water table map and evaluate the direction of groundwater flow at the site. The direction of groundwater flow is instrumental in controlling contaminant migration in groundwater and will allow RMT to

assess whether groundwater impacts detected on the adjacent City of Green Bay parcel are related to activities at the Ultra Plating facility.

The laboratory data and the water table map should allow Ultra Plating to assess whether past storage activities have caused impacts to site soils and/or groundwater and to determine whether additional costs for handling and disposal of impacted soils and/or groundwater will be incurred during construction of the proposed addition..

RMT will prepare a summary report including findings and conclusions regarding whether past storage activities have caused impacts to site soil and/or groundwater in the area of concern and whether additional costs for handling and disposal of impacted soil and/or groundwater are expected to be incurred during construction of the proposed building addition.

Section 3
Scope of Work

3.1 Subsurface Exploration

The objective of the subsurface investigation is to collect the necessary data on site hydrogeology and geochemistry to evaluate whether past storage activities have caused impacts to site soil and/or groundwater in the area of concern and whether additional costs for handling and disposal of impacted soil and/or groundwater will be incurred during construction of the proposed building addition.

Scope of Services:

- Prepare a site-specific Health and Safety Plan based on currently available data as required by the Occupational Health and Safety Administration.
- Prepare a subcontract for drilling and well installation services with EDS.
- Provide at least one week notice to the owner prior to conducting any site work.
- Observe and document drilling three soil borings to estimated depths of 15 feet below the ground surface. Soil samples will be collected continuously in the soil borings using a Geoprobe® sampler, and will be classified according to the USCS. A temporary, one-inch-diameter PVC well will be installed in each soil boring.
- Select a total of six soil samples (two from each soil boring) to be submitted to EnChem for analysis of cadmium, chromium, cyanide, copper, and nickel.
- Collect one water sample from each temporary well to be submitted to EnChem for analysis of dissolved cadmium, chromium, cyanide, copper, and nickel.
- Measure the top-of-casing elevations of each of the temporary wells with respect to a site datum.
- Re-mobilize to the site to measure the depth to water in each temporary well installed at the site.
- Use the data obtained to prepare a water table map indicating the direction of groundwater flow at the site.
- Abandon the temporary wells, upon Ultra Plating's approval.

3.2 Data Evaluation and Report Preparation

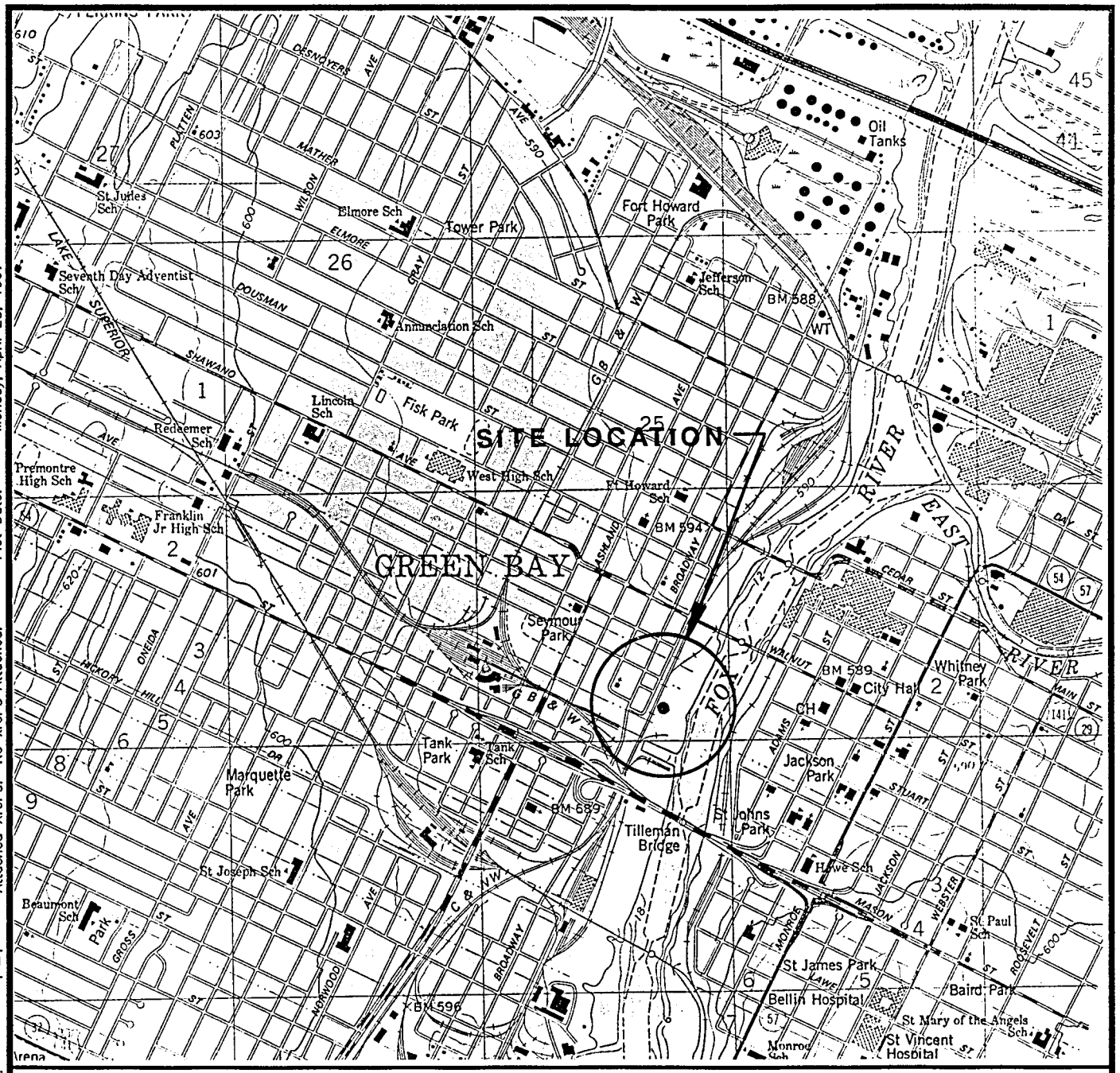
After completion of the field work, RMT will tabulate the data obtained and prepare a summary report including findings and recommendations. This work will include the following tasks:

- Finalize all of the soil boring logs and temporary well installation diagrams on WDNR forms in compliance with NR 141.
- Tabulate and review the results of the chemical analyses.
- Compile the data obtained, and prepare a report containing findings, conclusions and recommendations regarding the nature and extent of impacts in the area of concern.

Section 4
Schedule

The field investigation will be scheduled following receipt of WDNR approval of this work plan. It is anticipated that scheduling and completion of the drilling and well installation will take approximately three weeks. Groundwater samples will be collected approximately one week after the wells are installed. Laboratory analysis of the groundwater samples will take two to three weeks. After the data are received, they will be summarized and reviewed, and the summary report will be prepared. The report will be submitted to the WDNR approximately ten to twelve weeks after approval of the workplan.

RMT COMPUTER AIDED DESIGN & DRAFTING



STATE LOCATION

0 2000 4000

SCALE: 1"=2000'

SOURCE: BASE MAP FROM GREEN BAY WEST 7.5 MIN. USGS QUADRANGLE.

SITE LOCATION

ULTRA PLATING
GREEN BAY, WISCONSIN

RMT INC.

DWN. BY:	LLS
APPROVED BY:	[signature]
DATE:	APRIL 1997
PROJ. #	997701.57
FILE #	99770157.DWG

FIGURE 1

PLOT DATA
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Plot Date: Monday, April 28, 1997

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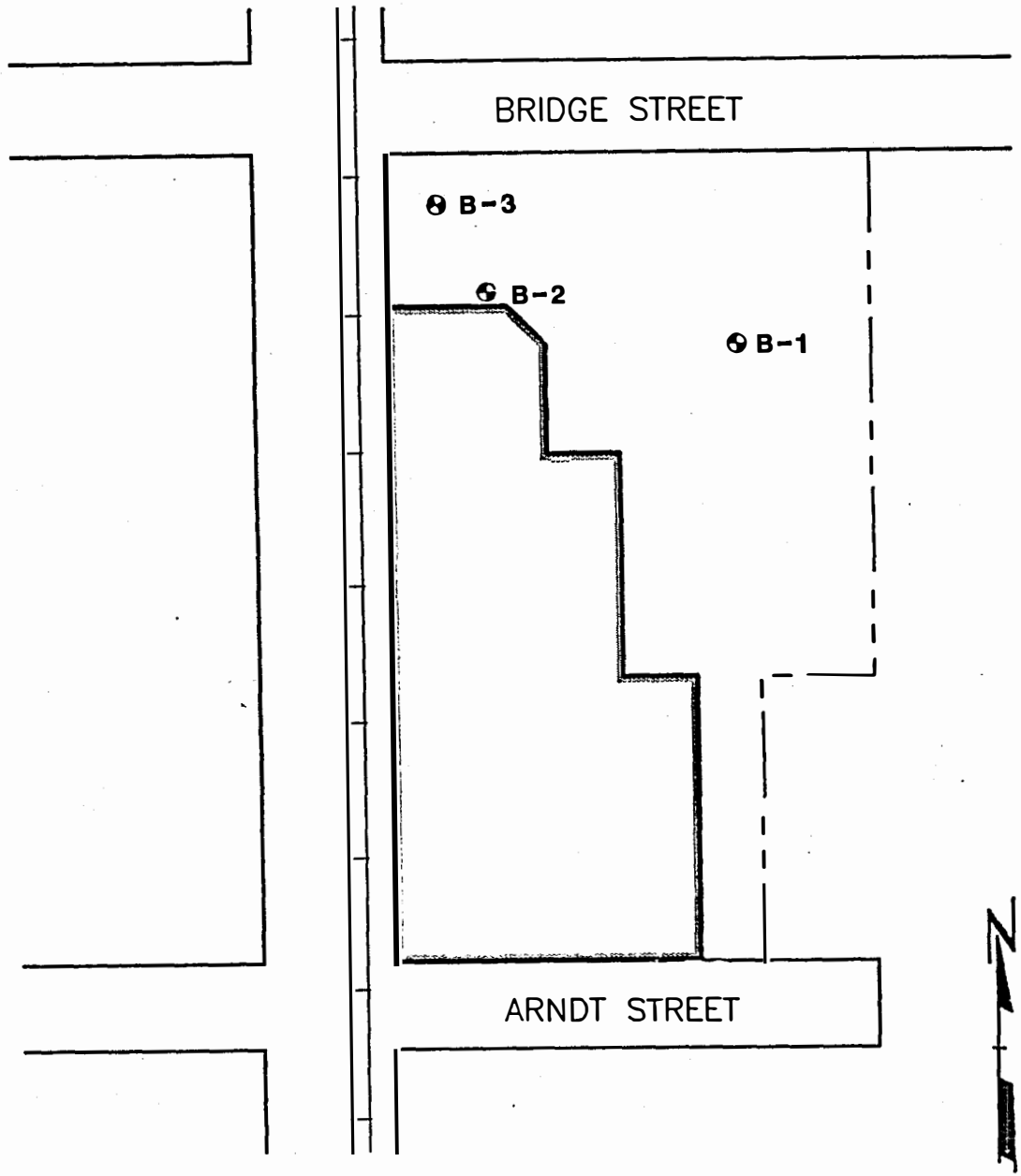
Plot Date: Monday, April 28, 1997

RMT COMPUTER AIDED DESIGN & DRAFTING



LEGEND

- PROPERTY LINE
- RAILROAD TRACKS
- BUILDINGS
- B-2 SOIL BORING LOCATION

NOT TO SCALE

EDS BORING LOCATIONS
ULTRA PLATING
GREEN BAY, WISCONSIN

RMT INC.

