SIMON HYDRO-SEARCH

175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

Telephone (414)792-1282
Facsimile (414)792-1310

September 1, 1993
(366115203)

Mr. James Morrin
Wildman, Harrold, Allen and Dixon
225 W. Wacker Dr.
Chicago, IL 60606-1229

RE: Work Plan for Milwaukee Plating Company

Dear Mr. Morrin:

In response to the Wisconsin Department of Natural Resources' (WDNR's) letter to Milwaukee Plating dated August 16, 1993, Simon Hydro-Search has prepared the following work plan. The purpose of this work plan is to address the removal of free product which has been observed in a monitor well located east of the Milwaukee Plating property (Figure 1).

Background

Simon Hydro-Search was contracted by Milwaukee Plating Company to remove and abandon two fuel oil underground storage tanks (USTs) at their facility in November of 1989. Soil impacts were encountered in the vicinity of a 3,000-gallon UST which was removed and a 6,400-gallon UST which was abandoned in place. Subsequent soil and ground-water investigations resulted in the installation of 13 soil borings, five of which were completed as monitor wells (Figure 1). Soil Boring Log Information forms (440-122) and Monitoring Well Construction forms (440-113A) for wells MW-4 and MW-5 are provided in Attachment A. All previous logs and construction forms were submitted to the WDNR in a report, "Soil and Ground-Water Investigations, Milwaukee Plating Company," dated November 21, 1991 by Simon Hydro-Search. A sixth monitor well was constructed by Dames and Moore, Inc. just west of the Central Controls garage east of Milwaukee Plating.

Water levels and product thickness measurements were taken at the six monitor wells in May and June, 1993; product was detected only in well MW-1. The following product thicknesses were measured in well MW-1:

Date	Depth of Product (ft.)
May 3	0.40
May 11	0.69
June 8	0.22

The laboratory results for the soil samples collected from the installation of wells MW-4 and MW-5 are provided in Attachment B. Laboratory results for ground-water samples collected in July, 1993 from wells MW-3 and MW-5 are provided in Attachment B. Ground-water samples were not collected from well MW-1 due to free floating product, from well MW-2 because of a product sheen, nor from well MW-4 as it was dry. Milwaukee Plating has installed five wells; Central Controls has installed one additional well and its analytical results are provided in Attachment C.

Work Plan for Free Product Recovery

Free product will be removed from well MW-1 by bailing by Milwaukee Plating personnel. Initially, product will be bailed on a daily basis five work days per week. The bailing frequency will be increased or decreased depending upon the speed of well recovery and amount of product recovered.

Prior to bailing, the quantity of free product will be measured with a tape measure and "Water Finder" or "Gasoline Finder" paste, or similar material. The thickness of product will be recorded on the Product Bailing Record provided in Attachment D. A standard PVC bailer will be used to bail product from the well. The bailer will be lowered to a

depth of about 6 inches below the measured water table surface and the liquid in the bailer will be removed from the well. The product and water removed by the bailer will be transferred to a bucket and the bucket will be used to carry the liquid for storage in a 55-gallon drum located inside the Milwaukee Plating facility. Accumulated product will be sampled, analyzed, and disposed properly.

After a bailer full of liquid has been removed from the well, the tape measure will be used to measure any remaining product. If measurable product is present, the bailer will again be used to remove it. Floating product will continued to be removed until no measurable product remains after bailing on that day. If, after the first week of bailing, it is shown that a measurable amount of product does not accumulate in the well after the initial bailing, measurement of product thickness after bailing will be discontinued and only one bailer full of liquid will be removed per day.

The total quantity of liquid removed from the well will be estimated each day. All of the data collected each day will be recorded on the Product Bailing Record form.

Monitor wells MW-2 and MW-3 will be checked for free product on a quarterly basis beginning in September, 1993. If free product is detected in either well, it will be removed using the above procedures.

If floating product continues to accumulate in well MW-1 after three months of bailing, a product-only pumping system will be considered for this well. Plans and specifications for such a system would be provided to the WDNR for approval prior to construction. A product-only pumping system located in the alley would also require permits from the City of Milwaukee.

SCHEDULE

Free product recovery from well MW-1 will begin during the week of September 7, 1993 and will continue as needed thereafter.

A brief letter report will be prepared based upon the first 30 calendar days of free product removal. This report will be submitted to the WDNR by November 12, 1993.

Milwaukee Plating also intends to abandon in-place the UST located in their basement. Prior to abandonment, a hole will be cut in the top of it, the interior will be cleaned, and samples of soil from beneath the tank will be collected for laboratory analysis. Documentation of tank abandonment will be provided when completed.

* * * * * * * * * * * * * *

If you have any questions regarding this work plan, please feel free to call me.

Sincerely,

SIMON HYDRO-SEARCH

Gerald DeMers

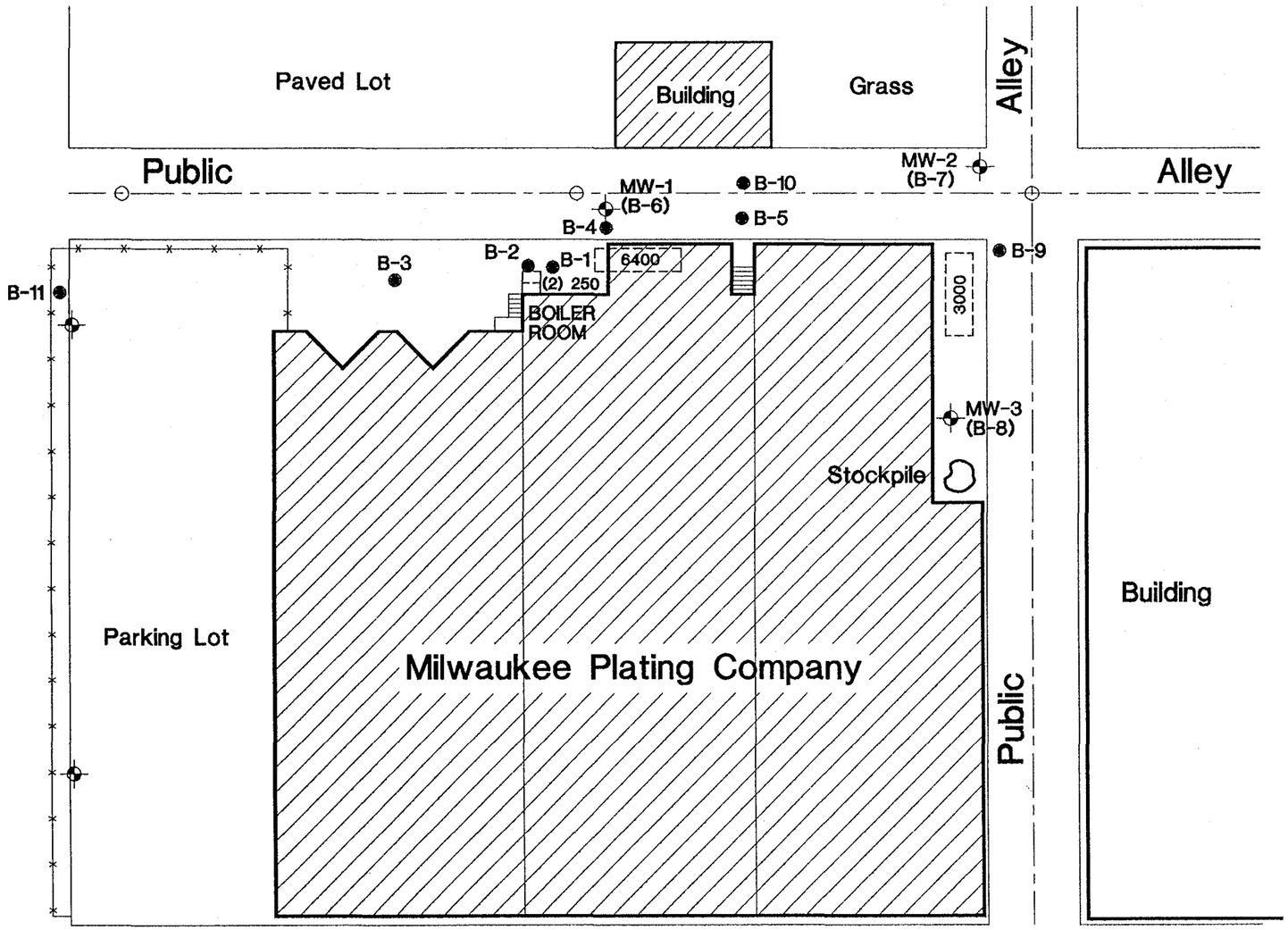
Gerald DeMers, P.E.
Senior Engineer

GLD:jo

attachments

cc: Alfred Mattacotti, Milwaukee Plating Company
James Bartzen, Boardman, Suhr, Curry & Field

