

von Briesen, Purtell & Roper, s.c.
Attorneys at Law

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Milwaukee, Wisconsin 53202-4470
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Suite 1000
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Milwaukee, Wisconsin 53202-4184
Telephone 414-273-7000
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1997 JUN 28 11:45 AM
WISCONSIN DEPARTMENT OF
NATURAL RESOURCES
Please Reply To:
 411 Building Office
 Water Street Office

David J. Edquist
Direct Telephone
414-287-1372
E-Mail Address
dedquist@water.vonbriesen.com

June 25, 1997

Mr. Andrew Boettcher
Wisconsin Department of
Natural Resources
4041 N. Richards Street
Box 12436
Milwaukee, WI 53212-0436

Re: 1005 Perkins Avenue, Waukesha, WI
FID #268091890

Dear Mr. Boettcher:

I am responding to your letter of June 20, 1997, addressed to Dominick and Frank Giuffre, regarding the above site. A copy of your letter is enclosed for your reference. You requested six items of information in your letter.

The first item requested was a copy of Figure 2 from the Phase III Environmental Assessment and Conceptual Action Plan prepared by Versar dated November, 1993. Unfortunately, that was a fold-out page that was not unfolded at the time of photocopying. I am enclosing a copy of Figure 2 with this letter.

Items 2 through 5 all relate to a groundwater assessment that was conducted by Versar relating to the west lot of the subject facility. A copy of the report, dated December 2, 1993, is enclosed. This investigation coincided with groundwater activities associated with the east lot, the site of the PCB removal action. Since none of the information sought in items 2-5 relates to the east lot, these items should not have any impact on the request for closure regarding the PCB contamination on the east lot. Items 2-5 are addressed specifically in the following paragraphs.

Item 2 requested copies of pages 1-12 of the laboratory analytical report from National Environmental Testing, Inc. That data was related to groundwater samples 210863, 210864, 210865 and 210866 collected on the west parcel at the same time that the east lot investigation was under way. The data on pages 1-12 was not related to the east site, and therefore was not included in the Phase III report. The analytical reports for these samples are included in the enclosed December 2, 1993 Groundwater

Mr. Andrew Boettcher
June 25, 1997
Page -2-

Investigation Report. Once again, these were not "missing" from the Phase III report as they did not relate to the east lot that is the subject of the Phase III report.

Request No. 3 references chlorinated hydrocarbons detected in sample 210864. This is a west lot sample, not an east lot sample, as indicated in the preceding paragraph. It is for that reason that this sample was not referenced in the Phase III report concerning the east lot; it is referenced in the enclosed Groundwater Investigation Report for the west parcel, however. Given the location of this sample along the northern property boundary, and groundwater flows in the area, Versar concluded that this data most likely suggested an off-site source to the north of the subject property.

Item 4 requested the chain of custody form for these samples. This is found in the enclosed west lot report.

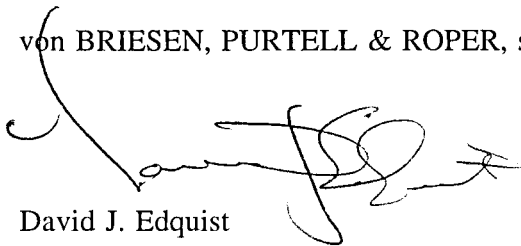
Item 5 requests the groundwater investigation report referenced above. The original draft report was dated November 21, 1993; the final report was issued on December 2, 1993. As noted previously in this letter, this groundwater investigation report related solely to the west lot, and had nothing to do with the PCB contaminated soils on the east lot. Nevertheless, a copy of the report is enclosed.

Finally, Item 6 of your letter requested information regarding the status of monitoring wells EMW-01, EMW-02 and EMW-03. I am advised by Versar that EMW-03 was completely removed during soil excavation. Wells EMW-01 and -02 were still in place as of the last sampling event conducted by Versar in 1993.

I trust that this letter and the enclosed materials address your concerns. Seeing as most of the requested documentation was completely unrelated to the PCB contaminated soils on the east lot, I again request that WDNR issue a site closure letter with respect to the east lot. Thank you for your consideration.

Sincerely,

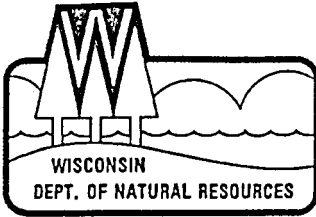
von BRIESEN, PURTELL & ROPER, s.c.



David J. Edquist

DJE/mss
Enclosures

cc: Mr. Mark DeLong
Mr. Doug Dahlberg
Mr. Dominick Giuffre
Mr. Frank Giuffre



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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

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

June 20, 1997

In Reply Refer To: FID# 268091890
BRRTS-LUST# 03-68-002916
BRRTS-ERP# 02-68-000916
County of Waukesha
BRR-LUST

Mr. Dominick J. Giuffre
Mr. Frank P. Giuffre
6635 South 13th Street
Milwaukee, WI 53221

SUBJECT: Closure Request for the *Underground Storage Tank Case* and the *PCB Contaminated Soils Case* at the Perkins Avenue Facility Site,
1005 Perkins Avenue, Waukesha, WI

Dear Gentlemen:

The Wisconsin Department of Natural Resources (WDNR) has been requested to consider granting "no further action" status for the underground storage tank (UST) case on the western portion of the site and the polychlorinated biphenyl (PCB) contaminated soils case on the eastern portion of the site. The east and west portions of the site are separated by an unnamed creek that flows to the northwest.

Underground Storage Tanks

Based upon the information in the case file and the supporting documentation, it appears that the contamination from the USTs at the above-named site has been remediated in compliance with the requirements of chs. NR 700 to 724, Wis. Adm. Code. Therefore, the Department considers the UST case "closed," having determined that no further action is necessary related to the USTs at this time.

However, the UST case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the UST site poses a threat to public health, safety or welfare or the environment.

PCB Contaminated Soils

Based upon the information in the report and other information in the case file, the WDNR regrets that we are unable to grant "no further action" status for the site at this time. In the *Phase III, Environmental Assessment and Conceptual Action Plan* prepared by Versar, Inc. and dated November 1993, it appears that some pages are missing or blank. The following information is necessary before the PCB contaminated soils portion of the site can be reviewed for closure:

1. Page 4 of the report is a blank sheet of paper. The List of Figures indicated that the page should contain figure 2 which is the "site layout with sampling grid location". Please submit a copy of the figure.
2. Appendix D2 contains the "water sample analytical results", however pages 1-12 of the laboratory analytical report from National Environmental Testing, Inc. (dated 6/4/93) are missing. Please submit the missing pages.
3. The case narrative of the laboratory analytical report in Appendix D2 indicated that the chlorinated hydrocarbons 1,1,1-Trichloroethane and Trichloroethene were detected in sample 210864. There is no mention of these detections in any of the documentation submitted to the WDNR. Please submit an explanation.
4. Appendix D3 is supposed to contain the "chain of custody form" for the groundwater samples, however it contains a "groundwater monitoring well information form" instead. Please submit a copy of the "chain of custody form" for the groundwater samples collected on May 13, 1993.
5. In the Closure Checklist report, prepared by Versar, Inc. and dated November 21, 1993, there is a reference to the draft report of a groundwater investigation performed by Michael Place, a Versar Hydrogeologist, . If a groundwater investigation report was ever generated, please submit a copy to the WDNR.
6. Please describe the current status of monitoring wells EMW-01, EMW-02 and EMW-03.

Please submit the requested information. Also, please note that this site has been added to the *Wisconsin Registry of Waste Disposal Sites List*, as a site with foundry sand. If future plans for the site include construction of a building or parking lot, an exemption to build on an abandoned landfill will be required. The regulations regarding requirements to build on an abandoned landfill can be found in Ch. NR 500.

Please note that the closure of the UST portion of the site does not include closure of the PCB contaminated soil nor does it include any volatile organic compound (VOC) or chlorinated hydrocarbon contamination in the groundwater beneath any part of this site. This letter does not address any issues relating to the buried drums discovered at this property. If you have any questions regarding issues related to the buried drums, you may contact Mr. Walt Ebersohl at (414) 229-0864. If you have any questions regarding this letter you may contact me at (414) 229-0833. Please refer to the FID number and the BRRTS number on the top of this letter in any future correspondence.

Sincerely,



Andrew Boettcher
Hydrogeologist

cc: Mr. David J. Edquist - von Briesen, Purtell & Roper, SC
Versar, Inc.
→ Mr. Scott Ferguson - WDNR
SED Case File

von Briesen, Purtell & Roper, s.c.
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Please Reply To:
411 Building Office
Water Street Office
David J. Edquist
Direct Telephone
414-287-1372
E-Mail Address
dedquist@water.vonbriesen.com

RECEIVED MAR 11 1997

RECEIVED MAR 10 1997

March 12, 1997

Ms. Gina Keenan, Hydrogeologist
Wisconsin Department of Natural Resources
4041 N. Richards Street
Milwaukee, WI 53212

Re: Request for Closure Underground Storage Tanks
1005 Perkins Avenue
RR-LUST FID No. 268091890

UST/ERR

Dear Ms. Keenan:

I recently received a copy of your February 5 letter to Dominick and Frank Giuffre, in which you requested information relating to the closure requests on the UST and tank removal activities performed at the site several years ago. This office represents Akerman, Inc. and Volvo Construction Equipment (formerly VME Americas, Inc.), which conducted the PCB and UST removal operations at the site. With this letter, I am providing the information that you have requested.

As an initial matter, I must note that my clients have been requesting closure since November of 1993. I wrote to you on November 24, 1993, providing you with the UST closure checklist and requesting closure with respect to the UST removal operations. I have been corresponding with Margaret Graefe regarding closure on the PCB removal operations since February 3, 1994, and formally requested closure in a letter to her dated June 7, 1994. On September 21, 1994, Mary Lou Bozica advised me that our request would be addressed within three weeks of that date. Now, two-and-one-half years later, we are still awaiting closure, and you are requesting copies of documents that we provided to WDNR years ago. What perhaps is most disturbing is the fact that you did not copy me with your request for information notwithstanding the fact that I was the author of the various closure requests to DNR, and notwithstanding the fact that I have had numerous telephone conversations with Walter Ebersohl, Margaret Graefe, Mike Ellenbecker, and others at DNR over the past few months in an effort to obtain closure.

The USTs and 15 cubic yards of contaminated soils were removed from the site during the week of October 11, 1993. I sent a copy of the UST closure checklist to you on November 24, 1993. That

Ms. Gina Keenan
March 12, 1997
Page -2-

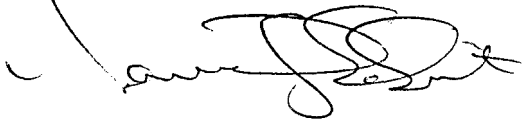
report contained documentation regarding the UST removal performed by Superior Environmental. You have now requested additional copies of documentation regarding the disposal of drums, contaminated soils, and the USTs themselves. I am enclosing additional copies documenting the disposition of soils. Superior has not located documentation regarding disposition of the USTs. You have not specifically requested another copy of the UST closure checklist. If you need another copy of the entire report, please let me know.

You also indicated that you required further information regarding the removal of the PCB-contaminated soils at the site. First, you requested a copy of the Phase III Report. I sent a copy of that report to Ms. Graefe on December 2, 1993. Another copy is enclosed. You inquired as to the source of the PCB contamination. As indicated in the enclosed affidavit of Robert L. Durfee, it appears that the PCBs were introduced to the site by Hein-Werner Corporation in the early to mid-1970s when Hein-Werner arranged for the disposal of foundry sand as fill material at the site. One or more loads of the foundry sand disposed of at the site apparently were contaminated with PCBs. Finally, you requested documentation for the disposal of drums which were at the property at the time of Versar's June 3, 1994 report. I provided that documentation to Margaret Graefe on June 23, 1994. Additional copies of those materials are enclosed.

Please proceed with the issuance of a closure letter as soon as possible. Thank you.

Sincerely,

von BRIESEN, PURTELL & ROPER, s.c.