DWN. BY: LLS
APPROVED BY:
DATE: APRIL 1997
PROJ. # 997701.57
FILE # 99771572.DWG

FIGURE 2

PLOT DATA
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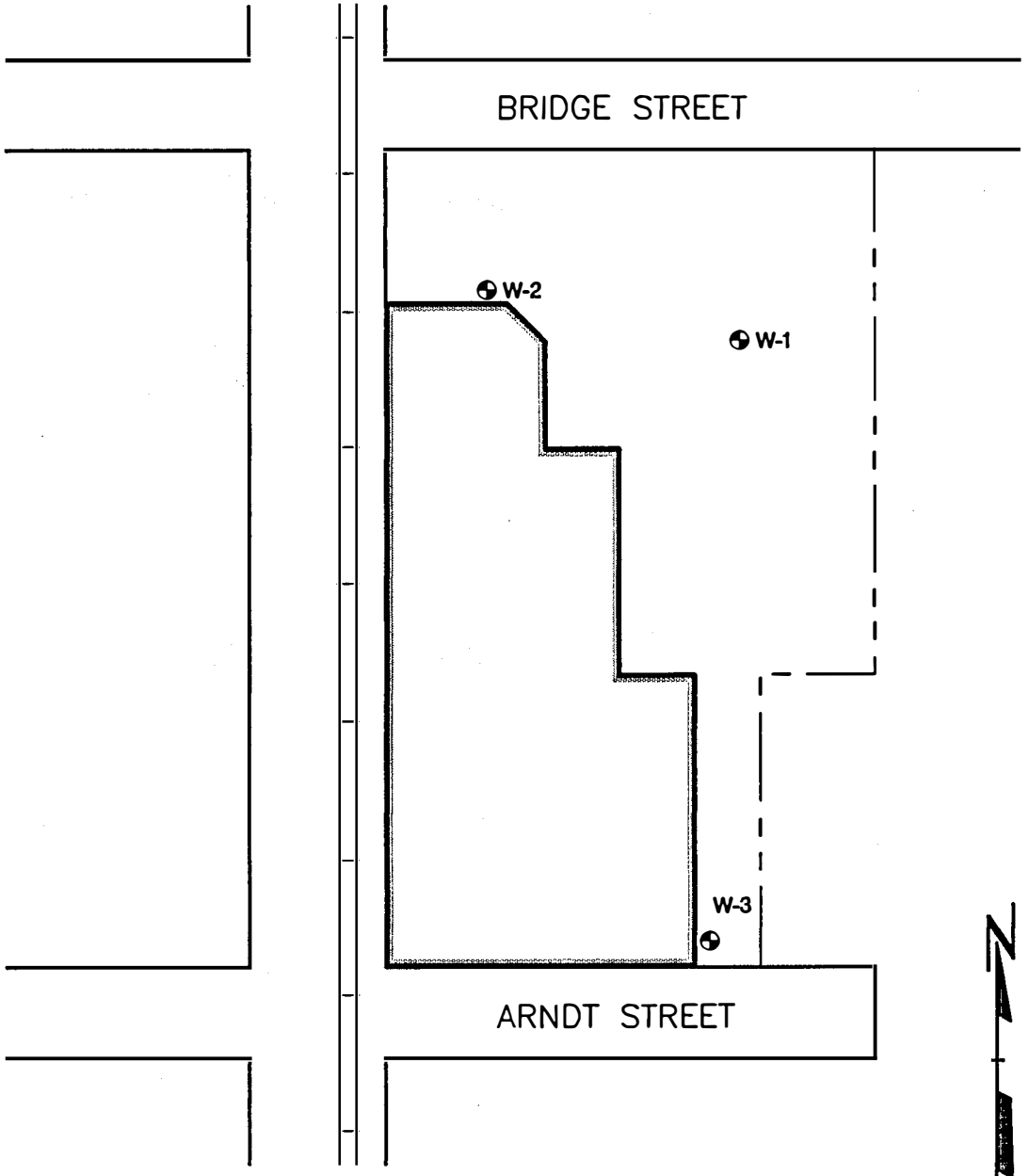
Plot Date: Wednesday, June 25, 1997

RMT COMPUTER AIDED DESIGN & DRAFTING



LEGEND

- PROPERTY LINE
- RAILROAD TRACKS
- BUILDINGS
- W-1 PROPOSED GEOPROBE LOCATION

NOT TO SCALE

PROPOSED GEOPROBE BORING LOCATIONS

ULTRA PLATING
GREEN BAY, WISCONSIN

RMT INC.