FIGURE



EXPLANATION

- MW-1 ⊕ — MONITOR WELL LOCATION AND DESIGNATION
- B-6 ● — BOREHOLE LOCATION AND DESIGNATION
- 6400 — FORMER UNDERGROUND STORAGE TANK LOCATION (SIZE IN GALLONS)
- ○ — SEWER MANHOLE
- ---------- — COMBINED SEWER
- —×—×— — CHAIN-LINK FENCE

N

SCALE
0 90
FEET

SIMON HYDRO-SEARCH
Brookfield Lakes Corporate Center XII
175 N. Corporate Drive, Suite 100
Brookfield, Wisconsin 53045

Dsgn. by: BAG	Chk. by: GLD	Apprv. by: GLD
PROJECT: 366115203	DATE: 08/30/93	

MILWAUKEE PLATING CO.
MILWAUKEE, WISCONSIN

SITE LAYOUT

DRAWING: 1243-a1	FIGURE: 1

ATTACHMENT A
SOIL BORING LOGS AND
MONITORING WELL CONSTRUCTION FORMS

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form: 4400-122 7/91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Milwaukee Plating Company		MW-5

Boring Drilled by (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Sauter Drilling Pat Bundl	06/25/92 (MM DD YY)	06/25/92 (MM DD YY)	

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	8.0 inches

Boring Location
State Plane _____ N, _____ E S/C/N
NW ¼ of SE ¼ of Section 20 T 7 N, R 22 E
Lat ___ ___ ___
Long ___ ___ ___

Local Grid Location (if applicable)
_____ Feet N or S
_____ Feet E or W

County	DNR County Code	Civil Town/City/or Village
Milwaukee	4 1	Milwaukee

SAMPLE NUMBER	SAMPLE LENGTH	SAMPLE RECOVERED (in)	SAMPLE BLOWS	DEPTH (ft.)	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	P200	RQD/ COMMENTS
				0	0.0 - 1.7: TOPSOIL, organic-rich, fine sand, dark gray (2.5YR 3/0)										
				1	1.7 - 5.0: SAND, 100%, fine-grained, white (10YR 8/2), nonplastic, moist, homogeneous (Fill)	OL-OH			0.0						
1	12			2					0.0						
				3		SP									
2	7	21,53 21,25		4					0.0						
				5	5.0 - 7.0: SAND, fine-grained with brick, about 25% sand, 75% yellow brick fragments, sand is white (10YR 8/2), nonplastic, moist (Fill)										
3	18	7,14 30,21		6		SP			0.0						
				7	7.0 - 9.0: SAND, about 80% fine-grained sand and 20% angular medium limestone gravel, pale brown (10YR 7/3), non-plastic, moist, homogeneous (Fill)										
4	13	26,10 31,20		8		SW			0.0						
				9											

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

Signature _____ Firm SIMON HYDRO-SEARCH
175 N. Corporate Dr., #100, Brookfield, WI 53045

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.

SIMON HYDRO-SEARCH

SAMPLE NUMBER	SAMPLE LENGTH RECOVERED (in)	BLOW COUNTS	DEPTH (ft.)	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	P200	RQD/ COMMENTS
			9											
5	20	3,4 5,10	10	9.0 - 11.0: SILTY CLAY, about 75% clay and 25% silt, yellowish brown (10YR 5/4), high plasticity, moist to wet, angular, geotite mottles (Till)	CL-ML			0.0						
			11											
6	24	18,12 14,12	12	11.0 - 13.0: SILTY CLAY with gravel, 60% clay, 20% silt, 20% fine gravel; brown (10Yr 4/4), highly plastic, moist to wet, angular geotite mottles, gravel lens from 11.25 to 12.0' was wet and had slight sulfur odor (Till)	CL-ML			0.0						
			13											
7	24	12,36 50,47	14	13.0 - 14.0: SILTY CLAY, about 60% clay, 20% silt, 20% fine to medium angular gravel, brown (10Yr 4/4), highly plastic, angular, no mottles (Till)	CL-ML			0.0						
			15	14.0 - 16.0: CLAYEY SILT, 60% silt, 30% clay, and 10% fine to medium angular gravel; dark gray (10YR 4/1), non-plastic, dry, homogeneous (Till)	CL-ML									
8	24	21,36 45,30	16	16.0 - 16.5: SILT, gray (10YR 4/2), nonplastic, moist, angular	ML			0.0						
			17	16.5 - 17.0: SILTY GRAVEL LENS, 20% silt, and 80% fine subangular gravel, wet (Outwash)	GM									
9	14	45,30 47,56	18	17.0 - 19.0: SILTY CLAY, 60% clay, 20% silt, and 20% fine to medium subrounded gravel, brown (10YR 4/2), dry, homogeneous, very hard and dry (Till)	ML-CL			0.0						
			19											
				EOB: 19.0 ft.										
			20											
			21											

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form: 4400-122 7/91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Milwaukee Plating Company	___ ___ ___ ___ ___ ___ ___	MW-4

Boring Drilled by (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Sauter Drilling Pat Bundl	06/25/92 M M D D Y Y	06/25/92 M M D D Y Y	

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___ ___ ___	___ ___ ___ ___ ___ ___		_____ Feet MSL	_____ Feet MSL	8.0 inches

Boring Location
State Plane _____ N, _____ E S/C/N
NW ¼ of SE ¼ of Section 20 T 7 N, R 22 E
Lat ___ ___ ___
Long ___ ___ ___

Local Grid Location (if applicable)
_____ Feet N or S
_____ Feet E or W

County	DNR County Code	Civil Town/City/or Village
Milwaukee	4 1	Milwaukee

SAMPLE NUMBER	SAMPLE LENGTH (in)	SAMPLE RECOVERED (in)	BLOWS COUNTS	DEPTH (ft.)	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
				0	0.0 - 3.0: SILTY CLAY TOPSOIL, about 65% clay, 25% silt, 10% medium angular gravel, 15% organics; brown (10YR 5/4), medium plasticity, homogeneous (Fill)										
				1					0.0						
1	6	9,25 --,--		2		OL			0.0						
				3	3.0 - 6.5: SANDY CLAY, about 70% clay, 20% fine sand, and 10% fine- to medium, sub-angular gravel; brown (10YR 4/4), medium plasticity, moist, homo-geneous (Fill)										
2	11	2,2 3,2		4					0.0						
				5		CL									
3	16	2,2 2,3		6					0.0						
				7	6.5 - 7.0: CLAYEY SAND, about 80% fine sand and 20% clay, yellow (10YR 5/8), low plasticity, moist, subangular clay appears in vugs (Fill)	SC									
4	24	2,1 1		8	7.0 - 9.8: CLAYEY SAND, 70% fine sand and 30% clay, brown (10YR 5/8), low plasticity, wet, subangular (Fill)	SC			0.0						
				9											

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

Signature	Firm
	SIMON HYDRO-SEARCH 175 N. Corporate Dr., #100, Brookfield, WI 53045

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.

SIMON HYDRO-SEARCH

SAMPLE NUMBER	SAMPLE LENGTH RECOVERED (in)	BLOW COUNTS	DEPTH (ft.)	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	P200	RQD/ COMMENTS
			9	9.0 - 11.0: SILTY CLAY, about 75% clay and 25% silt, brown (10YR 5/4), high plasticity, moist, subangular, limonite and geotite mottles (Till)	ML-CL									
5	21	2,3 4,4	10					0.0						
			11		ML-CL									
				11.0 - 15.0: SILTY CLAY, about 80% clay and 20% silt, brown (10YR 4/6), high plasticity, moist, angular, limonite mottles (Fill)										
6	20	4,5 7,8	12					0.0						
			13		ML-CL									
7	4	2,4 7,10	14					0.0						
			15	15.0 - 17.0: SANDY CLAY, 70% silt and 30% clay vugs, very dark gray (10YR 3/1), high plasticity, wet, homogeneous, may be original grade (Fill/Topsoil)										
8	4	4,7 7,9	16		CL			0.0						
			17	17.0 - 19.0: SILTY, SANDY CLAY, about 25% silt, 15% sand, and 60% clay; brown (10YR 4/3), medium to high plasticity, moist to wet, subangular, 3" sand fine gravel lens at 18.6', very moist (Till)										
9	24	3,4 7,7	18		ML-CL			0.0						
			19	19.0 - 21.0: SILTY CLAY, 60% clay and 40% silt, brown (10YR 4/4), medium plasticity, moist to wet, homogeneous, silt lens are wet (Till)										
10		5,7 10,8	20		ML-CL			0.0						
			21	EOB: 21.0 ft.										