David J. Edquist

DJE/mss
Enclosures

cc: Mark DeLong (w/o encs)
Dominick J. Giuffre (w/o encs)
Frank P. Giuffre (w/o encs)

Activity/Project Name: Akerman/VME
 License/Permit/Monitoring Number: _____ Boring Number: SBEMW-01
 Boring Drilled By (Firm name and name of crew chief): Alan Esko ~ Versar, Inc.
Don Kling ~ Wang Engineering
 Date Drilling Started: 05/11/1993 Date Drilling Completed: 05/11/1993 Drilling Method: 4 1/4 HSA
 M M D D Y Y M M D D Y Y
 DNR Facility Well No. _____ Unique Well No. _____ Common Well Name: EMW-01
 Final Static Water Level: 837.89 Feet MSL Surface Elevation: 843.70 Feet MSL Borehole Diameter: 8.25 Inches
 Boring Location: 375,229.83 N, 2,479,556.22 E (S/C/N) Lat _____ Long _____
 NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W
 County: Waukesha DNR County Code: 6.8 Civil Town/City/village: Waukesha

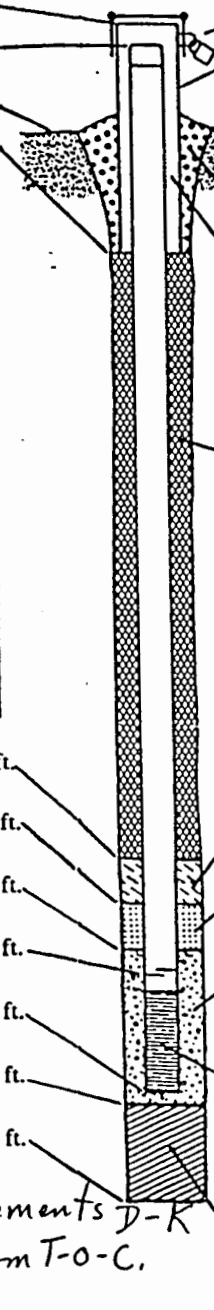
Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 SS	2' 6"	54/31/3	2-4	Gravel Fill Cinder Block/Debris Fill Organic peat, some clay, brown/black, soft, wet	PT		pellets/chips	1.6						
2 SS	2' 12"	92/2/4	8-10	Grades to: Silty clay, grey, to sand, saturated, Vry. Soft.	CL			1.6	2.25					
3 SS	18" 14"	57/4	14-16	Grades to Sand, fn-cs, little gravel, saturated, med. dense	SW		screen K 10-20	1.4						
4 SS	18" 15"	1/2/2	18-20	Grades to predominantly fine grained, brown, loose	SP			2.4						
			21	EOB @ 20.5' bgs.										

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

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

Facility/Project Name Akerman/VME	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name EMW-01
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane 375,229.83 ft. N 2,479,556.22 ft. E.	Date Well Installed 05/11/93 m d y
Distance Well Is From Waste/Source Boundary 100 ft.	Section Location of Waste/Source NE 1/4 of NE 1/4 of Sec. 2, T. 6 N, R. 19 E, W.	Well Installed By: (Person's Name and Firm) Dan Kling Wang Engineering, Inc.
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

A. Protective pipe, top elevation 846.19 ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 845.99 ft. MSL	2. Protective cover pipe: a. Inside diameter: 4.0 in. b. Length: 4.5 ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation 843.70 ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or 3.0 ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input checked="" type="checkbox"/> SP <input checked="" type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Annular space seal <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. 3 Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input checked="" type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	8. Filter pack material: Manufacturer, product name and mesh size a. Industrial Sand, Canada; 10-20 b. Volume added 5 ft ³
17. Source of water (attach analysis): _____	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or 5.0 ft.	10. Screen material: SS 304 a. Screen type: Factory cut <input type="checkbox"/> 11 Continuous slot <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or N/A ft.	b. Manufacturer No. Illinois Pump
G. Filter pack, top _____ ft. MSL or 8.0 ft.	c. Slot size: 0.010 in.
H. Screen joint, top _____ ft. MSL or 10.1 ft.	d. Slotted length: 10.0 ft.
I. Well bottom _____ ft. MSL or 20.1 ft.	11. Backfill material (below filter pack): native None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/>
J. Filter pack, bottom _____ ft. MSL or 22.8 ft.	
K. Borehole, bottom _____ ft. MSL or 22.8 ft.	
L. Borehole, diameter 8.25 in.	
M. O.D. well casing 2.25 in.	
N. I.D. well casing 2.00 in.	



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

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. 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 \$5000 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 including where the completed form should be sent.

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

Facility/Project Name <u>Herman/VME</u>	County Name <u>Waukegan</u>	Well Name <u>EMW-01</u>
Facility License, Permit or Monitoring Number _____	County Code <u>68</u>	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 41
 - surged with bailer and pumped 61
 - surged with block and bailed 42
 - surged with block and pumped 62
 - surged with block, bailed and pumped 70
 - compressed air 20
 - bailed only 10
 - pumped only 51
 - pumped slowly 50
 - Other _____
3. Time spent developing well _____ 30 min.
4. Depth of well (from top of well casing) _____ 20.1 ft.
5. Inside diameter of well _____ 2.00 in.
6. Volume of water in filter pack and well casing _____ 2.0 gal.
7. Volume of water removed from well _____ 13.0 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)	a. <u>8.40</u> ft.	<u>8.10</u> ft.
Date	b. <u>05/13/93</u> m m d d y y	<u>05/13/93</u> m m d d y y
Time	c. <u>15:30</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>16:00</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>1.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Dark Gray</u>	Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>Slightly Turbid</u>
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

16. Additional comments on development: Good Recharge

Well developed by: Person's Name and Firm	I hereby certify that the above information is true and correct to the best of my knowledge.
Name: <u>Dan Kling (Driller)</u>	Signature: _____
Firm: <u>Wang Engineering</u>	Print Initials: <u>AGE</u>
	Firm: <u>Versar, Inc.</u>

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

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

Facility/Project Name: Akerman / VME License/Permit/Monitoring Number: _____ Boring Number: SBEMW-02

Boring Drilled By (Firm name and name of crew chief): Alan Esko ~ Versar, Inc. Date Drilling Started: 05/12/93 Date Drilling Completed: 05/12/93 Drilling Method: 4 1/4 HSA

Dan Kling ~ Wang Engineering M M D D Y Y M M D D Y Y

DNR Facility Well No: _____ Unique Well No: _____ Common Well Name: EMW-02 Final Static Water Level: 839.51 Feet MSL Surface Elevation: 845.75 Feet MSL Borehole Diameter: 8.25 inches

Boring Location: State Plane 375,537.42 N, 2,479,359.24 E S1C/N Lat: 0 . . Local Grid Location (If applicable): N E S W
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E W Long: 0 . . Feet _____ Feet _____

County: Waukesha DNR County Code: 6.8 Civil Town/City/ or Village: Waukesha

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 SS	18" / 5"	2 2/3	2	Gravel Fill	Fill									
			4	Wood, Concrete, and Debris Fill										
2 SS	12"	0 1/1/2	6	Foundry Sand Fill, black, saturated, petroleum odor and sheen,	PT			8						
			10	Grades to Peat, brown, wet, vry. soft										
3 SS	18" / 12"	7 1/1/10	12	Driller observes change in resistance,	GW			1						
			14	Grades to Sandy, Gravel, well graded, saturated, brown										
			22	Grades to Silt, grey, saturated	ML			2						
			24	EOB @ 24' bgs										

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

Signature: _____ Firm: _____

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

Facility/Project Name Herman/VME	Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name EMW-02
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. _____ Long. _____ or St. Plane 375,537.42 ft. N. 2,479,359.24 ft. E.	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source NE 1/4 of NE 1/4 of Sec. 2, T. 6 N, R. 19 E, W.	Date Well Installed 05/12/93 m m d d y y
Distance Well Is From Waste/Source Boundary 10 ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) Dan Kling Wang Engineering, Inc
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation 847.67 ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 847.91 ft. MSL	2. Protective cover pipe: a. Inside diameter: 4.0 in. b. Length: 5.0 ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation 845.75 ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or 2.7 ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input checked="" type="checkbox"/> SW <input checked="" type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. 2 Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input checked="" type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. _____ b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8. Filter pack material: Manufacturer, product name and mesh size a. Industrial Sand: Canada; 10-20 b. Volume added 5 ft ³
Describe _____	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
17. Source of water (attach analysis): _____	10. Screen material: SS 304 a. Screen type: Factory cut <input type="checkbox"/> 11 Continuous slot <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or 6.7 ft.	b. Manufacturer No. Illinois Pump
F. Fine sand, top _____ ft. MSL or N/A ft.	c. Slot size: 0.010 in.
G. Filter pack, top _____ ft. MSL or 12.7 ft.	d. Slotted length: 10.0 ft.
H. Screen joint, top _____ ft. MSL or 15.1 ft.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/>
I. Well bottom _____ ft. MSL or 25.1 ft.	native
J. Filter pack, bottom _____ ft. MSL or 26.0 ft.	
K. Borehole, bottom _____ ft. MSL or 25.7 ft.	
L. Borehole, diameter 8.25 in. <i>Measurements J-K</i>	
M. O.D. well casing 2.25 in. <i>made from T-O-C.</i>	
N. I.D. well casing 2.00 in.	

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

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. 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 \$5000 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 including where the completed form should be sent.

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

Facility/Project Name <u>Akerman/VME</u>	County Name <u>Waukesha</u>	Well Name <u>EMW-02</u>
Facility License, Permit or Monitoring Number _____	County Code <u>68</u>	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 41
 - surged with bailer and pumped 61
 - surged with block and bailed 42
 - surged with block and pumped 62
 - surged with block, bailed and pumped 70
 - compressed air 20
 - bailed only 10
 - pumped only 51
 - pumped slowly 50
 - Other
3. Time spent developing well 65 min.
4. Depth of well (from top of well casing) 25.1 ft.
5. Inside diameter of well 2.00 in.
6. Volume of water in filter pack and well casing 3.0 gal.
7. Volume of water removed from well 60.0 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)	a. <u>7.90</u> ft.	<u>7.90</u> ft.
Date	b. <u>05/13/93</u> m m d d y y	<u>05/13/93</u> m m d d y y
Time	c. <u>08:40</u> <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>09:45</u> <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>6.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>dark gray, highly turbid</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>moderately turbid, light gray</u>
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

16. Additional comments on development: Good Recharge

Well developed by: Person's Name and Firm

Name: Dan Kling

Firm: Wang Engineering

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

Signature: _____

Print Initials: AK E

Firm: Versar, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

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

Facility/Project Name: Akerman / VME
 License/Permit/Monitoring Number: _____
 Boring Number: SBEMW-03
 Boring Drilled By (Firm name and name of crew chief): Alan Esko ~ Versar, Inc
Don Kline ~ Wang Eng.
 Date Drilling Started: 05/12/93 (MM/DD/YY)
 Date Drilling Completed: 05/10/93 (MM/DD/YY)
 Drilling Method: 4 1/4 HSA
 DNR Facility Well No.: _____
 Unique Well No.: _____
 Common Well Name: EMW-03
 Final Static Water Level: 841.90 Feet MSL
 Surface Elevation: 848.39 Feet MSL
 Borehole Diameter: 8.25 inches
 Boring Location: _____
 State Plane: 375, 808.05 N, 2, 479, 437.11 E S/C/N
 Lat: _____
 Long: _____
 Local Grid Location (if applicable): _____
 County: Waukesha
 DNR County Code: 6-8
 Civil Town/City/ or Village: Waukesha

Sample Number and Type	Length Alt. & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			2	Debris Fill, with sand											
			4	difficult drilling possible concrete											
1 CS	18" / 14"	2 1/2 / 5	4 - 6	Foundry Sand Fill, black, observable odor + sheen, loose, saturated.	SP										
2 SS	18" / 12"	1/2 / 2	8 - 10	Peat, brown, wet, soft contact change to Organic Clay, mottled black/grey, soft	PT / OH					.5					
3 SS	18" / 6"	5/5 / 7	14 - 16	Grades to Sand, fn-cs, brown, saturated med. dense.	SW										
4 S	18" / 9"	7/11 / 20	18 - 20	Grades to Sandy Gravel, well graded, saturated, dense	GW										
			22	EOB @ 23' bgs											

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

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

Facility/Project Name Akerman/VME	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name EMW-03
Utility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or _____	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane 375,808.05 ft. N 2,479,437.11 ft. E.	Date Well Installed 05/21/93 m m d d y y
Distance Well Is From Waste/Source Boundary 50 ft.	Section Location of Waste/Source NE 1/4 of NE 1/4 of Sec. 2, T. 6 N, R. 19 E.	Well Installed By: (Person's Name and Firm) Dan Kling Wang Engineering, Inc.
Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input checked="" type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

- A. Protective pipe, top elevation 851.23 ft. MSL
- B. Well casing, top elevation 850.75 ft. MSL
- C. Land surface elevation 848.39 ft. MSL
- D. Surface seal, bottom _____ ft. MSL or 3.4 ft.