DWN. BY:	LLS
APPROVED BY:	
DATE:	JUNE 1997
PROJ. #	3486.01
FILE #	34860101.DWG

FIGURE 3

Appendix A
WDNR File Data

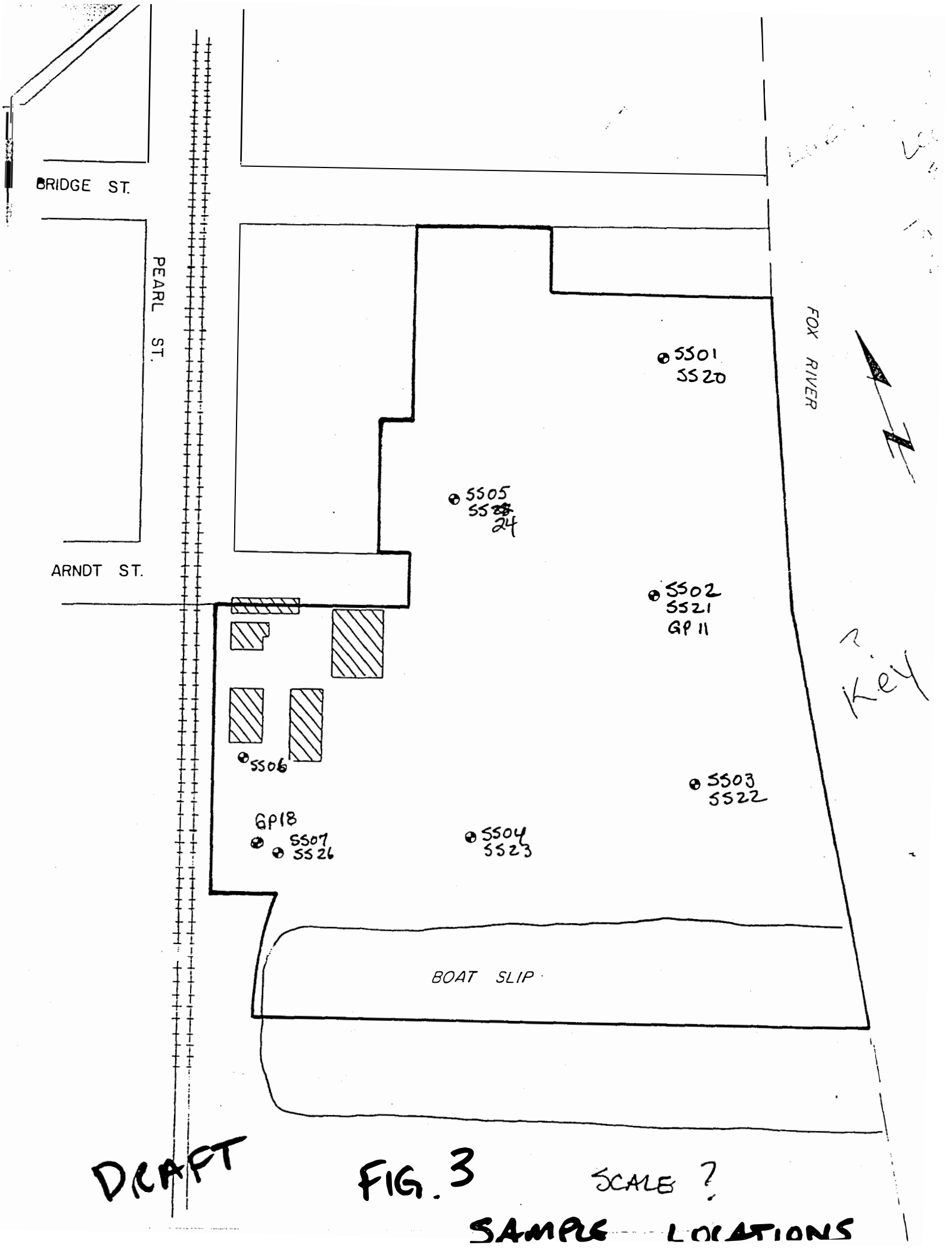

BRIDGE ST.
PEARL ST.
ARNDT ST.
FOX RIVER
SS01
SS20
SS05
SS24
SS02
SS21
GP 11
Key
SS06
SS03
SS22
GP18
SS07
SS26
SS04
SS23
BOAT SLIP
DRAFT
FIG. 3
SCALE ?
SAMPLE LOCATIONS

TABLE 1

SAMPLE SUMMARY - RIVERFRONT PROPERTY

Soil Sample Number	Soil description and sample depth (feet)		Corresponding groundwater sample from boring	Depth (ft) to water table from ground surface
SS01	0-1.5	sand fill	S20	2.9
	1.5-2.0	coal		
	2.0-3.0	silty fine sand (SS01) (Native Material)		
SS02 GP 11	0-1.0	grey gravel	S21	3.61
	1.0-2.0	coal waste (SS02) (Waste)		
	2.0-3.1	brown sand with gravel (GP11) (Native)		
SS03	1.5-2.5	dark brow grey fine material - possibly coal dust/waste) Waste	S22	2.32
SS04	0-1.0	brown silty clay - sample was smeared w/ coal, attempted to scrape off (SS04) Native w/waste	S23	1.08
SS05	0-.25	brown med sand	S24	3.6
	.25-1.25	black granular coal		
	1.25-5.0	brown med sand-well sorted (SS05) Native		
SS06	0-.7	grey gravel, silt, fill	no sample	
	.7-1.3	coal		
	1.3-2.5	red brown sand fill		
	2.5-3.0	red to black mix of coal dust & sand		
	3.0-4.6	red-brown silty clay,dense, little moisture (SS06) Native		
SS07	0-2.0	black stony fill, coal dust	S26	not recorded Dry?
	2.0-2.6	brown sand-well sorted		
	2.6-3.2	black granular waste; coal dust		
	3.2-3.3	brown clay		
	3.3-3.6	granular coal dust (Inorganic analysis -SS07) Waste		
	3.6-4.3	grey to black clay-diesel odor (Semivolatile SS07) Native		
	4.3-4.5	brown med sand (Semi-volatile SS07) Native		
	4.5-6.0	brown clay w/sand - diesel odor (VOC SS07) Native		
GP18	0-7	no recovery		
	7-11	grey gravel fill with contaminated fines;strong diesel smell		
No sample collected	14	clay - appeared clean; no staining, no odor		