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 8-89

Facility/Project Name: Milwaukee Plating
Facility License, Permit or Monitoring Number:
Grid Location: ft. N. S. / ft. E. W.
Well Name: MW-4
Wis. Unique Well Number: DNR Well Number:
Type of Well: Water Table Observation Well 11 / Piezometer 12
Section Location: NW 1/4 of SE 1/4 of Section 20, T 7 N, R 22 E W
Date Well Installed: 06/25/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: ft.
Location of Well Relative to Waste/Source: Upgradient / Sidegradient / Downgradient / Not Known
Well Installed By: (Person's Name and Firm): Pat Bundl, Sauter Drilling
Is Well A Point of Enforcement Std. Application? Yes / No

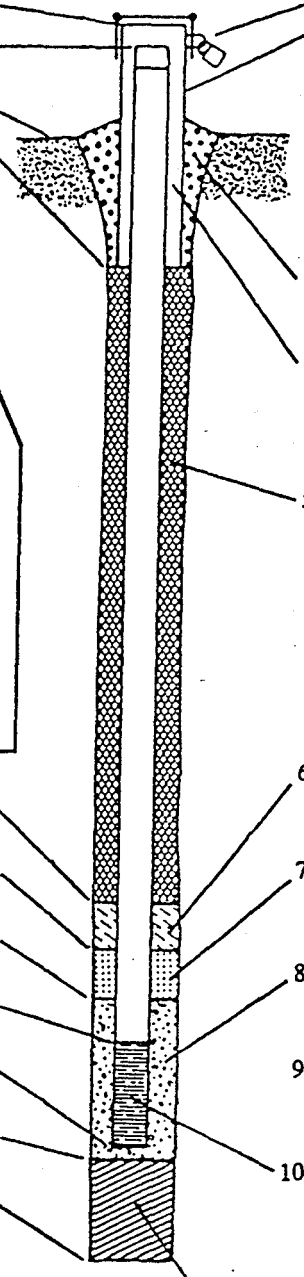
A. Protective pipe, top elevation ft. MSL
B. Well casing, top elevation ft. MSL
C. Land surface elevation ft. MSL
D. Surface seal, bottom ft. MSL or 1.0 ft.

1. Cap and lock? Yes / No
2. Protective cover pipe:
a. Inside diameter: in.
b. Length: ft.
c. Material: Flush mount — Steel 04 / Other
d. Additional protection? Yes / No
If yes, describe:

3. Surface seal: Bentonite 30 / Concrete 01 / Other
4. Material between well casing and protective pipe: Bentonite 30 / Annular space seal / Fine Sand — Other
5. Annular space seal: Granular Bentonite 33 / Lbs/gal mud weight ... Bentonite-sand slurry 35 / Lbs/gal mud weight ..... Bentonite slurry 31 / % Bentonite .... Bentonite-cement grout 50 / Ft³ volume added for any of the above
How installed: Tremie 01 / Tremie pumped 02 / Gravity 08
6. Bentonite seal: Bentonite granules 33 / 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32 / Other
7. Fine sand material: Manufacturer, product name and mesh size: Badger Mining 40-60
Volume added 1 50 lb bag ft³
8. Filter pack material: Manufacturer, product name and mesh size: Badger mining 80-90
Volume added 7 50 lb bags ft³
9. Well casing: Flush threaded PVC schedule 40 23 / Flush threaded PVC schedule 80 24 / Other
10. Screen material: Schedule 40 PVC
Screen type: Factory cut 11 / Continuous slot 01 / Other
Manufacturer: Johnson Envir. Products
Slot size: 0.010 in.
Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None / Other

E. Bentonite seal, top ft. MSL or 1.0 ft.
F. Fine sand, top ft. MSL or 2.6 ft.
G. Filter pack, top ft. MSL or 8.0 ft.
H. Well screen, top ft. MSL or 10.2 ft.
I. Well screen, bottom ft. MSL or 20.5 ft.
J. Filter pack, bottom ft. MSL or 21.0 ft.
K. Borehole, bottom ft. MSL or 21 ft.
L. Borehole, diameter 8.0 in.
M. O.D. well casing 2.32 in.
N. I.D. well casing 2.00 in.

12. USCS classification of soil near screen: GP GM GC GW SW SP / SM SC ML MH CL CH / Bedrock
13. Sieve analysis attached? Yes / No
14. Drilling method used: Rotary 50 / Hollow Stem Auger 41 / Other
15. Drilling fluid used: Water 02 / Air 01 / Drilling Mud 03 / None 99
16. Drilling additives used? Yes / No
Describe
17. Source of water (attach analysis):



I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature: Firm: Simon Hydro Search

Please complete and return both sides of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation.
NOTE: Shaded areas are for DNR use only. See instructions for more information.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT
Form 4400-113B 8-89

Facility/Project Name: Milwaukee Plating

Well Name: MW-4

License, Permit or Monitoring Number: _____

Wis. Unique Well Number: _____ DNR Well Number: _____

1. Can this well be purged dry? ☐ Yes ☐ No
The well is dry

2. Well development method

surged with bailer and bailed	☐	4 1
surged with bailer and pumped	☐	6 1
surged with block and bailed	☐	4 2
surged with block and pumped	☐	6 2
surged with block, bailed and pumped	☐	7 0
compressed air	☐	2 0
bailed only	☐	1 0
pumped only	☐	5 1
pumped slowly	☐	5 0
Other _____	☐	

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 20.5 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 0.0 gal.

7. Volume of water removed from well 0.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	No Water ft.	____.__ ft.
Date	07/02/92 m m d d y y	__/__/__ m m d d y y
Time	15:55 ☐ a.m. ☐ p.m.	__:__ ☐ a.m. ☐ p.m.
12. Sediment in well bottom	__.__ inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe) NA	Clear ☐ 20 Turbid ☐ 25 (Describe) NA

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Additional comments on development:

Well is Dry

Well developed by: Person's Name and Firm

Name: John Kaftan

Firm: Simon-HSI

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

Signature: John Kaftan

Firm: Simon - HSI

NOTE: Shaded areas are for DNR use only. See instructions for more information.

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 8-89

Facility/Project Name: Milwaukee Plating
Facility License, Permit or Monitoring Number:
Grid Location: ft. N. S. / ft. E. W.
Well Name: MW-5
Wis. Unique Well Number: DNR Well Number:
Type of Well: Water Table Observation Well 11 / Piezometer 12
Section Location: NW 1/4 of SE 1/4 of Section 20, T 7 N, R 22 E W
Date Well Installed: 06/25/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: Not Known ft.
Well Installed By: (Person's Name and Firm): Pat Bundl / Sauter Drilling
Is Well A Point of Enforcement Std. Application? Yes No
Location of Well Relative to Waste/Source: Upgradient, Sidegradient, Downgradient, Not Known

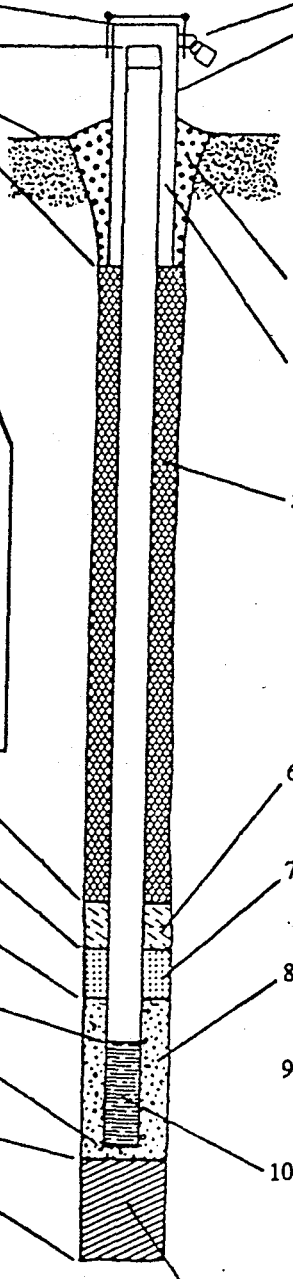
A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