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

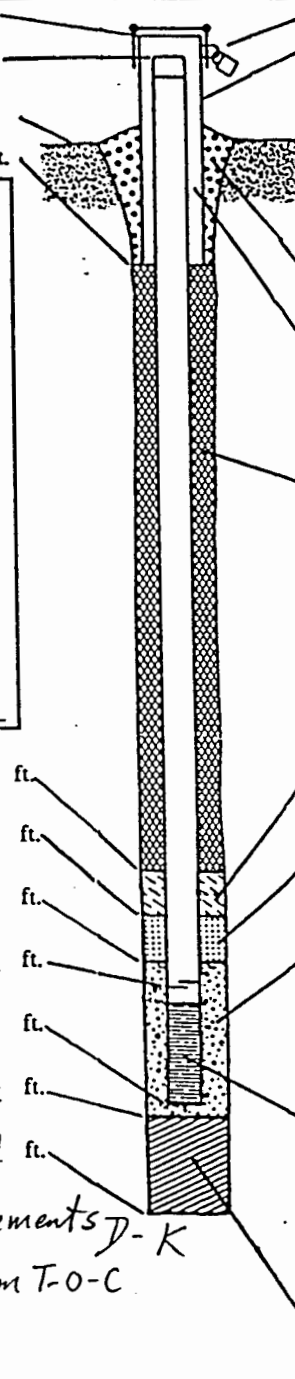
3. Sieve analysis attached? Yes No

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):



- 1. Cap and lock? Yes No
- 2. Protective cover pipe:
 - a. Inside diameter: 4.0 in.
 - b. Length: 5.0 ft.
 - c. Material: 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
Other
- 5. Annular space seal: a. Granular Bentonite 33
b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 35
c. _____ Lbs/gal mud weight ... Bentonite slurry 31
d. _____ % Bentonite ... Bentonite-cement grout 50
e. 4 Ft³ volume added for any of the above
f. How installed: Tremie 01
Tremie pumped 02
Gravity 08
- 6. Bentonite seal: a. Bentonite granules 33
b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32
c. _____ Other
- 7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³
- 8. Filter pack material: Manufacturer, product name and mesh size
a. Industrial Sands Canada 10-20
b. Volume added 5 ft³
- 9. Well casing: Flush threaded PVC schedule 40 23
Flush threaded PVC schedule 80 24
Other
- 10. Screen material: SS 304
a. Screen type: Factory cut 11
Continuous slot 01
Other
b. Manufacturer No. Illinois Pump
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
- 11. Backfill material (below filter pack): None 14
native Other

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

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. 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 \$5000 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 including where the completed form should be sent.

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other _____

Facility/Project Name <u>Herman / UME</u>	County Name <u>Waukesha</u>	Well Name <u>EMW-03</u>
Facility License, Permit or Monitoring Number _____	County Code <u>68</u>	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 41
 - surged with bailer and pumped 61
 - surged with block and bailed 42
 - surged with block and pumped 62
 - surged with block, bailed and pumped 70
 - compressed air 20
 - bailed only 10
 - pumped only 51
 - pumped slowly 50
 - Other _____ _____
3. Time spent developing well 20 min.
4. Depth of well (from top of well casing) 25.1 ft.
5. Inside diameter of well 2.00 in.
6. Volume of water in filter pack and well casing 2.7 gal.
7. Volume of water removed from well 153.0 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)	a. <u>8.85</u> ft.	<u>8.85</u> ft.
Date	b. <u>05/13/93</u> m m d d y y	<u>05/13/93</u> m m d d y y
Time	c. <u>10:00</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>10:30</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>1.0</u> inches	<u>1.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>dark gray</u>	Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>clear</u>

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

16. Additional comments on development:

Excellent Recharge

Well developed by: Person's Name and Firm

Name: Dom Kling

Firm: Wang Engineering

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

Signature: _____

Print Initials: AGE

Firm: Versar, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

APPENDIX D2
WATER SAMPLE ANALYTICAL RESULTS



NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

CASE NARRATIVE

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/04/1993

NET Job Number: 93.03857

Project Description: VME Americas, Inc.

Sample Number	Sample Description	Date Taken	Date Received
210867	EMW-01 Down Gradient-Fill; Grab	05/13/1993	05/14/1993
210868	EMW-02 Down Gradient-Fill; Grab	05/13/1993	05/14/1993
210869	EMW-02D Down Gradient-Fill; Grab	05/13/1993	05/14/1993
210870	EMW-03 Upgradient-Fill; Grab	05/13/1993	05/14/1993
210871	Equipment Blank	05/13/1993	05/14/1993
210872	Trip Blank	05/13/1993	05/14/1993

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. The supporting QA/QC documentation has also been enclosed.

The following comments should be noted for the indicated fraction;

Volatile Organic Analysis

WDNR DRO and Method 8021 analysis was subcontracted to our Watertown Wisconsin Division.

The presence of chlorinated hydrocarbons was confirmed in sample 210864 was confirmed by re-analysis. The initial analysis contained 1,1,1-Trichloroethane and Trichloroethene above the range of the instrument's calibration. Therefore, a dilution and re-analysis was required. The diluted analysis contained these compounds in the expected range.

Semi-Volatile Organic Analysis

No exceptions to the normal protocol.





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
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Bartlett, IL 60103
Tel: (708) 289-3100
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Pesticide Analysis

No exceptions to the normal protocol. A Lab Control Spike and Lab Control Spike Duplicate were analyzed in place of an MS/MSD due to insufficient sample available.

Conventionals (Wet Chemistry) Analysis

The TRPH (Method 9073) analysis was subcontracted to NET's Portland Oregon Division.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Should you have any questions concerning procedures or results, do not hesitate to call.

Approved by:

A handwritten signature in black ink, appearing to read "Neal Cleghorn".

Neal Cleghorn
Operations Manager





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210867
NET Job No.: 93.03857

Sample Description: EMW-01 Down Gradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 16:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
Conductivity	694.	umhos/cm	/137	05/19/1993	1.0	mas	2510B(4) 120.1(3)
pH	7.51	units	/522	05/13/1993	0.10	ljd	150.1(3) 9040(1)
Prep, Pesticides/PCB AQUEOUS	extracted		107/	05/19/1993		era	3500 (1)
PESTICIDES/PCB - 8080 AQUEOUS			/				
4,4'-DDD	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Dieldrin	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endosulfan I	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
Endosulfan sulfate	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endrin aldehyde	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Heptachlor epoxide	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
PCB-1248	<1.0	ug/L	107/133	05/21/1993	1.0	seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	33	%	107/133	05/21/1993	22-154	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	41	%	107/133	05/21/1993	23-154	seh	8080 (1)
PREP, ACID EXT. AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
PREP, BN AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
ACID CMPDS - 8270 AQUEOUS			/				
2-Chlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
2,4-Dichlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
4-Nitrophenol	<50.0	ug/L	120/177	05/26/1993	50.0	mjs	8270 (1)
Surr: Phenol-d6	41	%	120/177	05/26/1993	10-94	mjs	8270 (1)
Surr: 2-Fluorophenol	55	%	120/177	05/26/1993	21-100	mjs	8270 (1)
Surr: 2,4,6-Tribromophenol	89	%	120/177	05/26/1993	10-123	mjs	8270 (1)





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210867
NET Job No.: 93.03857

Sample Description: EMW-01 Down Gradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 16:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
BASE/NEUTRALS - 8270 AQUEOUS							
Benzo(b)fluoranthene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Di-n-butyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Dimethyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
1,2-Diphenylhydrazine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Nitrobenzene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
N-Nitrosodiphenylamine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Surr: Nitrobenzene-d5	50	%	120/177	05/26/1993	35-114	mjs	8270 (1)
Surr: 2-Fluorobiphenyl	50	%	120/177	05/26/1993	43-116	mjs	8270 (1)
Surr: Terphenyl-d14	86	%	120/177	05/26/1993	33-141	mjs	8270 (1)
Prep, 8310 PNA's AQUEOUS	extracted		83 /	05/18/1993		law	8310 (1)
PNA CMPDS - 8310 AQUEOUS							
Acenaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018	prp	8310 (1)
Benzo(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018	prp	8310 (1)
Fluorene	<0.0021	mg/L	83 /178	05/21/1993	0.0021	prp	8310 (1)
Naphthalene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Phenanthrene	<0.0064	mg/L	83 /178	05/21/1993	0.0064	prp	8310 (1)
Surr: 2-Fluorobiphenyl	33	mg/L	83 /178	05/21/1993	1-118	prp	8310 (1)
VOLATILES - 8021 AQUEOUS							
Methylene Chloride	<10.	ug/L	/8	05/20/1993	10.	mjs	8021 (1)





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210868
NET Job No.: 93.03857

Sample Description: EMW-02 Down Gradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 18:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
QA Report Level III	C		/5	05/27/1993		tag	
Prep, Pesticides/PCB AQUEOUS	extracted		107/	05/19/1993		era	3500 (1)
PESTICIDES/PCB - 8080 AQUEOUS			/				
4,4'-DDD	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Dieldrin	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endosulfan I	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
Endosulfan sulfate	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endrin aldehyde	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Heptachlor epoxide	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
PCB-1248	<1.0	ug/L	107/133	05/21/1993	1.0	seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	30	%	107/133	05/21/1993	22-154	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	31	%	107/133	05/21/1993	23-154	seh	8080 (1)
PREP, ACID EXT. AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
PREP, BN AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
ACID CMPDS - 8270 AQUEOUS			/				
2-Chlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
2,4-Dichlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
4-Nitrophenol	<50.0	ug/L	120/177	05/26/1993	50.0	mjs	8270 (1)
Surr: Phenol-d6	34	%	120/177	05/26/1993	10-94	mjs	8270 (1)
Surr: 2-Fluorophenol	50	%	120/177	05/26/1993	21-100	mjs	8270 (1)
Surr: 2,4,6-Tribromophenol	91	%	120/177	05/26/1993	10-123	mjs	8270 (1)





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210869
NET Job No.: 93.03857

Sample Description: EMW-02D Down Gradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 18:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
Prep, Pesticides/PCB AQUEOUS	extracted		107/	05/19/1993		era	3500 (1)
PESTICIDES/PCB - 8080 AQUEOUS			/				
4,4'-DDD	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Dieldrin	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endosulfan I	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
Endosulfan sulfate	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endrin aldehyde	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Heptachlor epoxide	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
PCB-1248	<1.0	ug/L	107/133	05/21/1993	1.0	seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	37	%	107/133	05/21/1993	22-154	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	33	%	107/133	05/21/1993	23-154	seh	8080 (1)
PREP, ACID EXT. AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
PREP, BN AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
ACID CMPDS - 8270 AQUEOUS			/				
2-Chlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
2,4-Dichlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
4-Nitrophenol	<50.0	ug/L	120/177	05/26/1993	50.0	mjs	8270 (1)
Surr: Phenol-d6	33	%	120/177	05/26/1993	10-94	mjs	8270 (1)
Surr: 2-Fluorophenol	50	%	120/177	05/26/1993	21-100	mjs	8270 (1)
Surr: 2,4,6-Tribromophenol	91	%	120/177	05/26/1993	10-123	mjs	8270 (1)





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210869
NET Job No.: 93.03857