Riverfront Property - City of Green Bay
Samples collected September 9-10, 1996

TABLE 1

SOIL - VOC ANALYSIS - Detects Only -µg/kg

	SS01	SSO2	SS03	SS04	SS05	SS06	SS07	GP11	GP18	NR 720*
Chloromethane	2								Visual & olefactory petroleum (diesel) contamination observed in the fines contained in the gravel fill. No sample collected	
Acetone			39							
Chloroform		2			1	4				
Benzene		2								5.5
Toluene		4								1500
Styrene		1								
Xylene		4								4100

* NR 720 Table 1 Residual Contaminant Levels (RCL) based on protection of groundwater.

Riverfront Property - City of Green Bay
Samples collected September 9-10, 1996

TABLE 2

SOIL - SEMI-VOLATILE ORGANIC ANALYSIS - Detects Only -µg/kg

	SS01	SS02	SS03	SS04	SS05	SS06	SS07	GP11	GP18	Suggested RCL*
1,2-Dichlorobenzene									Visual & olefactory petroleum (diesel) contamination observed in the fines contained in the gravel fill. No sample collected - due to insuffi-cent amount of matrix.	
Naphthalene		230	76	62						110,000
2-Methylnapthalene		370	130	24						$4x10^7$
Acenapthylene				20						360,000
Dibenzofuran		91								
Florene		23	32	22			350			$4x10^7$
Phenanthrane		280	300	150			650			390,000
Anthracene		30	74	42						$3x10^8$
Carbozole		20	28							
di-n-Butylphthalate		19								
Floranthene		110	330	220			460			$4x10^7$
Pyrene		90	290	150			290			$3x10^7$
Benzo(a)Anthracene		60	180	99			190			3900
Chrysene		100	240	130			230			390,000
bis(2-Ethylhexly)phthalate		34				26	97	31		3900
Benzo(b)Floranthene		54	280	220			200			39000
Benzo(k)Floranthene		47	210				140			390
Benzo(a)Pyrene		45	240	120			200			3900
Indeno(1,2,3-cd)Pyrene		32	160	82			130			390
Dibenz(a,h)anthracene		25	79	39			70			39,000
Benzo(g,h,i)perylene		52	190	100			130			

Riverfront Property - City of Green Bay
Samples collected September 9-10, 1996

TABLE 3

SOIL - INORGANIC ANALYSIS - Detects only - mg/kg

	SS01	SS02	SS03	SS04	SS05	SS06	SS07	GP11	GP18	RCL*
Aluminum	3110	4130	8450	11400	1500	8960	1230	1410	No sample collected	
Arsenic		9.5	24.7	3.5		2.7	5.8			1.6
Barium			54.5	78.3		51.1				
Cadmium			1.6							510
Calcium	91000	33300	18900	75700	57900	42200	7200	41200		
Chromium	6.2	9.2	13.1	24.3	10.4	20.2		4.0		200
Cobalt			14.3							
Copper	10.4	16.5	142	25.6	6.0	17.0	58.4			
Iron	7880	10700	62500	19200	4420	16400	24500	4070		
Lead	11.5	87.9	62.4	15.7	1.4	7.5	22.5	2.0		500
Magnesium	48000	14200	10500	24600	20800	16700	1520	16000		
Manganese	265	151	382	430	154	479	290	109		
Nickel		11.7	23.8	19.7		17.0				
Potassium				1760		1620	363			
Selenium							3.6			
Sodium		1670								
Vanadium	17.1	16.1	19.6	36.0		29.5				
Zinc	19.7	41.6	133	42.2	12.0	29.2	18.4	14.4		
Cyanide	3.1	0.22	0.31	0.05	0.08	0.10	0.09	0.48		

* exceeds NR 720 Table 2 Residual Contaminant Level (RCL) concentrations based on human health risk from direct contact for industrial sites

Riverfront Property - City of Green Bay
Samples collected on September 9-10, 1996

TABLE 4

GROUNDWATER - VOC ANALYSIS - Detects only µg/L

	S20	S21	S22	S23	S24	S26	PAL	ES
1,1-Dichloroethene					14		.7	7
1,1-Dichloroethane					19		85	850
cis-1,2-Dichloroethene					1		7	70
1,1,1-Trichloroethane					48		40	200
Trichloroethene					8		.5	5
Isopropylbenene						1		
sec-Butylbenzene						4		
p-Isopropyltoluene	2							
Naphthalene						2	8	40

exceeds NR 140 Preventative Action Limit (PAL)

exceeds NR 140 Enforcement Standard (ES)

TABLE 5

GROUNDWATER - SEMI-VOLATILE ORGANIC ANALYSIS - Detects only - µg/L

	S20	S21	S22	S23	S24	S26	PAL	ES
Benzoic Acid					14			
2-Methylnapthalene						12		
Acenapthene						1		
Dibenzofuran						2		
Fluorene						2	80	400
Phenanthrene						2		