USCS classification of soil near screen:
GP GM GC GW SW SP
SM SC ML MH CL CH
Bedrock

Sieve analysis attached? Yes No

14. Drilling method used: Rotary 50; Hollow Stem Auger 41; Other
Drilling fluid used: Water 02; Air 01; Drilling Mud 03; None 99
16. Drilling additives used? Yes No
Describe
17. Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.
F. Fine sand, top _____ ft. MSL or 6.0 ft.
G. Filter pack, top _____ ft. MSL or 7.8 ft.
H. Well screen, top _____ ft. MSL or 9.7 ft.
I. Well screen, bottom _____ ft. MSL or 20.0 ft.
J. Filter pack, bottom _____ ft. MSL or 20.0 ft.
K. Borehole, bottom _____ ft. MSL or 20.0 ft.
L. Borehole, diameter 8.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? Yes No
2. Protective cover pipe:
a. Inside diameter: . in.
b. Length: . ft.
c. Material: Flush mount — Steel 04; Other
d. Additional protection? Yes No
If yes, describe:
3. Surface seal: Bentonite 30; Concrete 01; Other
4. Material between well casing and protective pipe: Bentonite 30; Annular space seal; Fine Sand — Other
5. Annular space seal: Granular Bentonite 33; Lbs/gal mud weight . . . Bentonite-sand slurry 35; Lbs/gal mud weight . . . . . Bentonite slurry 31; % Bentonite . . . . Bentonite-cement grout 50; Ft³ volume added for any of the above
How installed: Bentonite Seal To surface — Tremie 01; Tremie pumped 02; Gravity 08
6. Bentonite seal: Bentonite granules 33; 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32; 1 50lb bag — Other
7. Fine sand material: Manufacturer, product name and mesh size: Badger Mining 40/60
Volume added 1 50lb bag ft³
8. Filter pack material: Manufacturer, product name and mesh size: Badger Mining 80/90
Volume added 7 50lb bag ft³
9. Well casing: Flush threaded PVC schedule 40 23; Flush threaded PVC schedule 80 24; Other
10. Screen material: PVC
Screen type: Factory cut 11; Continuous slot 01; Other
Manufacturer: Johnson Environmental Products
Slot size: 0.010 in.
Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None; Other

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature
Firm: Simon Hydro Search

Please complete and return both sides of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation.
NOTE: Shaded areas are for DNR use only. See instructions for more information.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT
Form 4400-113B 8-89

Facility/Project Name

Well Name

License, Permit or Monitoring Number _ _ _ _ _ _ _

Wis. Unique Well Number _ _ _ _ _ _ _

DNR Well Number _ _ _

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	4 1
surged with bailer and pumped	☐	6 1
surged with block and bailed	☐	4 2
surged with block and pumped	☐	6 2
surged with block, bailed and pumped	☐	7 0
compressed air	☐	2 0
bailed only	☐	1 0
pumped only	☐	5 1
pumped slowly	☐	5 0
Other _____	☐	

3. Time spent developing well _ _ _ _ min.

4. Depth of well (from top of well casisng) _ _ _ . _ ft.

5. Inside diameter of well _ _ . _ _ in.

6. Volume of water in filter pack and well casing _ _ _ . _ gal.

7. Volume of water removed from well _ _ _ . _ gal.

8. Volume of water added (if any) _ _ _ . _ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	_ _ _ . _ _ ft.	_ _ _ . _ _ ft.
Date	_ _ / _ _ / _ _ m m d d y y	_ _ / _ _ / _ _ m m d d y y
Time	☐ a.m. ☐ p.m. _ _ : _ _	☐ a.m. ☐ p.m. _ _ : _ _
12. Sediment in well bottom	_ _ . _ inches	_ _ . _ inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_ _ _ _ _ . _ mg/l	_ _ _ _ _ . _ mg/l
15. COD	_ _ _ _ _ . _ mg/l	_ _ _ _ _ . _ mg/l

Additional comments on development:

No Water in well
Cannot Develop

Well developed by: Person's Name and Firm

Name: _____

Firm: _____

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

Signature: _____

Firm: _____

NOTE: Shaded areas are for DNR use only. See instructions for more information.

ATTACHMENT B

LABORATORY ANALYTICAL RESULTS FOR

MILWAUKEE PLATING / SIMON HYDRO-SEARCH

SIMON HYDRO-SEARCH

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

ANALYTICAL REPORT

Project # 366115203
CC: GLD, MRN, JFK

Mr. Jerry DeMers
SIMON HYDRO-SEARCH, INC.
175 N. Corporate Drive
Suite 100
Brookfield, WI 53045

07/13/1992
Job No: 92.2772
Account No: 39150
Page 1

JOB DESCRIPTION: SHSI #366115203
PROJECT DESCRIPTION: Soil Sample
SAMPLE DESCRIPTION: SEE BELOW
SHSI #366115203
Rec'd on ice

Date Received: 06/26/1992 14:25

Date Taken: SEE BELOW SEE BELOW

Parameter	Results	Units	Detection Limit	Date Analyzed
47803 MW-5 (7-9')			06/25/1992	08:39
Solids, Total	84.	%		07/09/1992
GRO - Nonaqueous	<5.0	mg/kg	5.0	07/03/1992
DRO - NONAQUEOUS	6.	mg/kg	5.0	07/06/1992
47804 MW-4 (5-7')			06/25/1992	12:45
Solids, Total	no samp	%		07/09/1992
GRO - Nonaqueous	<5.0	mg/kg	5.0	07/06/1992
DRO - NONAQUEOUS	18.	mg/kg	5.0	07/08/1992

David W. Havick, Manager
Watertown Division
Certification No. 128053530

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

92.2772

CHAIN OF CUSTODY

Client Simon Hydro-Search	Project Name 36611520 3
Send Report to: Jerry DeMers	
Address 175 N Corporate Dr. Brookfield WI 53045	Collected by: JFK, AEF
Telephone # 792-1282	

Sample ID	Sampling Location	Date	Time	GRAB	COMP	Sample Type	No. of Container	GRO, BTEX	DRO			Parameters										
	MW-5(7-9)	6/25/92	8:39	X		Soil	4	X	X			3/60ml			1/4oz							
	MW-4(5-7)	6/25/92	12:45	X		"	3	X	X			2/60ml			1/4oz							

Remarks: _____

Relinquished by:	Date	Time	Received by:	Date	Time
W McBaggs	6/26	2:24	Jerry Schmitz	6-26-92	1425
Jerry Schmitz	6-26-92	1546	Penni May	6/26/92	

Shipping Notes/Lab Comments

Received for NET Midwest by:

Samples Field Filtered: ___ Yes ___ No
Seals Intact Upon Receipt: ___ Yes ___ No ___ N/A

SWANSON ENVIRONMENTAL INC.

3150 North Brookfield Road
Brookfield, Wisconsin 53045
telephone (414) 783-6111
FAX (414) 783-5752

WDNR Certification #268181760

ANALYTICAL REPORT

REPORT NUMBER: BC014

Simon Hydro-Search, Inc.
175 North Corporate Drive, Suite 100
Brookfield, WI 53045

Attn: Mr. Gerald DeMers
Project #366115203

DATE: July 29, 1992
PURCHASE ORDER:
SEI NO: WL1967
DATE COLLECTED: 07/17/92
DATE RECEIVED: 07/17/92

Matrix: Groundwater

Units: mg/l (ppm)

DATE EXTRACTED
DRO - 07/02/92

DATE ANALYZED
GRO - 07/27/92
DRO - -07/24/92

DNR #	Analyte	PQL	SEI ID / Sample ID 1967-1 MW-3	1967-2 MW-5
	WDNR Modified Method GRO			
78920	GRO	0.1	0.6	<0.1
	WDNR Modified Method DRO			
78919	DRO	0.1	<0.1	<0.1

ORIGINAL

SWANSON ENVIRONMENTAL INC.