Sample Description: EMW-02D Down Gradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 18:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
BASE/NEUTRALS - 8270 AQUEOUS							
Benzo(b)fluoranthene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Di-n-butyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Dimethyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
1,2-Diphenylhydrazine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Nitrobenzene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
N-Nitrosodiphenylamine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Surr: Nitrobenzene-d5	73	%	120/177	05/26/1993	35-114	mjs	8270 (1)
Surr: 2-Fluorobiphenyl	72	%	120/177	05/26/1993	43-116	mjs	8270 (1)
Surr: Terphenyl-d14	90	%	120/177	05/26/1993	33-141	mjs	8270 (1)
Prep, 8310 PHAs AQUEOUS	extracted		83 /	05/18/1993		law	8310 (1)
PNA CMPDS - 8310 AQUEOUS							
Acenaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018	prp	8310 (1)
Benzo(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018	prp	8310 (1)
Fluorene	<0.0021	mg/L	83 /178	05/21/1993	0.0021	prp	8310 (1)
Naphthalene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Phenanthrene	<0.0064	mg/L	83 /178	05/21/1993	0.0064	prp	8310 (1)
Surr: 2-Fluorobiphenyl	47	%	83 /178	05/21/1993	1-118	prp	8310 (1)
VOLATILES - 8021 AQUEOUS							
Methylene Chloride	<50.	ug/L	/8	05/20/1993	10.	mjs	8021 (1)





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210870
NET Job No.: 93.03857

Sample Description: EMW-03 Upgradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 19:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
Prep, Pesticides/PCB AQUEOUS	extracted		107/	05/19/1993		era	3500 (1)
PESTICIDES/PCB - 8080 AQUEOUS			/				
4,4'-DDD	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Dieldrin	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endosulfan I	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
Endosulfan sulfate	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Endrin aldehyde	<0.1	ug/L	107/133	05/21/1993	0.1	seh	8080 (1)
Heptachlor epoxide	<0.05	ug/L	107/133	05/21/1993	0.05	seh	8080 (1)
PCB-1248	<1.0	ug/L	107/133	05/21/1993	1.0	seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	45	%	107/133	05/21/1993	22-154	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	39	%	107/133	05/21/1993	23-154	seh	8080 (1)
PREP, ACID EXT. AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
PREP, BN AQUEOUS	extracted		120/	05/20/1993		law	3500 (1)
ACID CMPDS - 8270 AQUEOUS			/				
2-Chlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
2,4-Dichlorophenol	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
4-Nitrophenol	<50.0	ug/L	120/177	05/26/1993	50.0	mjs	8270 (1)
Surr: Phenol-d6	34	%	120/177	05/26/1993	10-94	mjs	8270 (1)
Surr: 2-Fluorophenol	51	%	120/177	05/26/1993	21-100	mjs	8270 (1)
Surr: 2,4,6-Tribromophenol	95	%	120/177	05/26/1993	10-123	mjs	8270 (1)





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210870
NET Job No.: 93.03857

Sample Description: EMW-03 Upgradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 19:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
BASE/NEUTRALS - 8270 AQUEOUS							
Benzo(b)fluoranthene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Di-n-butyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Dimethyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
1,2-Diphenylhydrazine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Nitrobenzene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
N-Nitrosodiphenylamine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Surr: Nitrobenzene-d5	68	%	120/177	05/26/1993	35-114	mjs	8270 (1)
Surr: 2-Fluorobiphenyl	72	%	120/177	05/26/1993	43-116	mjs	8270 (1)
Surr: Terphenyl-d14	94	%	120/177	05/26/1993	33-141	mjs	8270 (1)
Prep, 8310 PNAs AQUEOUS	extracted		83 /	05/18/1993		law	8310 (1)
PNA CMPDS - 8310 AQUEOUS							
Acenaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018	prp	8310 (1)
Benzo(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018	prp	8310 (1)
Fluorene	<0.0021	mg/L	83 /178	05/21/1993	0.0021	prp	8310 (1)
Naphthalene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Phenanthrene	<0.0064	mg/L	83 /178	05/21/1993	0.0064	prp	8310 (1)
Surr: 2-Fluorobiphenyl	19	%	83 /178	05/21/1993	1-118	prp	8310 (1)
VOLATILES - 8021 AQUEOUS							
Methylene Chloride	<10.	ug/L	/9	05/24/1993	10.	mjs	8021 (1)





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210871
NET Job No.: 93.03857

Sample Description: Equipment Blank
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 15:20
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
TRPH	<1.0	mg/L	/3	05/20/1993	1.0	mjs	9073 (1)
DRO-Diesel Range Organics	<0.1	mg/L	/6	05/20/1993	0.1	mjs	WDNR
Prep, 8310 PNAS AQUEOUS	extracted		83 /	05/18/1993		law	8310 (1)
PNA CMPDS - 8310 AQUEOUS			/				
Acenaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018	prp	8310 (1)
Acenaphthylene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Anthracene	<0.0066	mg/L	83 /178	05/21/1993	0.0066	prp	8310 (1)
Benzo(a)anthracene	<0.00013	mg/L	83 /178	05/21/1993	0.00013	prp	8310 (1)
Benzo(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018	prp	8310 (1)
Benzo(k)fluoranthene	<0.00017	mg/L	83 /178	05/21/1993	0.00017	prp	8310 (1)
Benzo(a)pyrene	<0.00023	mg/L	83 /178	05/21/1993	0.00023	prp	8310 (1)
Benzo(ghi)perylene	<0.00076	mg/L	83 /178	05/21/1993	0.00076	prp	8310 (1)
Chrysene	<0.00015	mg/L	83 /178	05/21/1993	0.00015	prp	8310 (1)
Dibenzo(a,h)anthracene	<0.00030	mg/L	83 /178	05/21/1993	0.00030	prp	8310 (1)
Fluoranthene	<0.0021	mg/L	83 /178	05/21/1993	0.0021	prp	8310 (1)
Fluorene	<0.0021	mg/L	83 /178	05/21/1993	0.0021	prp	8310 (1)
Indeno(1,2,3-cd)pyrene	<0.00043	mg/L	83 /178	05/21/1993	0.00043	prp	8310 (1)
Naphthalene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Phenanthrene	<0.0064	mg/L	83 /178	05/21/1993	0.0064	prp	8310 (1)
Pyrene	<0.0027	mg/L	83 /178	05/21/1993	0.0027	prp	8310 (1)
Surr: 2-Fluorobiphenyl	48	%	83 /178	05/21/1993	1-118	prp	8310 (1)
VOLATILES - 8021 AQUEOUS			/				
Benzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromochloromethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromodichloromethane	<1.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
Bromoform	<2.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
Bromomethane	<4.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210871
NET Job No.: 93.03857

Sample Description: Equipment Blank
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 15:20
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
n-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
sec-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
tert-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Carbon tetrachloride	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chlorodibromomethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chloroethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
Chloroform	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chloromethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
2-Chlorotoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
4-Chlorotoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dibromo-3-chloropropane	<2.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
1,2-Dibromoethane (EDB)	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Dibromomethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,4-Dichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Dichlorodifluoromethane	<3.0	ug/L	/8	05/20/1993	3.0	mjs	8021 (1)
1,1-Dichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1-Dichloroethene	<2.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
cis-1,2-Dichloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
trans-1,2-Dichloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
2,2-Dichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
cis-1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
trans-1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Ethylbenzene	<1.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
Hexachlorobutadiene	<2.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210871
NET Job No.: 93.03857

Sample Description: Equipment Blank
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 15:20
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
p-Isopropyltoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Methylene Chloride	<10.	ug/L	/8	05/20/1993	10.	mjs	8021 (1)
Methyl-t-butyl ether (MTBE)	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Naphthalene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
n-Propylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Styrene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,1,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,2,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Tetrachloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Toluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,3-Trichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,4-Trichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,1-Trichloroethane	2.7	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,2-Trichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichloroethene	2.7	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichlorofluoromethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
1,2,3-Trichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,4-Trimethylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3,5-Trimethylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Vinyl Chloride	<3.0	ug/L	/8	05/20/1993	3.0	mjs	8021 (1)
Xylenes, total	<3.0	ug/L	/8	05/20/1993	3.0	mjs	8021 (1)





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
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ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210872
NET Job No.: 93.03857

Sample Description: Trip Blank
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken:
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
VOLATILES - 8021 AQUEOUS							
Benzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromochloromethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromodichloromethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromoform	<2.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
Bromomethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
n-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
sec-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
tert-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Carbon tetrachloride	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chlorodibromomethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chloroethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
Chloroform	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chloromethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
2-Chlorotoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
4-Chlorotoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dibromo-3-chloropropane	<2.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
1,2-Dibromoethane (EDB)	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Dibromomethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,4-Dichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Dichlorodifluoromethane	<3.0	ug/L	/8	05/20/1993	3.0	mjs	8021 (1)
1,1-Dichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1-Dichloroethene	<2.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
cis-1,2-Dichloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)





ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210872
NET Job No.: 93.03857

Sample Description: Trip Blank
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken:
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
trans-1,2-Dichloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
2,2-Dichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
cis-1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
trans-1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Ethylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Hexachlorobutadiene	<2.0	ug/L	/8	05/20/1993	2.0	mjs	8021 (1)
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
p-Isopropyltoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Methylene Chloride	<10.	ug/L	/8	05/20/1993	10.	mjs	8021 (1)
Methyl-t-butyl ether (MTBE)	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Naphthalene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
n-Propylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Styrene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,1,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,2,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Tetrachloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Toluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,3-Trichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,4-Trichlorobenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,1-Trichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,2-Trichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichlorofluoromethane	<4.0	ug/L	/8	05/20/1993	4.0	mjs	8021 (1)
1,2,3-Trichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,4-Trimethylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3,5-Trimethylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Vinyl Chloride	<3.0	ug/L	/8	05/20/1993	3.0	mjs	8021 (1)
Xylenes, total	<3.0	ug/L	/8	05/20/1993	3.0	mjs	8021 (1)



APPENDIX D3
CHAIN-OF-CUSTODY FORMS

APPENDIX D4
SOIL SAMPLE BORING LOGS

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-1

Boring Drilled By (Firm name and name of crew chief)
Versar Inc / Michael Weston, Geologist
Abus Engineering / Don King, Driller
 Date Drilling Started 08/23/93 Date Drilling Completed 08/23/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

NR Facility Well No: _____ WI Unique Well No: _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E S/CN Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W Local Grid Location (if applicable) _____ Feet _____ Feet _____ Feet _____ Feet

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	20	5/4	1	Misc fill, silty sand w/ fragments of concrete, cinders, brick, wood & metal, dark gray, loose to med dense, damp to moist				0.0						
			2											
2	17	4/5	3					0.0						
			4											
			5											
3	22	2/1	6	grades wet @ 6'				0.0						
			7											
4	18	1/1	8	grades saturated @ 7.3'				0.0						
			9											
			10	peat (1ft) dark brown, firm, moist, trace silt/clay	pt			0.0						
			11											
			12											

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

Signature Michael Weston Firm Versar 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.