Riverfront Property - City of Green Bay
Samples collected September 9-10, 1996

TABLE 6

GROUNDWATER - INORGANIC ANALYSIS - Detects only µg/L

	S20	S21	S22	S23	S24	S26	PAL	ES
Aluminum	758	302	832	1100	307	269		
Arsenic	4	4		4	4		5	50
Barium	79.4	63.9	35	22.1	30.4	75.6	.5	5
Cadmium	4				0.2	0.4	.5	.5
Calcium	380000	179000	429000	540000	186000	172000		
Chromium	24.4		11		1810		10	100
Iron	4640	12600	13300	76800	1290	854		
Lead	12		3	5		2	1.5	15
Magnesium	345000	148000	594000	122000	137000	52100		
Manganese	363	679	246	1670	945	302		
Nickel				42	20.2		20	100
Potassium	25100	11300	26600	9380	6890	13000		
Selenium	50	10	8	10	10	6	10	50
Sodium	4230000	855000	100000	23800	220000	116000		
Thallium	10						.4	2
Vanadium	9.5	6.3	8.7					
Cyanide	74	81			88		40	200

exceeds NR 140 Preventative Action Limit (PAL)

exceeds NR 140 Enforcement Standard (ES)

Metals all filtered ∴ dissolved

Appendix B
EDS File Data

ENVIRONMENTAL DRILLING SERVICES INC.
EDS
Office
3671 Monroe Rd.
De Pere, WI 54115
1.800.236.0137
414.337.9600
Fax: 414.336.5935

12/20/96

Mr. Gary Jensen
Ultra Plating, Inc.
345 S. Pearl St.
Green Bay, WI 54303

RE: Soil sampling at above property.

Dear Mr. Jensen:

On December 2, 1996 we performed three soil probes on the north side of your property. As discussed, old tanks were stored in that area and there was some concern over residue leaching into the surrounding soil. The three soil borings are described as follows:

B-1: Downgradiant boring. Soil sampled to 16 feet and took a water sample. Water table at approximately 11 feet. This water sample was taken approximately 60 feet downgradiant of the source area to determine the migration through the watertable.

B-2: In source area. Soil sampled to 7 feet. Blind drill to 15 feet and took a water sample. Water table at approximately 3 feet (possibly perched). The soil sample was a composite sample from 1 to 7 feet. This represents the soil just above and into the water table. The water sample was taken from a screened interval of 10 - 15 feet.

B-3: In source area. Soil sampled to 7 feet. Water table at approximately 3 feet (possibly perched). The soil sample was a composite sample from1 to 7 feet. This represents the soil just above and into the water table. No water samples were taken.

The soil and water samples were tested for Cadmium, Chrome, Cyanide, Copper and Nickel. See the attached sheets for the lab results and boring locations.

Please contact me with any additional comments or questions.

Sincerely,
Environmental Drilling Services, Inc.

Tom Van De Yacht

EN CHEM INC.

. . . chemistry for the environment

1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX: 414-469-8827

Lab Certification No. 405132750
Location : ULTRA PLATING
Your Sample ID: GP-1
Sample Desc. : H2O
Sample Matrix : WATER — Date Collected: 12/06/1996
En Chem Proj# : 9612096 — Date Received : 12/06/1996
En Chem Lab # : 208760 — Date Reported : 12/20/1996

Report to: ENVIRONMENTAL DRILLING SERVICES
3671 MONROE ROAD
DE PERE, WI 54115

Bill to: ENVIRONMENTAL DRILLING SERVICES

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyst By
M-NI-W-T	Nickel, dissolved	67	ug/l	10			SW846 6010	12/11/1996	MWH
M-CU-W-T	Copper, dissolved	ND	ug/l	10			SW846 6010	12/11/1996	MWH
M-CR-W-T	Chromium, dissolved	94	ug/l	2.3			SW846 6010	12/11/1996	MWH
M-CD-W-T	Cadmium, dissolved	2.5	ug/l	0.7			SW846 6010	12/11/1996	MWH
CN-WW	Cyanide	0.17	mg/L	0.01			EPA 335.4	12/17/1996	*MM

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

These results have been reviewed and their authenticity verified by:

EN CHEM INC.

. . . chemistry for the environment

1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
Fax: 414-469-8827

Lab Certification No. 405132750
Location : ULTRA PLATING
Your Sample ID: GP-2
Sample Desc. : H2O
Sample Matrix : WATER — Date Collected: 12/06/1996
En Chem Proj# : 9612096 — Date Received : 12/06/1996
En Chem Lab # : 208761 — Date Reported : 12/20/1996

Report to: ENVIRONMENTAL DRILLING SERVICES
3671 MONROE ROAD
DE PERE, WI 54115

Bill to: ENVIRONMENTAL DRILLING SERVICES

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyz By
M-NI-W-T	Nickel, dissolved	ND	ug/l	10			SW846 6010	12/11/1996	MWM
M-CU-W-T	Copper, dissolved	ND	ug/l	10			SW846 6010	12/11/1996	MWM
M-CR-W-T	Chromium, dissolved	ND	ug/l	2.3			SW846 6010	12/11/1996	MWM
M-CD-W-T	Cadmium, dissolved	ND	ug/l	0.7			SW846 6010	12/11/1996	MWM
CN-WW	Cyanide	ND	mg/L	0.010			EPA 335.4	12/17/1996	*MA

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

These results have been reviewed and their authenticity verified by:

EN CHEM INC.

. . . chemistry for the environment

1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
Fax: 414-469-8827

Lab Certification No. 405132750
Location : ULTRA PAINTING
Your Sample ID: GP-3
Sample Desc. : SOIL
Sample Matrix : SOIL — Date Collected: 12/03/1996
En Chem Proj# : 9612035 — Date Received : 12/03/1996
En Chem Lab # : 208347 — Date Reported : 12/13/1996

Report to: ENVIRONMENTAL DRILLING SERVICES
3671 MONROE ROAD
DE PERE, WI 54115

Bill to: ULTRA PAINTING

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
TOTSOLID	Total Solids	76	percent				SM2540G	12/04/1996	PHS
M-NI-S	Nickel	28	mg/kg	2.7	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSB
M-CU-S	Copper	21	mg/kg	2.7	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSB
M-CR-S	Chromium	23	mg/kg	1.0	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSB
M-CD-S	Cadmium	2.7	mg/kg	0.3	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSB
CN-S	Total Cyanide	13	mg/kg	1.2	EPA 335.4		EPA 335.4	12/10/1996	*MA

"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:

M. Sulka

EN CHEM INC.