3150 North Brookfield Road
Brookfield, Wisconsin 53045
telephone (414) 783-6111
FAX (414) 783-5752

WDNR Certification #268181760

ANALYTICAL REPORT

REPORT NUMBER: B0014

Simon Hydro-Search, Inc.
175 North Corporate Drive, Suite 100
Brookfield, WI 53045

Attn: Mr. Gerald DeMers
Project #366115203

DATE: July 29, 1992
PURCHASE ORDER:
SEI NO: WL1967
DATE COLLECTED: 07/16&17/92
DATE RECEIVED: 07/17/92
DATE ANALYZED: 07/21/92

Matrix: Groundwater

Units: ug/l (ppb)

DNR #	Analyte	SEI ID Sample ID	1967-1 MW-3	1967-2 MW-5	1967-3 Trip Blank
EPA Method 8021					
78124	Benzene		250	<1	<1
81555	Bromobenzene		<1	<1	<1
77297	Bromochloromethane		<1	<1	<1
32101	Bromodichloromethane		<1	<1	<1
32104	Bromform		<1	<1	<1
34413	Bromomethane		<1	<1	<1
77342	n-Butylbenzene		<1	<1	<1
77350	sec-Butylbenzene		<1	<1	<1
77353	tert-Butylbenzene		<1	<1	<1
32102	Carbon tetrachloride		<1	<1	<1
34301	Chlorobenzene		<1	<1	<1
34306	Chlorodibromomethane		<1	<1	<1
34311	Chloroethane		<1	<1	<1
32106	Chloroform		<1	<1	<1
34418	Chloromethane		<1	<1	<1
77275	2-Chlorotoluene		<1	<1	<1
77277	4-Chlorotoluene		<1	<1	<1
38437	1,2-Dibromo-3-chloropropane		<2	<2	<2
77651	1,2-Dibromoethane		<2	<2	<2
77596	Dibromomethane		<1	<1	<1

ORIGINAL

SWANSON ENVIRONMENTAL INC.

3150 North Brookfield Road
Brookfield, Wisconsin 53045
telephone (414) 783-6111
FAX (414) 783-5752

WDNR Certification #268181760

ANALYTICAL REPORT

REPORT NUMBER: B0014

Simon Hydro-Search, Inc.
175 North Corporate Drive, Suite 100
Brookfield, WI 53045

Attn: Mr. Gerald DeMers
Project #366115203

DATE: July 29, 1992
PURCHASE ORDER:
SEI NO: WL1967
DATE COLLECTED: 07/16&17/92
DATE RECEIVED: 07/17/92
DATE ANALYZED: 07/21/92

Matrix: Groundwater

Units: ug/l (ppb)

		SEI ID	1967-1	1967-2	1967-3 Trip
DNR #	Analyte	Sample ID	MW-3	MW-5	Blank
EPA Method 8021					
77224	n-Propylbenzene		<1	<1	<1
77128	Styrene		<1	<1	<1
77562	1,1,1,2-Tetrachloroethane		<1	<1	<1
34516	1,1,2,2-Tetrachloroethane		<1	<1	<1
34475	Tetrachloroethene		<1	<1	<1
78131	Toluene		1	<1	<1
77613	1,2,3-Trichlorobenzene		<1	<1	<1
34551	1,2,4-Trichlorobenzene		<1	<1	<1
34506	1,1,1-Trichloroethane		<1	<1	<1
34511	1,1,2-Trichloroethane		<1	<1	<1
39180	Trichloroethene		14	<1	<1
34488	Trichlorofluoromethane		<1	<1	<1
77443	1,2,3-Trichloropropane		<1	<1	<1
77222	1,2,4-Trimethylbenzene		<1	<1	<1
77226	1,3,5-Trimethylbenzene		<1	<1	<1
39175	Vinyl chloride		140	<1	<1
77135	o-Xylenes		<1	<1	<1
85795	m & p Xylenes		<1	<1	<1

Rosemary L. Dineen
Laboratory Director

ORIGINAL

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME

SAMPLERS: JFK

SEI #	STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TEST PARAMETERS: GRO	DRO	VOC					SAMPLE TYPE
		7/17	16:35		X	MW-3	5	X	X	X	2	4	1 Amber Vials each		Water
		"	15:00		X	MW-5	5	X	X	X	5	4	Vials		"
						Trip Blank	2	X	~~X~~	X		2	Vials		

SAMPLE CONDITION: RECEIVED ON ICE

SAMPLE LOCATION:

RELINQUISHED BY:	DATE / TIME	RELINQUISHED BY:	DATE / TIME
	7/20 12:40		
RECEIVED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME
	7/21 10:00		

SPECIAL REQUESTS:

REPORT TO:

NAME:

ADDRESS:

PHONE:

LABORATORY
3150 North Brookfield Rd.
Brookfield, WI 53045
(414) 783-6111
Fax (414) 783-5752

SWANSON ENVIRONMENTAL INC.

ATTACHMENT C

LABORATORY ANALYTICAL RESULTS FOR

CENTRAL CONTROLS / DAMES & MOORE

SIMON HYDRO-SEARCH

Telephone: (414) 521-2470
FAX: ~~(414) 521-0262~~

COPY

SUBURBAN LABORATORIES of WISCONSIN, Inc.

"Analytical Testing"
N8 W22520-B Johnson Drive Waukesha, WI 53186

FINAL REPORT OF LABORATORY ANALYSIS
LEVEL II

Dames & Moore
250 East Wisconsin Aveune
Suite 1500
Milwaukee, WI 53202
Attention: DAN VIEGIET

Report Date: April 27, 1993 11:06
SLI Order Number: W304119
Page Number: 1

Date Samples Received: 04/12/93
Samples Collected By: CLIENT

Project ID.: CCAC 26312-001
P.O. #:

[redacted]

Date Collected: 04/12/93
SLI ID: W304119-01A

PARAMETER	RESULT	UNITS	MDL	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
Lead by HGA (Furnace)	0.002	mg/l	0.001		04/20/93	IDZ	EPA 239.2
DIESEL RANGE ORGANICS	0.609	mg/l	0.10	04/15/93	04/16/93	JKK	WI DNR MOI
GASOLINE RANGE ORGANICS	10.6	mg/l	0.10		04/20/93	RD	WI DNR MOI
PVOC (WI LUST LIST)							EPA 8020
Benzene 71-43-2	3970	ug/l	0.500		04/20/93	RLD	
Ethyl benzene 100-41-4	154	ug/l	0.500		04/20/93	RLD	
Methyl-t-butyl-ether 1634-04-4	9.68	ug/l	0.500		04/20/93	RLD	
Toluene 108-88-3	71.3	ug/l	1.00		04/20/93	RLD	
1,2,4-Trimethylbenzene 95-63-6	57.5	ug/l	0.500		04/20/93	RLD	
1,3,5-Trimethylbenzene 108-67-8	194	ug/l	0.500		04/20/93	RLD	
** m-Xylene 108-38-3	414	ug/l	1.00		04/20/93	RLD	
** p-Xylene 106-42-3	414	ug/l	1.00		04/20/93	RLD	
o-Xylene 95-47-6	138	ug/l	0.500		04/20/93	RLD	

SURROGATE STANDARD	% RECOVERY						
4-Bromofluorobenzene	97%				04/20/93	RLD	

Ex 15

Telephone: (414) 521-247C
FAX: (404) 521-0362

SUBURBAN LABORATORIES of WISCONSIN, Inc.

"Analytical Testing"
N8 W22520-B Johnson Drive Waukesha, WI 53186

Client: *Dames & Moore*
SLI Order Number: W304119

Report Date: April 27, 1993 11:06
Page Number: 2

COMMENTS

Analysis Certified By: _____ Laboratory Director

Reported By: JOANNE
Verified By: DJH

Telephone (708) 544-3260
FAX (708) 544-8587
#1-800-783-LABS

SUBURBAN LABORATORIES, Inc.

"Analytical Testing"
Environmental, Microbiological, Nutritional
4140 Litt Drive • Hillside, Illinois 60162 - 1183

GLOSSARY OF TERMS

NI.....Not Injected

ND.....Not Detected

MI.....Matrix Interference

NA.....Not Applicable or Not Available

MDL.....Method Detection Limit

BDL.....Below Detection Limit

EQL.....Estimated Quantitation Limit

PQL.....Practical Quantitation Limit

CS.....Compound Screened

NG.....Not Given

Y*.....No Free Liquid Present

N*.....Free Liquid Present

F.....Estimated Concentration

TNTC....Too Numerous to Count

*.....Sample concentration is less than or equal to the reported value

**.....o-Xylene & p-Xylene are co-eluting. (Under present conditions we are unable to discern between the two, hence the quantitation is plus or minus that value.)