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-2

Boring Drilled By (Firm name and name of crew chief)
Vowser Inc / Michael Melton, Geologist
Long Engineering / Dan King, Driller
 Date Drilling Started 08/23/93 Date Drilling Completed 08/23/93 Drilling Method HSA
 MM DD YY MM DD YY

DNR Facility Well No. _____ Unique Well No. _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location
 State Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W
 N E
 S W

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	Misc fill silty sand w/ fragments of brick, cinder, wood, metal				0.0							
1	17	4/3	2	Concrete, dark gray, loose to med dense, moist				0.0							
2	14	3/3	4					0.0							
			5	grades wet @ approx 5'											
3	6	2/1	6					0.0							
			7	grades saturated @ approx 7'											
4	6	1/2	8					0.0							
			9	Peat (Pt) dark brown, firm, moist, w/ root fragments, trace silt/clay	Pt			0.0							
			10												
			11												
			12												

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

Signature Michael Melton Firm Vowser Inc

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Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-3

Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael Melton, Geologist Date Drilling Started 08/23/93 Date Drilling Completed 08/23/93 Drilling Method HSA
Long Engineering / Dunkling, Miller
 M M D D Y Y M M D D Y Y

Site/Well No. _____ Unique Well No. _____ Common Well Name _____ Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E S/C/N Lat 0 Local Grid Location (If applicable) _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W Long 0 Feet N E
 S W

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	22	5/1	1	Mise fill silty sand w/ fragments of concrete, cinders, brick, wood, and metal, dark gray, loose to med dense, moist				0.0							
		6/0	2					0.0							
2	18		3												
			4					0.0							
			5	grades wet @ 4.5'											
3	3	3/5	6	grades saturated @ approx 6'				0.0							
		5/4	7												
4	9	1/1	8					0.0							
		1/2	9	peat (1ft) dark brown, firm, moist, trace silt/clay	pt										
			10												
			11												
			12												

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

Signature Michael Melton Firm Versar Inc

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Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-85

Boring Drilled By (Firm name and name of crew chief)
Versar Inc / Michael Melton, Geologist
Long Engineering / DuKling, Miller
 Date Drilling Started 08/23/93 Date Drilling Completed 08/23/93 Drilling Method HSA
 MM DD YY MM DD YY

DNR Facility Well No: _____ Unique Well No: _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location
 State Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W
 N E
 S W

County Waukesha DNR County Code 68 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	19	9/5	1	Mise fill silty sand w/ fragments of concrete, cinder, and wood, dark gray, loose to med dense, moist, w/ gravel				0.0							
			2					0.0							
			3												
2	24	4/3	4	grades not @ 4'				0.0							
			5												
3	22	2/3	6	grades saturated @ 5.5'				0.0							
			7												
4	18	4/2	8					0.0							
			9		peat (Pt) dark brown, firm, moist, w/ silt/clay	pt									
			10												
			11												
			12												

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

Signature Michael Melton Firm Versar 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.

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-6

Boring Drilled By (Firm name and name of crew chief)
Versar Inc / Michael McLean, Geologist
Long Engineering / Dakling, Driller
 Date Drilling Started 08/23/93 Date Drilling Completed 08/23/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

DNR Facility Well No: _____ Well Unique Well No: _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E SCIN Lat _____ Local Grid Location (If applicable) _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E Long _____ Feet _____ Feet _____ Feet _____ Feet

County Waukesha DNR County Code 68 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Att. & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	19	3 1/2	1	Misc fill silty sand w/ fragments of cinders, concrete, wood & metal				0.0							
		4 1/7	2					0.0							
2	20		3												
			4					2.0							
			5	grades wet @ 5'											
3	16	2 3/3	6					0.0							
		3 1/1	7												
4	24		8					0.0							
			9	grades saturated @ 8.7'											
5	20	1 1/1	10					0.0							
		2 1/2	11	Peat (Pt) dark brown, firm, moist w/ silty clay, w/ root fragments	PT										
			12												

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

Signature Michael McLean Firm Versar 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.

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-8

Boring Drilled By (Firm name and name of crew chief)
Versar Inc / Michael Melton, Geologist
Soil Engineering / Duckling, Driller
 Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

DNR Facility Well No. _____ Unique Well No. _____ Common Well Name _____ Final Static Water Level _____ Feet MSL
 Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E S1/4 N Lat 0 . . . Local Grid Location (If applicable)
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W Long 0 . . . Feet N E
 S W

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	Misc fill silty sand w/ fragments of concrete, and cinders, dark gray, loose to med dense, moist				0.0						
	21	5/8	2					0.0						
		7/25	3											
2	6	14/7	4					0.0						
		4/1	5	grades wet @ approx 5.2'										
3	12	2/2	6	grades saturated @ approx 6'				0.0						
		1/2	7											
4	12	1/2	8					0.0						
		1/1	9	peat (pt) dark brown, firm, moist	PT									
			10											
			11											
			12											

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

Signature Michael Melton Firm Versar Inc

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Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-9

Boring Drilled By (Firm name and name of crew chief)
Vonsar Inc / Michael Melton, Geologist
Aug Engineering / DuKling, Miller

Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
 MM DD YY MM DD YY

DNR Facility Well No. _____ Unique Well No. _____ Common Well Name _____ Final Static Water Level _____ Feet MSL
 Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location
 State Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W Long _____ Feet _____ Feet _____ Feet _____ Feet

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	23	3/5	1	Misc fill silty sand w/ fragments of concrete, arden, wood, and brick, dark gray, moist, loose to med dense				0.0							
		2/6	2					0.0							
2	14	4/4	3					0.0							
		3/2	4					0.0							
3	15	4/2	5	grades wet @ 5.5'				0.0							
		2/2	6	grades sat water @ 7'				0.0							
4	10	2/3	7					0.0							
		4/1	8	peat (pt) dark brown, firm moist, roots silty clay	pt										
			9												
			10												
			11												
			12												

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

Signature Michael Melton Firm Vonsar Inc

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City/Project Name UME License/Permit/Monitoring Number _____ Boring Number B-10

Boring Drilled By (Firm name and name of crew chief)
Jensen Inc / Michael Melton, Geologist
Aug Engineering / DuKling, Miller
 Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

DNR Facility Well No: _____ WI Unique Well No: _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Drilling Location
 Site Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W
 Local Grid Location (If applicable)
 N E
 S W

County Waushara DNR County Code 68 Civil Town/City/ or Village Waushara

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	Misc fill silty sand w/ fragments of concrete, slag cinders, and wood,				0.0							
1	22	2/3	2	dark gray, loose to med dense, moist, trace gravel				0.0							
		2/2	3												
2	20	4/2	4	grades wet @ 4'				0.0							
		2/1	5	grades saturated @ 5'											
3	23	2/2	6					0.0							
		1/0	7												
4	18	2/1	8					0.0							
		1/3	9	peat (pt) dark brown, firm, moist w/ silty clay	pt										
			10												
			11												
			12												

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

Signature Michael Melton Firm Jensen Inc

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City/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-11

Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael Melton, Geologist
Long Engineering / Don King, Miller
 Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

DNR Facility Well No: _____ Unique Well No: _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E Local Grid Location (If applicable) _____ Feet _____ Feet _____ Feet _____ Feet

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments		
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200			
1	17		1	Mgt fill silty sand w/ fragments of cinders, slag, concrete, wood & gravel, dark gray, loose to medium, moist				0.0								
			2						0.0							
			3													
2	14	6/5	4	grades wet @ 5'				0.0								
		5/4	5													
3	8	3/4	6	grades saturated @ approx 6'				0.0								
		13/8	7													
4	14	3/5	8					0.0								
		5/9	9													
5	14		10					0.0								
			11	peat (Pt) dark brown, firm, moist, trace silt/clay	PT											
			12													

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

Signature Michael Melton Firm Versar 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.

Activity/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-12

Boring Drilled By (Firm name and name of crew chief) Vorsol Inc / Michael Melton, Geologist Date Drilling Started 0812-193 Date Drilling Completed 0812-193 Drilling Method HSA
Aug Engineering / DuKling, Driller
 M M D D Y Y M M D D Y Y

DNR Facility Well No. _____ WI Unique Well No. _____ Common Well Name _____ Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N. 2,479,437 E S/C/N Lat. 0 Local Grid Location (If applicable) N E
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W Long 0 Feet S _____ Feet W

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	23	3/4	1	mass fill silty sand w/ fragments of concrete, wood, cinders and metal, dark gray, loose to med dense, moist				0.0						
			2											
			3											
2	21	2/2	4					0.0						
			5											
			6											
3	3		7	grades wet @ approx 6'				0.0						
			8											
			9											
4	4	4/3	10	grades saturated @ approx 8'				0.0						
			11											
			12											

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

Signature Michael Melton Firm Vorsol Inc

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NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Joe McCue
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

06/02/1993
Sample No. : 210868
NET Job No.: 93.03857

Sample Description: EMW-02 Down Gradient-Fill; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 18:00
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:23
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
BASE/NEUTRALS - 8270 AQUEOUS							
Benzo(b)fluoranthene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Di-n-butyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Dimethyl phthalate	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
1,2-Diphenylhydrazine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Nitrobenzene	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
N-Nitrosodiphenylamine	<10.0	ug/L	120/177	05/26/1993	10.0	mjs	8270 (1)
Surr: Nitrobenzene-d5	75	%	120/177	05/26/1993	35-114	mjs	8270 (1)
Surr: 2-Fluorobiphenyl	71	%	120/177	05/26/1993	43-116	mjs	8270 (1)
Surr: Terphenyl-d14	100	%	120/177	05/26/1993	33-141	mjs	8270 (1)
Prep, 8310 PNAS AQUEOUS	extracted		83 /	05/18/1993		law	8310 (1)
PNA CMPDS - 8310 AQUEOUS							
Acenaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018	prp	8310 (1)
Benzo(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018	prp	8310 (1)
Fluorene	<0.0021	mg/L	83 /178	05/21/1993	0.0021	prp	8310 (1)
Naphthalene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Phenanthrene	<0.0064	mg/L	83 /178	05/21/1993	0.0064	prp	8310 (1)
Surr: 2-Fluorobiphenyl	41	%	83 /178	05/21/1993	1-118	prp	8310 (1)
VOLATILES - 8021 AQUEOUS							
Methylene Chloride	<20.	ug/L	/8	05/20/1993	10.	mjs	8021 (1)



Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-84

Boring Drilled By (Firm name and name of crew chief) Vensor Inc / Michael Melton, Geologist Date Drilling Started 08/23/93 Date Drilling Completed 08/23/93 Drilling Method HSA
Long Engineering / Durling, Miller
MM DD YY MM DD YY

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

Boring Location State Plane 375,808 N. 2,479,437 E S/C/N Lat _____ Local Grid Location (if applicable) _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W Long _____ Feet N E
 S W

County Waushara DNR County Code 6.8 Civil Town/City/ or Village Waushara

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	Misc fill silty sand w/ fragments of cinders, concrete, wood & metal, dark gray loose to med dense, moist w/ gravel				0.0							
	20	4/8	2					0.0							
		10/15	3												
2	16	5/4	4	grades water 3.3'				0.0							
		2/2	5												
3	4		6					0.0							
			7	grades saturated @ 7'											
4	21	9/1	8					0.0							
		1/2	9	Peat (Pt) dark brown, firm, moist	pt										
			10	silty clay (cc) med gray, firm to stiff, moist to wet, trace lignite, cl moderate to high plasticity											
5	ST 22		11												
			12					0.0							

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

Signature Michael Melton Firm Vensor Inc

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Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-7

Boring Drilled By (Firm name and name of crew chief) Vensor Inc / Michael Melton, Geologist
Bob Engineering / DuKling, Miller
 Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
 MM DD YY MM DD YY

NRR Facility Well No: _____ Unique Well No: _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 W Long _____ Feet _____ Feet _____ Feet _____ Feet

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	20	3/2	1	Misc fill silty clay w/ fragments of concrete, cinders, wood, brick, and metal, dark gray, loose to med dense, moist, trace gravel				2.0						
			2				2.0							
			3											
2	18	3/2	4	grades wet @ 4.4'				0.0						
			5											
3	17	1/1	6					0.0						
			7	grades saturated @ 6.5'										
4	21	2/3	8					0.0						
			9	peat (pt) dark brown, firm, moist, w/ silt/clay	Pt									
			10											
			11											
			12											

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

Signature Michael Melton Firm Vensor Inc

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ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993
Sample No. : 227058
NET Job No.: 93.07730

Sample Description: B9-8
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	65.1	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.83	D10 ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	99	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	76	%	09/04/1993	29-128	seh	8080 (1)

D10 : Parameter analysis performed at a 10x dilution.





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
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ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993
Sample No. : 227059
NET Job No.: 93.07730

Sample Description: B5-2
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	89.1	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchlorendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	56	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	123	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227060

NET Job No.: 93.07730

Sample Description: B15-12, B3-9, B1-8, B16-10, B14-10; Comp 1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	64.6	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	1.60	D10 ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.11	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchlorendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	91	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	67	%	09/04/1993	29-128	seh	8080 (1)

D10 : Parameter analysis performed at a 10x dilution.