. . . chemistry for the environment

1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
Fax: 414-469-8827

Lab Certification No. 405132750
Location : ULTRA PAINTING
Your Sample ID: GP-2
Sample Desc. : SOIL
Sample Matrix : SOIL Date Collected: 12/03/1996
En Chem Proj# : 9612035 Date Received : 12/03/1996
En Chem Lab # : 208348 Date Reported : 12/13/1996

Report to: ENVIRONMENTAL DRILLING SERVICES
3671 MONROE ROAD
DE PERE, WI 54115

Bill to: ULTRA PAINTING

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyst By
TOTSOLID	Total Solids	75	percent				SM2540G	12/04/1996	PHS
M-NI-S	Nickel	120	mg/kg	2.7	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSP
M-CU-S	Copper	18	mg/kg	2.7	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSP
M-CR-S	Chromium	44	mg/kg	1.0	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSP
M-CD-S	Cadmium	4.6	mg/kg	0.3	SW846 3051	12/09/1996	SW846 6010	12/10/1996	MSP
CN-S	Total Cyanide	2.8	mg/kg	0.59	EPA 335.4		EPA 335.4	12/10/1996	***

"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:

M. Sucha

Company: [illegible]

Branch or Location:

Project Contact: Tom Van De Yacht

Telephone: 227-9600

Project Number: Ultra Platinum

Project Name: "

Project Location:

Sampled By (Print): Troy Simonar

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

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

Mail Report To: [illegible]

Company: 3671 Monroe Rd

Address: De Pere, WI 54115

Invoice To: Same

Company:

Address:

Mail Invoice To:

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

NR720 Confirmation Analysis Required?

(En Chem will confirm unless otherwise instructed.)

SHADED AREA FOR LABORATORY USE ONLY

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
GP-1	H_2O	12/6	11:30				NaOH	Cyanide	✓	1-500ml	NaOH	208760
GP-1	H_2O	"	"				None	Cu, Ni, Cd, Cr	↓	1-500ml		↓
GP-2	H_2O	"	"				NaOH	Cyanide	↓	1-500ml	NaOH	208761
GP-2	H_2O	"	"				None	Cu, Ni, Cd, Cr	↓	1-500ml		↓

***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.
[signature]	12/6 12:00		9612096
Relinquished By:	Date/Time:	Received By:	Sample Receipt Temp. *(Must be rec'd at 4°C)*
Relinquished By:	Date/Time: [illegible]	Received By (En Chem): [illegible]	FRESH Sample

Company Name: Ultra Plating Inc

Branch or Location: G.B.

Project Contact: Tom Van De Yacht

Telephone: 337-9600

Project Number:

Project Name:

Project Location:

Sampled By (Print): Chuck Cisler

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

NPDES/WPDES CAA NR_____ Other_____

EN CHEM INC. CHAIN OF CUSTODY

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

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.)

Mail Report To:

Company: SAME

Address:

Invoice To: Ultra Plating

Company:

Address: 345 S. Pearl
G.B. WI 54303

Mail Invoice To:

Field ID	Sample Description	Collection Date	Collection Time	Field Screen	Matrix	Filt'd Y/N	Preserv*	Analysis Requested	SHADED AREA FOR LABORATORY USE ONLY: Good Cond.	Total Bottles	Comments	Laboratory Number
GP-3	Soil	12/3	12:40				None	Cyanide	X	1-4oz 1-5oz		208347
GP-3	Soil	12/3	12:40				None	Ca|Cr|Cu|Ni	↓	↓		↓
GP-2	soil	12/3	11:00				None	Cyanide				208348
GP-2	↓	12/3	11:00				None	Ca|Cr|Cu|Ni				↓
GP-2	H_2O	12/3	11:00				HNO_3	~~Ca|Cr|Cu|Ni~~ Wm 12/06/96	↓	1-250ml		~~208349~~ DELETE WM 12/06/96

*Preservation Code
A=None B=HCL C=H2SO4
D=HNO3 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:
	12/3/96 5:00 p.m.		96-12035
Relinquished By:	Date/Time:	Received By:	Sample Receipt Temp. (Must be rec'd at 4°C)
			ROI
Relinquished By:	Date/Time: 12/3/96 5p	Received By (En Chem):	

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Page _____ of _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Ultra Plating	_ _ _ _ _ _ _ _	B-1

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Environmental Drilling Services, Inc. Tom Van De Yacht	12 /02 /96 M M D D Y Y	12 /02 /96 M M D D Y Y	Geoprobe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	2.0" 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
Brown	05	Green Bay

Sample Number	Sample Length 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: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				Gravel to topsoil										
1			2	Topsoil to silt										
2			4	Silty/clay to clay										
3			6	Red Clay										
4			8	Red Clay										
5			10	Red Clay										
6			12	Same- moist										
7			14	Same- moist										
8			16	E.O.B. 16 feet Set temp. well at 15ft.										
			18											

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

Signature _____ Firm Environmental Drilling Services, 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
☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Page _____ of _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Ultra Plating	— — — — — — — —	B-2