+.....Upon visual review of the Total Ion Chromatograms, unidentified peaks were observed which are outside the parameters listed.

EPA....."Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, United States Environmental Protection Agency, Revised March 1983 and 1979 where applicable.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", United States Environmental Protection Agency, SW-846 November 1986 and Revision 1, November 1990 where applicable.

"Methods for the Determination of Organic Compounds in Drinking Water", United States Environmental Protection Agency, EPA/600/4-88/039 July 1988, and EPA/600/4-90/020 July 1990 where applicable.

SM....."Standard Methods for the Examination of Water and Wastewater", American Public Health Association, American Water Works Association, 17th Edition 1979, and 18th Edition 1992 where applicable.

ASTM...."1991 Annual Book of Standards, Water and Environmental Technology", American Society for Testing and Materials, 1986.

AOAC...."Official Methods of Analysis of the Association of Official Analytical Chemists", Methods Manual 15th Edition 1990.

DAMES & MOORE

250 East Wisconsin Ave, Suite 1500
Milwaukee, Wisconsin 53202
(414) 347-0800 FAX:(414) 347-0288

Lab Suburban

Chain of Custody Seal # _____ # _____

Turnaround Time
☐ Rush (preapproved by Lab)
☒ Normal

PROJECT NAME: CCAC
PROJECT #: 26312-001
Send Results To:
PROJECT MANAGER: Dan Voegt
BILL TO: _____

SHIPPING DETAILS:
Method of Shipment 54
Contents Temperature 40c C
Comments NOI

LAB USE ONLY	DATE	SAMPLE TIME	CONTAINERS	No.	SAMPLE ID	SAMPLE TYPE	ANALYSIS REQUESTED: GRO	PVOC	DRO	TOTAL PB		REMARKS/PRESERVAT.
	4/12/93		1L.gl	2	CCAC/MW1/APR93	GW			X	X		
	"		40mlgl	6	"	"	X	X				
						SUBTOTAL						TOTAL

CHAIN OF CUSTODY RECORD

SAMPLER: (SIGNATURE)	DATE
Heidi L Vogt	4/12/93

COMMENTS
please filter lead samples

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Heidi L Vogt	4/12/93 2:35				
RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY: BY: (SIGNATURE) / DATE/TIME

Telephone: (414) 521 2470
FAX: (414) 521 0626

RECEIVED APR 2 1 1993

26318-081
[illegible]

SUBURBAN LABORATORIES, Inc.

OF WISCONSIN
"Analytical Testing"
Environmental, Microbiological, Nutritional

N8 W22520-B Johnson Drive Waukesha, WI 53186

FINAL REPORT OF LABORATORY ANALYSIS
LEVEL II

Dames & Moore
250 East Wisconsin Aveune
Suite 1500

Attention: Hiedi Virgil

Report Date: April 14, 1993 13:57
SLI Order Number: W303016
Page Number: 1

Date Samples Received: 03/25/93
Samples Collected By: CLIENT

Project ID.: CCAC-GRENSHEW
P.O. #:

[redacted]

Date Collected: 03/25/93
SLI ID: W303016-01A

PARAMETER	RESULT	UNITS	MDL	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
Lead by ICP	41.6	mg/kg	0.50		04/08/93	WC	EPA 6010
DIESEL RANGE ORGANICS	14.6	mg/kg	10.0	03/26/93	03/29/93	JKK	WI DNR MOD
GASOLINE RANGE ORGANICS	<10.0	mg/kg	10.0	03/25/93	03/30/93	LF	WI DNR MOD
PVOC (WI LUST LIST)							EPA 8020
Benzene 71-43-2	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
Ethyl benzene 100-41-4	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
Methyl-t-butyl-ether 1634-04-4	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
Toluene 108-88-3	<100	ug/kg	1.00	03/25/93	03/30/93	LF	
1,2,4-Trimethylbenzene 95-63-6	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
1,3,5-Trimethylbenzene 108-67-8	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
** m-Xylene 108-38-3	<100	ug/kg	1.00	03/25/93	03/30/93	LF	
** p-Xylene 106-42-3	<100	ug/kg	1.00	03/25/93	03/30/93	LF	
o-Xylene 95-47-6	<50.0	ug/kg	1.00	03/25/93	03/30/93	LF	

SURROGATE STANDARD	% RECOVERY	DATE ANALYZED	BY
4-Bromofluorobenzene	94%	03/30/93	LF

Telephone: (414) 521 2470
FAX: (414) 521 0626

SUBURBAN LABORATORIES, Inc.

OF WISCONSIN

"Analytical Testing"
Environmental, Microbiological, Nutritional

N8 W22520-B Johnson Drive Waukesha, WI 53186

Client: *Dames & Moore*
SLI Order Number: W303016

Report Date: April 14, 1993 13:57
Page Number: 2

Sample ID: CCAC-DMI-S2-8-10
Sample Type: SOIL

Date Collected: 03/25/93
SLI ID: W303016-02A

PARAMETER	RESULT	UNITS	MDL	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
Lead by ICP	56.6	mg/kg	0.50		04/08/93	WC	EPA 6010
DIESEL RANGE ORGANICS	<10.0	mg/kg	10.0	03/26/93	03/29/93	JKK	WI DNR MOD
GASOLINE RANGE ORGANICS	<10.0	mg/kg	10.0	03/25/93	03/30/93	LF	WI DNR MOD
PVOC (WI LUST LIST)							EPA 8020
Benzene 71-43-2	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
Ethyl benzene 100-41-4	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
Methyl-t-butyl-ether 1634-04-4	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
Toluene 108-88-3	<100	ug/kg	1.00	03/25/93	03/30/93	LF	
1,2,4-Trimethylbenzene 95-63-6	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
1,3,5-Trimethylbenzene 108-67-8	<50.0	ug/kg	0.500	03/25/93	03/30/93	LF	
** m-Xylene 108-38-3	<100	ug/kg	1.00	03/25/93	03/30/93	LF	
** p-Xylene 106-42-3	<100	ug/kg	1.00	03/25/93	03/30/93	LF	
o-Xylene 95-47-6	<50.0	ug/kg	1.00	03/25/93	03/30/93	LF	

SURROGATE STANDARD	% RECOVERY						
4-Bromofluorobenzene	93%				03/30/93	LF	

Telephone: (414) 521 2470
FAX: (414) 521 0626

SUBURBAN LABORATORIES, Inc.

OF WISCONSIN

"Analytical Testing"
Environmental, Microbiological, Nutritional

N8 W22520-B Johnson Drive Waukesha, WI 53186

Client: *Dames & Moore*
SLI Order Number: W303016

Report Date: April 14, 1993 13:57
Page Number: 3

Sample ID: CCAC-DMI-S3-10-12
Sample Type: SOIL

Date Collected: 03/25/93
SLI ID: W303016-03A

PARAMETER	RESULT	UNITS	MDL	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
PARTICLE SIZE							SEIVE
> 2 mm RTIC	1.0				04/02/93	mkk	
2 - 1 mm RTIC	1.5				04/02/93	mkk	
1 - 0.5 mm RTIC	5.0				04/02/93	mkk	
0.5 - 0.25 mm RTIC	31.0				04/02/93	mkk	
0.25 - 0.125 mm RTIC	23.0				04/02/93	mkk	
0.125 - 0.05 mm RTIC	27.0				04/02/93	mkk	
0.05 - 0.0 mm RTIC	11.5				04/02/93	mkk	
Total Organic Carbon	82.4	mg/kg	1.0		04/08/93	MS	EPA 9060

Telephone: (414) 521 2470
FAX: (414) 521 0626

SUBURBAN LABORATORIES, Inc.