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993
Sample No. : 227061
NET Job No.: 93.07730

Sample Description: B14-S thru 10; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	82.8	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.13	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchlorendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	70	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	43	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993
Sample No. : 227062
NET Job No.: 93.07730

Sample Description: B17-9
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	80.3	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.12	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.33	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchlorendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	99	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	64	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227063

NET Job No.: 93.07730

Sample Description: B12-S thru 8; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	83.9	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.24	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.18	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	94	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	76	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993
Sample No. : 227064
NET Job No.: 93.07730

Sample Description: B16-S thru 10; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	85.3	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.59	D10 ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.17	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroethylene (TCX)	108	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	75	%	09/04/1993	29-128	seh	8080 (1)

D10 : Parameter analysis performed at a 10x dilution.





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227065

NET Job No.: 93.07730

Sample Description: B19-S thru 8; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	86.4	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.28	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.13	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	105	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	87	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227066

NET Job No.: 93.07730

Sample Description: B4-S thru 8; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	86.2	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.12	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	101	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	88	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227067

NET Job No.: 93.07730

Sample Description: B5-6 & 8; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	84.0	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.27	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	102	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	54	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227068

NET Job No.: 93.07730

Sample Description: S1
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	92.1	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	1.6	D10 ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	111	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	113	%	09/04/1993	29-128	seh	8080 (1)

D10 : Parameter analysis performed at a 10x dilution.





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227069

NET Job No.: 93.07730

Sample Description: B10-S
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	93.1	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1221	<8	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<8	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<8	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	98	D1000 ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	0	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	0	%	09/04/1993	29-128	seh	8080 (1)

Most compounds analyzed at a 100X dilution.
D1000: Parameter analysis performed at a 1000x dilution.





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227070

NET Job No.: 93.07730

Sample Description: B10-4
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	82.6	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	95	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	123	%	09/04/1993	29-128	seh	8080 (1)





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227071

NET Job No.: 93.07730

Sample Description: B7-6
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	86.9	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	4.6	D100 ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	0.28	D10 ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	117	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	142	%	09/04/1993	29-128	seh	8080 (1)

D10 : Parameter analysis performed at a 10x dilution.
D100 : Parameter analysis performed at a 100x dilution.





ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993
Sample No. : 227072
NET Job No.: 93.07730

Sample Description: B8-8
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/30/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	83.1	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	0.32	ug/g	09/09/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	84	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	70	%	09/04/1993	29-128	seh	8080 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289 5445

QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521
Mr. Doug Dahlberg

09/10/1993

NET Job Number: 93.07730

Analyte	Run	CCV			Percent
	Batch Number	True Conc.	Conc. Found	Units	Recovery
PCB'S - 8080 NONAQUEOUS					
PCB-1242	170	500	521	ug/L	104.2
PCB-1260	178	500	524	ug/L	104.8
Surr: Tetrachloroethylene (TCX)	170	50	100	X	200.0
Surr: Decachlorobiphenyl (DCB)	178	50	100	X	200.0 Rec 9-10-93
PCR'S - 8080 NONAQUEOUS					
PCB-1242	178	500	521	ug/L	104.2
PCB-1260	178	500	524	ug/L	104.8
Surr: Tetrachloroethylene (TCX)	178	50	100	X	200.0
Surr: Decachlorobiphenyl (DCB)	178	50	100	X	200.0 Rec 9-10-93

CCV - Continuing Calibration Verification





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
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QUALITY CONTROL REPORT

BLANK ANALYSIS

VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521
Mr. Doug Dahlberg

09/10/1993

NET Job Number: 93.07730

Analyte	Prep Batch Number	Run. Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
PCB'S - 8080 MONAQUECUS						8080 (1)
PCB-1016	109	178	<0.10	ug/g	0.10	8080 (1)
PCB-1221	109	178	<0.08	ug/g	0.08	8080 (1)
PCB-1232	109	178	<0.08	ug/g	0.08	8080 (1)
PCB-1242	109	178	<0.08	ug/g	0.08	8080 (1)
PCB-1248	109	178	<0.08	ug/g	0.08	8080 (1)
PCB-1254	109	178	<0.10	ug/g	0.10	8080 (1)
PCB-1260	109	178	<0.10	ug/g	0.10	8080 (1)
Surr: Dibutylchlorodate	109	178	na	%		8080 (1)
Surr: Tetrachloroxylene (TCX)	109	178	109	%	31-128	8080 (1)
Surr: Decachlorobiphenyl (DCB)	109	178	108	%	29-128	8080 (1)

Advisory Control limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.





NATIONAL
ENVIRONMENTAL
TESTING, INC.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521
Mr. Doug Dahlberg

09/10/1993

NET Job Number: 93.07730

Analyte	Prep Batch Number	RUN Batch Number	LCS True Concentration	LCS % Recovery
PCB'S - 8080 NONAQUEOUS				
PCB-1221	109	178	500.	
PCB-1260	109	178	500.	90.2

LCS - Laboratory Control Standard

Advisory Control Limits - Inorganics - LCS recovery should be 80 - 120%.





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QUALITY CONTROL REPORT

DUPLICATES

VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521
Mr. Doug Dahlberg

09/10/1993

NET Job Number: 93.07730

Analyte	Prep Batch Number	Run Batch Number	Original Analysis	Duplicate Analysis	Units	RPD
Solids, Total		634	85.3	83.2	%	2.5
solids, Total		635	83.1	81.2	%	2.3

NOTE: Spikes and Duplicates may not be samples from this job.

RPD - Relative Percent Difference

Advisory Control Limits for Duplicates - RPD should be less than 20.



NET Midwest, Bartlett Division

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
- mg/L : Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
- ug/g : Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
- ug/L : Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
- ug/Kg : Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
- B : Sample result flag indicating that the analyte was also found in the method blank analysis. The value after the B indicates the concentration found in the blank analysis.
- E : Sample result flag indicating that the reported concentration exceeds the linear range of the instrument for that specific analysis and should be considered estimated.
- TCLP : These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
- % : Percent; To convert ppm to %, divide the result by 10,000.
To convert % to ppm, multiply the result by 10,000.
- Dry Weight : When indicated, the results are reported on a dry weight basis. The contribution of the moisture content in the sample is subtracted when calculating the concentration of the analyte.
- ICP : Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
- AA : Indicates analysis was performed using Atomic Absorption Spectroscopy.
- GFAA : Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
- PQL : Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

- (1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.
- (2) ASTM "American Society for Testing Materials
- (3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.
- (4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.
- (5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.
- (6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.

APPENDIX D7
CHAIN-OF-CUSTODY FORMS



CHAIN OF CUSTODY RECORD

2 of 5

SENT BY: NET MIDWEST : 9-13-93 : 9:28AM : NET BARTLETT- 708 990 7585 : # 3 / 6

PROJECT NO.		PROJECT NAME				PARAMETERS						INDUSTRIAL HYGIENE SAMPLE	Y N	
1871002		VME				/ / / / / / / / / / / / / / / /						REMARKS		
SAMPLERS: (Signature) <i>[Signature]</i>					(Printed) Douglas J. PATILSON									
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PCB							
B17e 5	8-23-93			/		/								COMPOSITE TO CONFIRM CLEAR
B17e 2				/										
B17e 4				/										
B17e 6				/										
X B17e 9				-	? No Sample									
B18e 5				/		/								COMPOSITE TO CONFIRM CLEAR
B18e 2				/										
B18e 4				/										
B18e 6				/										
X B18e 8				/										
B19e 8				/		/								CONFIRM ABOVE 5 < 50
B5e 2				/		/								CONFIRM > 5 < 50
Relinquished by: (Signature)			Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)		
(Printed)					(Printed)			(Printed)				(Printed)		
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks				
<i>[Signature]</i>			8-27-93 140		<i>[Signature]</i>			8/27/93 1340						
(Printed)					(Printed)									
Douglas J. PATILSON					NEAL E. CLEGHORN									

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink)



CHAIN OF CUSTODY RECORD

3 of 5

SENT BY: NET MIDWEST : 9-13-93 : 9:29AM : NET BARTLETT- 708 990 7585 : # 1 / 6

PROJECT NO.		PROJECT NAME				PARAMETERS						INDUSTRIAL HYGIENE SAMPLE	Y	N			
1871002		VME				/ / / / / / / / / / / /											
SAMPLERS: (Signature) <i>Donna J. Parsons</i>					(Printed) DONNA J. PARSONS												
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS						REMARKS					
B15 @ 12	8-23			/		/											
B3 @ 9				/		/											
B1 @ 8				/		/										INDIVIDUAL BASE CONFIRM CLEAN	
B16 @ 10				/	Duplicate	/											
B14 @ 8 10				/		/										COMPOSITE TO / SAMPLE CONFIRM CLEAN	
B14 @ 5				/		/											
B14 @ 2				/		/											
B14 @ 4				/		/											
B14 @ 6				/		/											
B14 @ 8				/		/											
B14 @ 10				/	NO SAMPLE	/											
B17 @ 9				/		/										INDIVIDUAL CONFIRM CLEAN	
Relinquished by: (Signature)			Date / Time			Received by: (Signature)			Relinquished by: (Signature)			Date / Time			Received by: (Signature)		
(Printed)						(Printed)			(Printed)						(Printed)		
Relinquished by: (Signature)			Date / Time			Received for Laboratory by: (Signature)			Date / Time			Remarks					
<i>Donna J. Parsons</i>			8-27-93 140			<i>Neal E. Cleghorn</i>			8/27/93 1340								
(Printed)						(Printed)											
DONNA J. PARSONS						NEAL E. CLEGHORN											

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

PROJECT NO.		PROJECT NAME					PARAMETERS										INDUSTRIAL HYGIENE SAMPLE		Y
1871002		VME																	N
SAMPLERS: (Signature)					(Printed)					REMARKS									
<i>W. J. Doherty</i>					Douglas J. DAVENOUS														
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	No. OF CONTAINERS													
						PCB													
B12 @ 5	8-23			/		1													
B12 @ 2				/															
B11 @ 4				/															
B12 @ 6				/															
B12 @ 8				/															
B16 @ 5				/		1													
B16 @ 2				/															
B16 @ 7				/															
B16 @ 6				/															
B16 @ 8				/															
B16 @ 10				/	? Dupl.														
Relinquished by: (Signature)			Date / Time		Received by: (Signature)			Relinquished by: (Signature)			Date / Time		Received by: (Signature)						
(Printed)					(Printed)			(Printed)					(Printed)						
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks									
<i>D. J. Doherty</i>			8-27-75 140		<i>Neal E. Cleghorn</i>			8/27/75 1340											
(Printed)					(Printed)														
Douglas J. DAVENOUS					NEAL E. CLEGHORN														

COMPOSITE TO
CONFIRM CLEAN

COMPOSITE TO
CONFIRM CLEAN

SENT BY: NET MIDWEST : 9-13-93 : 9:29AM : NET BARTLETT- 708 990 7585 : # 5 / 6

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

APPENDIX D8
ISOLATED SAMPLING LABORATORY ANALYTICAL RESULTS



NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

NET Job Number: 93.09708

Enclosed are the Analytical Results for the following samples submitted to NET, Inc. Bartlett Division for analysis:

Project Description: 1871.002; VME Americas

Sample Number	Sample Description	Date Taken	Date Received
236889	CS-2 0-6' Core Sample 2; Soil	10/28/1993	10/29/1993
236890	CS-2 12-18' Core Sample 2; Soil	10/28/1993	10/29/1993
236891	CS-3 0-6' Core Sample 3; Soil	10/28/1993	10/29/1993
236892	CS-3 12-18' Core Sample 3; Soil	10/28/1993	10/29/1993
236893	CS-4 0-6' Core Sample 4; Soil	10/28/1993	10/29/1993
236894	CS-4 12-18' Core Sample 4; Soil	10/28/1993	10/29/1993
236895	CS-5 0-6' Core Sample 5; Soil	10/28/1993	10/29/1993
236896	CS-5 12-18' Core Sample 5; Soil	10/28/1993	10/29/1993
236897	CS-6 0-6" Core Sample 6; Soil	10/28/1993	10/29/1993
236898	CS-6 12-18" Core Sample 6; Soil	10/28/1993	10/29/1993
236899	CS-7 0-6" Core Sample 7; Soil	10/28/1993	10/29/1993
236900	CS-7 12-18" Core Sample 7; Soil	10/28/1993	10/29/1993
236901	CS-8 0-6" Core Sample 8; Soil	10/28/1993	10/29/1993
236902	CS-8 12-18" Core Sample 8; Soil	10/28/1993	10/29/1993
236903	CS-9 0-6" Core Sample 9; Soil	10/28/1993	10/29/1993
236904	CS-9 12-18" Core Sample 9; Soil	10/28/1993	10/29/1993
236905	CS-1 0-6" Core Sample 1; Soil	10/28/1993	10/29/1993
236906	CS-1 12-18" Core Sample 1; Soil	10/28/1993	10/29/1993

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please do not hesitate to call. NET has been pleased to provide these analytical services for you.