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Environmental Drilling Services, Inc. Tom Van De Yacht	12 /02 / 96 M M D D Y Y	12 /02 / 96 M M D D Y Y	Geoprobe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — — —	— — — — — — — —		_____ Feet MSL	_____ Feet MSL	2.0" 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
Brown	05	Green Bay

Sample Number	Sample Length 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: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P-200	RQD/ Comments
				Topsoil to sand										
1			2	sand to silty sand										
2			4	silty sand to silty clay										
3			6	Silty clay to clay.										
4			8	Blind drill form 7 ft. to 15 ft.										
5			10											
6			12											
7			14											
				E.O.B. 15 ft.										
8			16	Set temp. well at 15 ft.										
			18											

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

Signature: Tom Van De Yacht

Firm: Environmental Drilling Services, 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
☐ Other _____

SOIL BORING LOG INFORMATION
Form 4400-122 7-91

Page _____ of _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Ultra Plating	_ _ _ _ _ _ _ _	B-3

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Environmental Drilling Services, Inc. Tom Van De Yacht	12 /02 /96 M M D D Y Y	12 /02 /96 M M D D Y Y	Geoprobe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _	_ _ _ _ _ _ _ _		_____ Feet MSL	_____ Feet MSL	2.0" 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
Brown	05	Green Bay

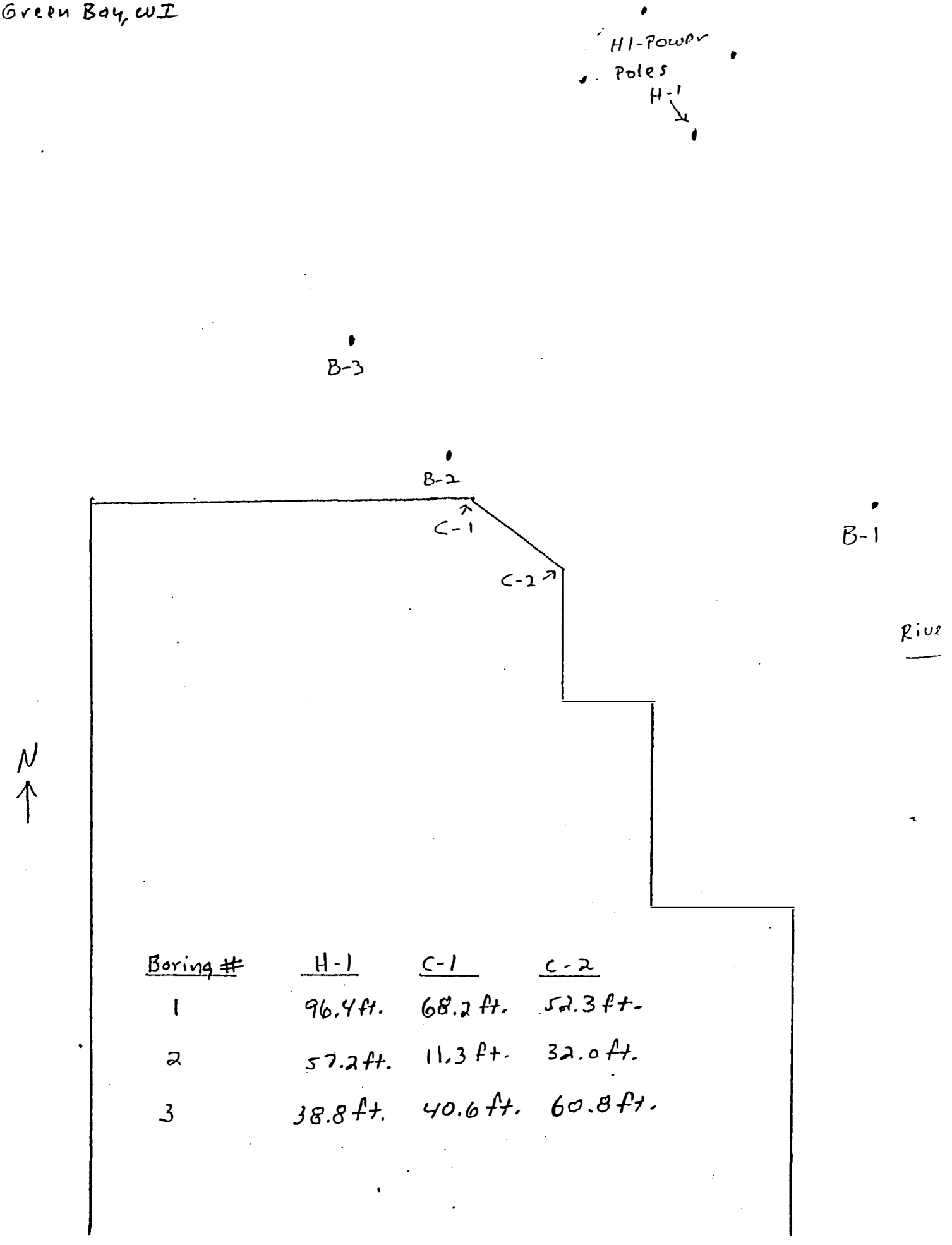
Sample Number	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1			2	Topsoil to sand										
2			4	Sand to Silty Sand - Wet										
3			6	Silty and to clay										
4			8	E.O.B. 7 feet.										
5			10											
6			12											
7			14											
8			16											
			18											

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

Signature Tom Van De Yacht | Firm Environmental Drilling Services, 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.

Ultra Plating
345 S. Pearl St.
Green Bay, WI



Boring #	H-1	C-1	C-2
1	96.4 ft.	68.2 ft.	52.3 ft.
2	57.2 ft.	11.3 ft.	32.0 ft.
3	38.8 ft.	40.6 ft.	60.8 ft.