OF WISCONSIN

"Analytical Testing"
Environmental, Microbiological, Nutritional

N8 W22520-B Johnson Drive Waukesha, WI 53186

Client: *Dames & Moore*
SLI Order Number: W303016

Report Date: April 14, 1993 13:57
Page Number: 4

Sample ID: CCAC-DMI-AUGER CUTTING
Sample Type: SOIL

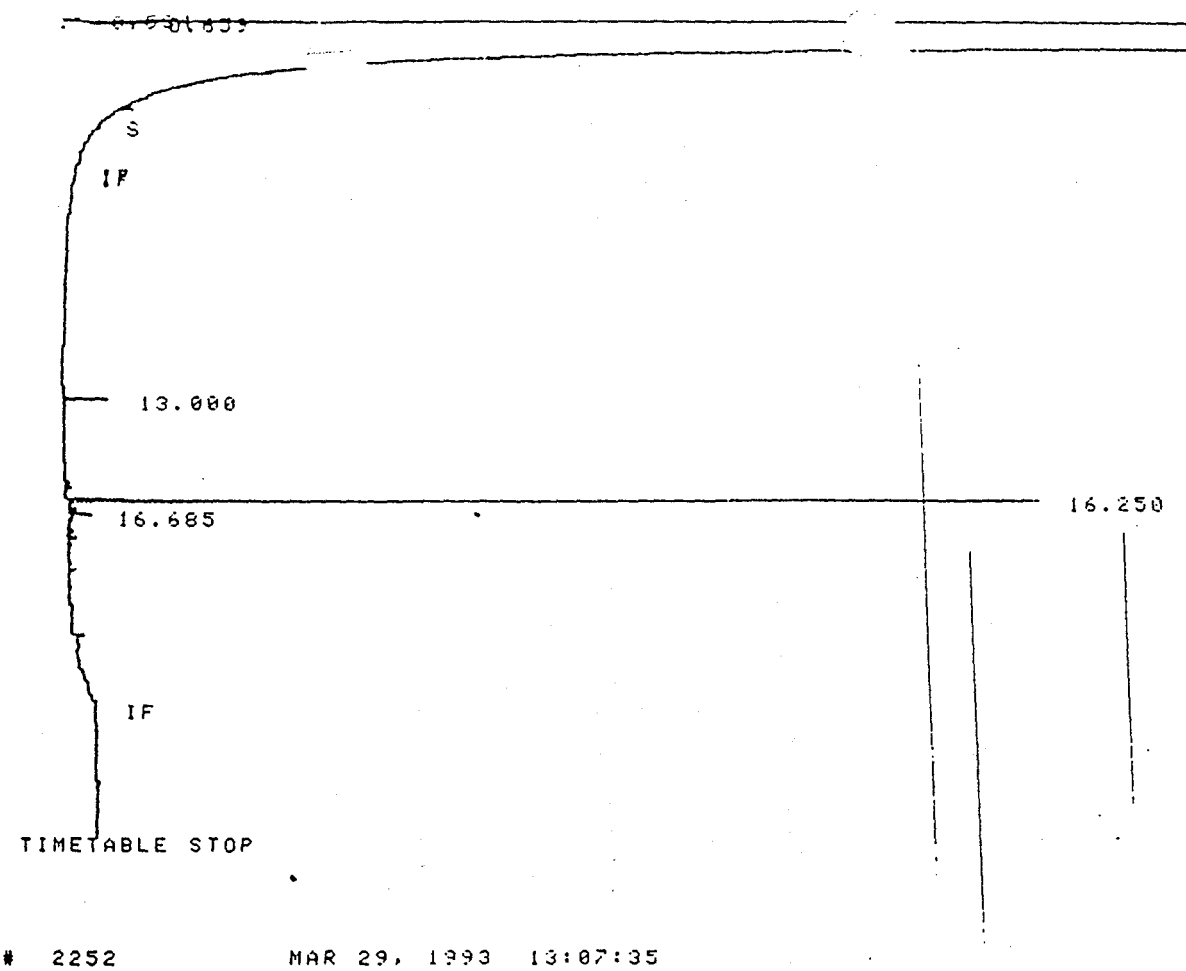
Date Collected: 03/25/93
SLI ID: W303016-04A

PARAMETER	RESULT	UNITS	MDL	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
PARTICLE SIZE							SEIVE
> 2 mm RTIC	19.0				04/02/93	mkk	
2 - 1 mm RTIC	18.0				04/02/93	mkk	
1 - 0.5 mm RTIC	16.0				04/02/93	mkk	
0.5 - 0.25 mm RTIC	16.5				04/02/93	mkk	
0.25 - 0.125 mm RTIC	10.5				04/02/93	mkk	
0.125 - 0.05 mm RTIC	12.0				04/02/93	mkk	
0.05 - 0.0 mm RTIC	8.0				04/02/93	mkk	
Total Organic Carbon	62.3	mg/kg	1.0		04/08/93	MS	EPA 9060

COMMENTS

Analysis Certified By: David J. Hutchens Laboratory Director

Reported By: JOANNE
Verified By: DJH



RUN# 2252 MAR 29, 1993 13:07:35

SAMPLE NAME: 93-16-07
MATRIX: WATER__ SOIL X DIL: 1 EXT. DATE: 3/29/93

GC#3

ESTD-AREA

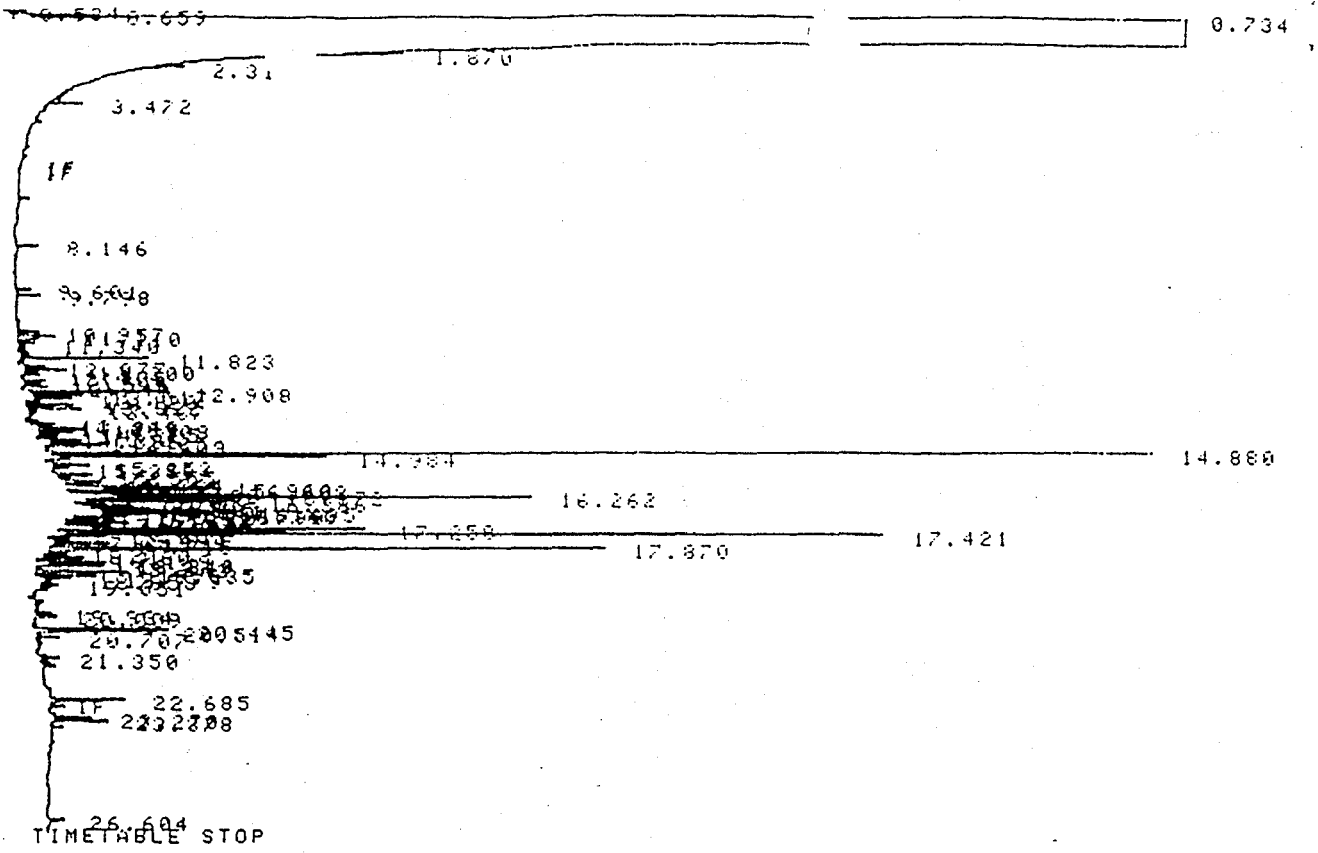
RT	TYPE	AREA	WIDTH	HEIGHT	CAL#	PPM	NAME
14.225	++	53841	.032	28418	1	.735	DR01