Approved By:

Neal E. Cleghorn
Operations Manager





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

Sample No. : 236889

NET Job No.: 93.09708

Sample Description: CS-2 0-6' Core Sample 2; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:17
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	76.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/05/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/05/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/05/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/05/1993	8080 (1)
PCB-1248	2.3	ug/g	11/05/1993	8080 (1)
PCB-1254	0.8	ug/g	11/05/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/05/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/05/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
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11/10/1993

Sample No. : 236890

NET Job No.: 93.09708

Sample Description: CS-2 12-18' Core Sample 2; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:25
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	81.2	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	9.7	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1248	3.1	ug/g	11/06/1993	8080 (1)
PCB-1254	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

Sample No. : 236891

NET Job No.: 93.09708

Sample Description: CS-3 0-6' Core Sample 3; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:38
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	92.3	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.76	ug/g	11/06/1993	8080 (1)
PCB-1254	0.22	ug/g	11/06/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
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11/10/1993

Sample No. : 236892

NET Job No.: 93.09708

Sample Description: CS-3 12-18' Core Sample 3; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:41
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	88.1	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1248	21	ug/g	11/06/1993	8080 (1)
PCB-1254	2.2	ug/g	11/06/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
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Suite 115
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11/10/1993

Sample No. : 236893

NET Job No.: 93.09708

Sample Description: CS-4 0-6' Core Sample 4; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:58
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	85.0	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1221	<.8	ug/g	11/06/1993	8080 (1)
PCB-1232	<.8	ug/g	11/06/1993	8080 (1)
PCB-1242	<.8	ug/g	11/06/1993	8080 (1)
PCB-1248	3.2	ug/g	11/06/1993	8080 (1)
PCB-1254	1.7	ug/g	11/06/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

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11/10/1993

Sample No. : 236894

NET Job No.: 93.09708

Sample Description: CS-4 12-18' Core Sample 4; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 12:04
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	88.8	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<10	ug/g	11/06/1993	8080 (1)
PCB-1221	<8	ug/g	11/06/1993	8080 (1)
PCB-1232	<8	ug/g	11/06/1993	8080 (1)
PCB-1242	<8	ug/g	11/06/1993	8080 (1)
PCB-1248	84	ug/g	11/06/1993	8080 (1)
PCB-1254	33	ug/g	11/06/1993	8080 (1)
PCB-1260	<10	ug/g	11/06/1993	8080 (1)
PCB-1268	<10	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
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11/10/1993

Sample No. : 236895

NET Job No.: 93.09708

Sample Description: CS-5 0-6' Core Sample 5; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 12:20
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.1	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<10	ug/g	11/06/1993	8080 (1)
PCB-1221	<E	ug/g	11/06/1993	8080 (1)
PCB-1232	<E	ug/g	11/06/1993	8080 (1)
PCB-1242	<E	ug/g	11/06/1993	8080 (1)
PCB-1248	2E	ug/g	11/06/1993	8080 (1)
PCB-1254	5 J	ug/g	11/06/1993	8080 (1)
PCB-1260	<10	ug/g	11/06/1993	8080 (1)
PCB-1268	<10	ug/g	11/06/1993	8080 (1)

J : Estimated concentration (value is below the routine PQL).





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ANALYTICAL REPORT

Mr. Doug Dahlburg
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11/10/1993

Sample No. : 236896

NET Job No.: 93.09708

Sample Description: CS-5 12-18' Core Sample 5; Soil
1871.002; VME Americas

Date Taken: 10/28/1993

Date Received: 10/29/1993

Time Taken: 12:21

Time Received: 13:00

Date Sample Picked Up: 10/29/1993

IEPA Cert. No. 100221

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<.08	ug/g	11/06/1993	8080 (1)
PCB-1248	1.3	ug/g	11/06/1993	8080 (1)
PCB-1254	0.5	ug/g	11/06/1993	8080 (1)
PCB-1260	<.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<.10	ug/g	11/06/1993	8080 (1)



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ANALYTICAL REPORT

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11/10/1993

Sample No. : 236897

NET Job No.: 93.09708

Sample Description: CS-6 0-6" Core Sample 6; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 12:30
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	91.4	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<10	ug/g	11/06/1993	8080 (1)
PCB-1221	<8	ug/g	11/06/1993	8080 (1)
PCB-1232	<8	ug/g	11/06/1993	8080 (1)
PCB-1242	<8	ug/g	11/06/1993	8080 (1)
PCB-1248	91	ug/g	11/06/1993	8080 (1)
PCB-1254	74	ug/g	11/06/1993	8080 (1)
PCB-1260	<10	ug/g	11/06/1993	8080 (1)
PCB-1268	<10	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

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11/10/1993

Sample No. : 236898

NET Job No.: 93.09708

Sample Description: CS-6 12-18" Core Sample 6; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 12:35
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.1	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<10	ug/g	11/06/1993	8080 (1)
PCB-1221	<8	ug/g	11/06/1993	8080 (1)
PCB-1232	<8	ug/g	11/06/1993	8080 (1)
PCB-1242	<8	ug/g	11/06/1993	8080 (1)
PCB-1248	130	ug/g	11/06/1993	8080 (1)
PCB-1254	15	ug/g	11/06/1993	8080 (1)
PCB-1260	<10	ug/g	11/06/1993	8080 (1)
PCB-1268	<10	ug/g	11/06/1993	8080 (1)





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11/10/1993

Sample No. : 236899

NET Job No.: 93.09708

Sample Description: CS-7 0-6" Core Sample 7; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 14:00
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	94.3	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.80	ug/g	11/06/1993	8080 (1)
PCB-1254	0.20	ug/g	11/06/1993	8080 (1)
PCB-1260	<.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<.10	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
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1520 Kensington Road
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11/10/1993

Sample No. : 236900

NET Job No.: 93.09708

Sample Description: CS-7 12-18" Core Sample 7; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 14:05
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	81.2	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<.08	ug/g	11/06/1993	8080 (1)
PCB-1248	<.08	ug/g	11/06/1993	8080 (1)
PCB-1254	<.10	ug/g	11/06/1993	8080 (1)
PCB-1260	<.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<.10	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
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11/10/1993

Sample No. : 236901

NET Job No.: 93.09708

Sample Description: CS-8 0-6" Core Sample 8; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 14:18
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	92.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.17	ug/g	11/06/1993	8080 (1)
PCB-1254	<.10	ug/g	11/06/1993	8080 (1)
PCB-1260	<.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<.10	ug/g	11/06/1993	8080 (1)





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11/10/1993

Sample No. : 236902

NET Job No.: 93.09708

Sample Description: CS-8 12-18" Core Sample 8; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 14:20
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	85.7	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.09	ug/g	11/06/1993	8080 (1)
PCB-1254	<.10	ug/g	11/06/1993	8080 (1)
PCB-1260	<.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<.10	ug/g	11/06/1993	8080 (1)





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Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

Sample No. : 236903

NET Job No.: 93.09708

Sample Description: CS-9 0-6" Core Sample 9; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 14:30
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	92.0	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/07/1993	8080 (1)
PCB-1221	<.08	ug/g	11/07/1993	8080 (1)
PCB-1232	<.08	ug/g	11/07/1993	8080 (1)
PCB-1242	<.08	ug/g	11/07/1993	8080 (1)
PCB-1248	<.08	ug/g	11/07/1993	8080 (1)
PCB-1254	<.10	ug/g	11/07/1993	8080 (1)
PCB-1260	<.10	ug/g	11/07/1993	8080 (1)
PCB-1268	<.10	ug/g	11/07/1993	8080 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

Sample No. : 236904

NET Job No.: 93.09708

Sample Description: CS-9 12-18" Core Sample 9; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 14:32
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	88.6	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/07/1993	8080 (1)
PCB-1221	<.08	ug/g	11/07/1993	8080 (1)
PCB-1232	<.08	ug/g	11/07/1993	8080 (1)
PCB-1242	<.08	ug/g	11/07/1993	8080 (1)
PCB-1248	0.24	ug/g	11/07/1993	8080 (1)
PCB-1254	0.18	ug/g	11/07/1993	8080 (1)
PCB-1260	<.10	ug/g	11/07/1993	8080 (1)
PCB-1268	<.10	ug/g	11/07/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

Sample No. : 236905

NET Job No.: 93.09708

Sample Description: CS-1 0-6" Core Sample 1; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:02
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<.08	ug/g	11/06/1993	8080 (1)
PCB-1248	1.6	ug/g	11/06/1993	8080 (1)
PCB-1254	0.32	ug/g	11/06/1993	8080 (1)
PCB-1260	<.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<.10	ug/g	11/06/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/10/1993

Sample No. : 236906

NET Job No.: 93.09708

Sample Description: CS-1 12-18" Core Sample 1; Soil
1871.002; VME Americas

Date Taken: 10/28/1993
Time Taken: 11:06
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	89.3	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/07/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1248	0.45	ug/g	11/07/1993	8080 (1)
PCB-1254	0.18	ug/g	11/07/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/07/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/07/1993	8080 (1)





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/19/1993

NET Job Number: 93.10073

Enclosed are the Analytical Results for the following samples submitted to NET, Inc. Bartlett Division for analysis:

Project Description: VME; 1871-002

Sample Number	Sample Description	Date Taken	Date Received
238474	SS-4; Soil	10/28/1993	10/29/1993
238475	SS-5; Soil	10/28/1993	11/10/1993
238476	SS-7; Soil	10/28/1993	11/10/1993
238477	CS-3, 24-36"; Soil	10/28/1993	11/10/1993
238478	CS-4, 24-36"; Soil	10/28/1993	11/10/1993
238479	CS-6, 24-36"; Soil	10/28/1993	11/10/1993

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please do not hesitate to call. NET has been pleased to provide these analytical services for you.

Approved By:

Darla J. Kalicki
Darla J. Kalicki
Project Manager





NATIONAL
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TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/19/1993

Sample No. : 238474

NET Job No.: 93.10073

Sample Description: SS-4; Soil
VME; 1871-002

Date Taken: 10/28/1993
Time Taken: 10:28
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

Date Received: 10/29/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	82.2	%	11/17/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/19/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/19/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/19/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/19/1993	8080 (1)
PCB-1248	2.3	ug/g	11/19/1993	8080 (1)
PCB-1254	0.9 J	ug/g	11/19/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/19/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/19/1993	8080 (1)

J : Estimated concentration (value is below the routine PQL).





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ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/19/1993

Sample No. : 238475

NET Job No.: 93.10073

Sample Description: SS-5; Soil
VME; 1871-002

Date Taken: 10/28/1993
Time Taken: 10:44
Date Sample Picked Up: 11/10/1993
IEPA Cert. No. 100221

Date Received: 11/10/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	95.1	%	11/17/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/19/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/19/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/19/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/19/1993	8080 (1)
PCB-1248	11	ug/g	11/19/1993	8080 (1)
PCB-1254	1.5	ug/g	11/19/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/19/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/19/1993	8080 (1)





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division 850 W. Bartlett Rd. Bartlett, IL 60103 Tel: (708) 289-3100 Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Doug Dahlburg VERSAR CORP. 1520 Kensington Road Suite 115 Oakbrook, IL 60521

11/19/1993 Sample No. : 238476 NET Job No.: 93.10073

Sample Description: SS-7; Soil VME; 1871-002

Date Taken: 10/28/1993 Time Taken: 10:55 Date Sample Picked Up: 11/10/1993 IEPA Cert. No. 100221

Date Received: 11/10/1993 Time Received: 13:00 WDNR Cert. No. 999447130

Table with 5 columns: Parameter, Results, Units, Date of Analysis, Analytical Method. Rows include Solids, Total (91.1 %) and PCB'S - 8080 NONAQUEOUS (various PCB types with results <0.10 or <0.08).