TOTAL AREA=2.3372E+08
MUL FACTOR=1.0000E+00

7.521

$\frac{7.521 \times 5}{29.66} \div .79 = 1.604$

< 100



RUN# 2251 MAR 29, 1993 12:34:06

SAMPLE NAME: 93-11-01

MATRIX: WATER__ SOIL__ DIL: 1 EXT. DATE: 3/29/93

GC#3

ESTD-AREA

RT	TYPE	AREA	WIDTH	HEIGHT	CAL#	PPM	NAME
14.225	++	376446	.035	131453	1	60.914	DR01

TOTAL AREA=1.3140E+08

MUL FACTOR=1.0000E+00

$60.914 \times 5 / 25.166 = 11.869 \div .81 = 14.65$

RUN# 1130 MAR 30, 1993 18:06:08

START

2.774

IF

8.139

19.685

IF

TIMETABLE STOP

RUN# 1130 MAR 30, 1993 18:06:08

SAMPLE NAME: W3-03-16-02

METHOD NAME: M*GRO1.ME1

MATRIX: WATER (SOIL) INJECTED 5.0 UL

GC #9

ESTD-AREA

RT	TYPE	AREA	WIDTH	CAL#	GRO(PPM)	NAME
16.300	++	58358	.077	1	.070	GRO

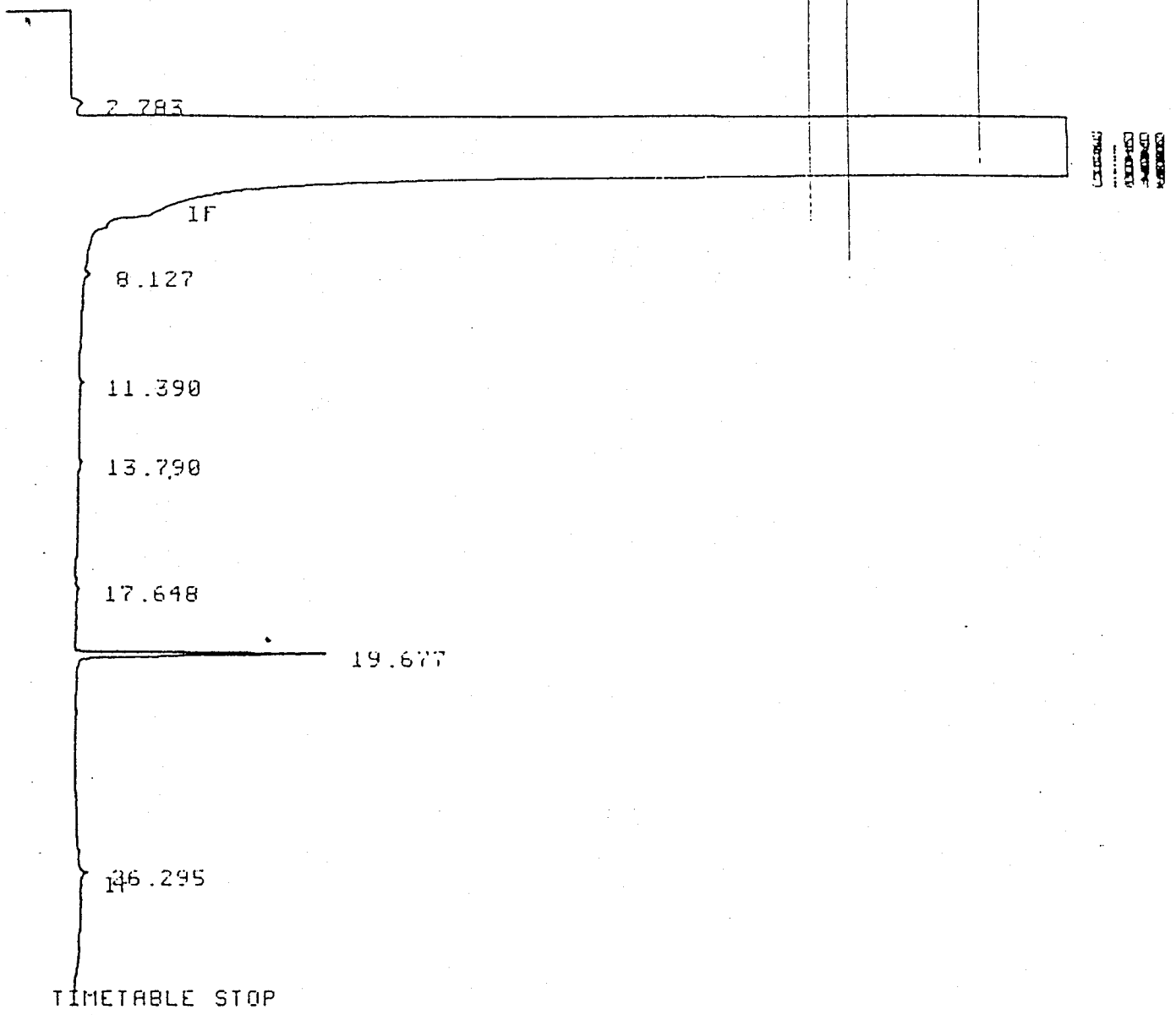
TOTAL AREA=7.2942E+07

MUL FACTOR=1.0000E+00

$\frac{25}{23.08} \times \frac{5302}{50} = 108$

$\frac{.1}{.8} = 0.80$

* RUN # 1129 MAR 30, 1993 17:13:19
START



RUN# 1129 MAR 30, 1993 17:13:19

SAMPLE NAME: W3-03-16-01
METHOD NAME: M*GRO1.MET
MATRIX: WATER (SOIL) INJECTED 5.0 UL

$\frac{25}{23.9} \times \frac{5000}{50} = 104.5$

GC #4

ESTD-AREA

RT	TYPE	AREA	WIDTH	CAL#	GRO(PPM)	NAME
16.300	++	106702	.101	1	.099	GRO

TOTAL AREA=6.9719E+07
MUL FACTOR=1.0000E+00

$-.1 = 0.0$

DAMES & MOORE

250 East Wisconsin Ave, Suite 1500
Milwaukee, Wisconsin 53202
(414) 347-0800 FAX:(414) 347-0288

Lab Suburban

Chain of Custody Seal # _____ # _____

Turnaround Time
- ☐ Rush (preapproved by Lab)
- ☒ Normal

SHIPPING DETAILS:
Method of Shipment _____
Contents Temperature _____ C
Comments _____

PROJECT NAME: CCAC - Greenbay
PROJECT #: 21e213
Send Results To:
PROJECT MANAGER: Vieqst

LAB USE ONLY	DATE	CONTAINERS	No.	SAMPLE ID	SAMPLE TYPE	ANALYSIS REQUESTED: PVOC	CLPD	DRO	VOA	TOC	GRAIN SIZE	REMARKS/PRESERVATIVES
	3-25	3		CCAC-DM1-S1-3-4.5	Soil	X	X	X	X			W3-03-016-01
	3-25	3		CCAC-DM1-S2-8-10	Soil	X	X	X	X			02
	3-25	2 1		CCAC-DM1-S3-10-12	Soil					X	X	03
	3-25	1		CCAC-DM1-Tuga Cuthugga -15-18	Soil					X	X	Petroleum Odor 04
										due 4/8/93		

CHAIN OF CUSTODY RECORD

SAMPLER: (SIGNATURE)	DATE
Vieqst	3/25-92

COMMENTS: Please Provide QADC

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Vieqst	3/25 1500				
RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY: BY: (SIGNATURE) / DATE/TIME

ATTACHMENT D

PRODUCT BAILING RECORD

SIMON HYDRO-SEARCH

MILWAUKEE PLATING COMPANY

PRODUCT BAILING RECORD

FOR WELL MW-_____

DATE	TIME	PRODUCT THICKNESS BEFORE BAILING (inches)	PRODUCT THICKNESS AFTER BAILING (inches)	QUANTITY OF LIQUID BAILED (gallons)	INITIALS OF SAMPLER	COMMENTS

SIMON HYDRO-SEARCH