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Bartlett Division
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Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/19/1993

Sample No. : 238477

NET Job No.: 93.10073

Sample Description: CS-3, 24-36"; Soil
VME; 1871-002

Date Taken: 10/28/1993

Time Taken: 11:45

Date Sample Picked Up: 11/10/1993

IEPA Cert. No. 100221

Date Received: 11/10/1993

Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	85.8	%	11/17/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/18/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1248	0.9 J	ug/g	11/18/1993	8080 (1)
PCB-1254	0.6 J	ug/g	11/18/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/18/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/18/1993	8080 (1)

J : Estimated concentration (value is below the routine PQL).





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Bartlett Division
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Bartlett, IL 60103
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Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/19/1993

Sample No. : 238478

NET Job No.: 93.10073

Sample Description: CS-4, 24-36"; Soil
VME; 1871-002

Date Taken: 10/28/1993
Time Taken: 12:08
Date Sample Picked Up: 11/10/1993
IEPA Cert. No. 100221

Date Received: 11/10/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.2	%	11/17/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/18/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1248	<0.8	ug/g	11/18/1993	8080 (1)
PCB-1254	0.2 J	ug/g	11/18/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/18/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/18/1993	8080 (1)

J : Estimated concentration (value is below the routine PQL).





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Doug Dahlburg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/19/1993

Sample No. : 238479

NET Job No.: 93.10073

Sample Description: CS-6, 24-36"; Soil
VME; 1871-002

Date Taken: 10/28/1993
Time Taken: 12:39
Date Sample Picked Up: 11/10/1993
IEPA Cert. No. 100221

Date Received: 11/10/1993
Time Received: 13:00

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	89.1	%	11/17/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<10	ug/g	11/18/1993	8080 (1)
PCB-1221	<8.0	ug/g	11/18/1993	8080 (1)
PCB-1232	<8.0	ug/g	11/18/1993	8080 (1)
PCB-1242	<8.0	ug/g	11/18/1993	8080 (1)
PCB-1248	<8.0	ug/g	11/18/1993	8080 (1)
PCB-1254	540	ug/g	11/18/1993	8080 (1)
PCB-1260	<10	ug/g	11/18/1993	8080 (1)
PCB-1268	<10	ug/g	11/18/1993	8080 (1)

NET Midwest, Bartlett Division

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
- mg/L : Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
- ug/g : Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
- ug/L : Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
- ug/Kg : Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
- B : Sample result flag indicating that the analyte was also found in the method blank analysis. The value after the B indicates the concentration found in the blank analysis.
- E : Sample result flag indicating that the reported concentration exceeds the linear range of the instrument for that specific analysis and should be considered estimated.
- TCLP : These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
- % : Percent; To convert ppm to %, divide the result by 10,000.
To convert % to ppm, multiply the result by 10,000.
- Dry Weight : When indicated, the results are reported on a dry weight basis. The contribution of the moisture content in the sample is subtracted when calculating the concentration of the analyte.
- ICP : Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
- AA : Indicates analysis was performed using Atomic Absorption Spectroscopy.
- GFAA : Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
- PQL : Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

- (1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.
- (2) ASTM "American Society for Testing Materials"
- (3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.
- (4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.
- (5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.
- (6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.

PROJECT NO.		PROJECT NAME		PARAMETERS										INDUSTRIAL HYGIENE SAMPLE		Y	N					
1871.002		VME Americas																				
SAMPLERS: (Signature)				(Printed)				NO. OF CONTAINERS	PCBS	Hold											REMARKS	
Michael Melton John & John				Michael Melton John & John																		
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION																	
SS-1	10/28	10:22		✓	Surface Sample 1		1		✓													
SS-2		10:24		✓	↓		2		✓													
SS-3		10:27		✓	↓		3		✓													
SS-4		10:28		✓	↓		4		✓													
SS-5		10:44		✓	↓		5		✓													
SS-6		10:40		✓	↓		6		✓													
SS-7		10:55		✓	↓		7		✓													
SS-8		10:46		✓	↓		8		✓													
SS-9		10:50		✓	↓		9		✓													
CS-1 0-6"		11:02			Core Sample 1		1		✓													
CS-1 12-18"		11:06			↓		1		✓													
CS-1 24-36"		11:12			↓		1		✓													
Relinquished by: (Signature)		Date / Time		Received by: (Signature)				Relinquished by: (Signature)		Date / Time		Received by: (Signature)										
								Y. Kapusta		10/29/11:50		Anthony Langfeld										
(Printed)				(Printed)				Y. KAPUSTA				(Printed)										
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)				Date / Time		Remarks												
Anthony Langfeld		10/29/93 1300		Denise Wilkening				10/29/93 1300														
(Printed)				(Printed)																		
A. LANGFELD		10/29/93 1300		Denise Wilkening																		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

11/10/93 13:43
 0708 289 7347
 NET MIDWEST CORP +VERSAR INC.
 022

APPENDIX D9
CHAIN-OF-CUSTODY FORMS

GIBBS, ROPER, LOOTS & WILLIAMS, S.C.

ATTORNEYS AT LAW

735 NORTH WATER STREET
MILWAUKEE, WISCONSIN 53202
TELEPHONE (414) 273-7000
FACSIMILE (414) 273-7897

DAVID J. EDQUIST
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LINDA S. MCPIKE
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OF COUNSEL
RICHARD S. GIBBS
THOMAS B. FIFIELD

WAYNE J. ROPER
ROBERT J. LOOTS
CLAY R. WILLIAMS
JOHN W. HEIN
WILLIAM J. FRENCH
GEORGE A. EVANS, JR.
THOMAS P. GUSZKOWSKI
GREGORY G. WILLE
EDWARD R. NUSS
BRENT E. GREGORY
TERRY E. NILLES
STEPHEN L. KNOWLES
ROBERT E. WRENN
BROOKE J. BILLICK
THOMAS R. STREIFENDER
ROBERT L. GEGIOS

June 23, 1994

Ms. Margaret Graefe
Wisconsin Department of Natural Resources
4041 N. Richards Street
Milwaukee, WI 53212

Re: Perkins Avenue Facility
1005 Perkins Avenue
Waukesha, Wisconsin
DNR File Reference 4440-2916

Dear Ms. Graefe:

This letter follows up on my correspondence to you of June 7. At that time I advised you of the completion of remedial activities at this site, subject only to the transport of three remaining drums of waste to the Wayne Services site in Michigan.

I am enclosing at this time copies of the container placard, manifest, and delivery ticket, confirming the disposition of these wastes. Please contact me at your earliest convenience, to advise me of your time table for issuing a closure letter on this site. Thank you for your assistance.

Sincerely,

GIBBS, ROPER, LOOTS & WILLIAMS, S.C.


David J. Edquist

DJE/mss
Enclosure
cc: Jon Hill
Doug Dahlberg

RECEIVED
APR 29 1994

Field Modification Form
Additional Work

Task: Excavation as Required
VME/Akerman Property
Waukesha, Wisconsin

Scope of Work:

Superior Hazardous Waste Group (SHWG) has received the attached request from Versar to provide excavation and backfill services in order to allow Versar's sampling for clean confirmation at the base of the PCB Contaminated Soil removal pit. SHWG will provide a skid steer unit with backhoe attachment to construct test trenches through the backfill at the local indicated by Versar on the attached drawing. Once through the stone backfill, SHWG will excavate foundry sand at the direction of Versar. SHWG will provide 17h open top drums (not more than 6) containerizing the soils as necessary. SHWG will provide transportation and disposal of the soil as special solid waste at the Rechimovich Landfill, Mayville.

Skid-Steer w/ bucket and backhoe attachments.....	per day rate \$600.00
Trailer and Tow Vehicle.....	\$185.00
Equipment Operator.....	\$420.00
Waste disposal permit.....	unit price \$150.00
Transport and Disposal of 1 cu yd of <10 ppm PCB soil.....	\$225.00

Invoice will be calculated upon days required on site and number of drums required for transport/disposal.

By signing this document, Superior Hazardous Waste Group and Client (VME Americas) agree that the above work becomes part of the contract between them and subject to all its terms and conditions.

Authorized by: *Mark Erdling*
Title: VICE PRESIDENT
Date: APRIL 22, 1994



VME Americas Inc.

June 3, 1994

Mr. Terry Freudenrich
Superior Hazardous Waste Group, Inc.
P.O. Box 500
Port Washington, WI 53074

Dear Terry:

This will confirm your authority as agent of VME Americas Inc. to sign on our behalf the State of Michigan Uniform Waste Manifest No. MI 2662980 covering three (3) drums of low level, non-regulated, PCB contaminated soil (less than 10 ppm) to be transported to Wayne, Michigan in June, 1994.

Sincerely,

Mark E. DeLong

Mark E. DeLong
Vice President,
Law and Administration

275m

VOLVO BM

MICHIGAN

EUCLID

Zetelmejer

AKERMAN

Postal Address
One West Park Square
BB&T Building
Suite 607
Asheville, NC 28801

Telephone
(704) 257-4660

Telex
(704) 257-4660



VME Americas Inc.

June 3, 1994

Mr. Terry Freudenrich
Superior Hazardous Waste Group, Inc.
P.O. Box 500
Port Washington, WI 53074

Dear Terry:

This will confirm your authority as agent of VME Americas Inc. to sign on our behalf the State of Michigan Uniform Waste Manifest No. MI 2662980 covering three (3) drums of low level, non-regulated, PCg contaminated soil (less than 10 ppm) to be transported to Wayne, Michigan in June, 1994.

Sincerely,

Mark E. DeLong

Mark E. DeLong
Vice President,
Law and Administration

275m

VOLVO BM MICHIGAN EUCLID Zettelmeyer AKERMAN

Postal Address
One West Park Square
BB&T Building
Suite 507
Asheville, NC 28801

Telephone
(704) 257-4880

Telefax
(704) 257-4890

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF WISCONSIN**

VME AMERICAS, INC., a Delaware
Corporation, and AKERMAN, INC.,
A Wisconsin Corporation,

Plaintiffs,

v.

Case No. 95-C-0596
Hon. Rudolph T. Randa

HEIN-WERNER CORPORATION, a Wisconsin
Corporation,

Defendant

AFFIDAVIT OF ROBERT L. DURFEE

State of Maryland)
) SS
County of Montgomery)

Robert L. Durfee, being first duly sworn, states under oath as follows:

1. I am the President and Chief Executive Officer of GEOMET Technologies, Inc., located at 20251 Century Boulevard, Germantown, Maryland. I am also presently employed as Senior Engineer/Executive Vice-President by Versar, Inc., located at 6850 Versar Center, Springfield, Virginia. A copy of my current *curriculum vita* is attached to this Affidavit and identified as Exhibit 1. Exhibit 1 accurately describes my background and experience, and is incorporated by reference in this Affidavit.

2. I have extensive experience in the areas of research and evaluation of contamination resulting from polychlorinated biphenyls ("PCBs"), as summarized in Exhibit 1. I have had an opportunity to review various materials prepared by Versar relating to PCB contamination at a facility located at 1005 Perkins Avenue, Waukesha, Wisconsin (the "Site"). I have also had the opportunity to discuss the factual background pertaining to the removal of PCBs from the Site. In particular, I have reviewed analytical data generated in connection with Versar's Phase IIB and III Reports for this Site, and in connection with subsequent removal activities. I have also discussed the factual background relating to the PCB removals at the Site with Douglas J. Dahlberg, who acted as Versar's Project Manager during the removal activities.

3. In 1976, Versar prepared a publication under contract with the United States Environmental Protection Agency entitled *PCBs in the United States Industrial Use and Environmental Distribution* (the "Report"). The Report was published on February 25, 1976; I was the lead author on Versar's preparation

team. A true and correct copy of excerpts from the Report is attached to this Affidavit as Exhibit 2. As indicated in the abstract of the Report,

This document presents the current state of knowledge about the production, usage and distribution of polychlorinated biphenyls (PCBs) in the United States. The information presented is derived from detailed studies on the production and first tier user industries, the past and present generation and disposition of PCB-containing wastes, environmental transport and cumulative loads, potential alternatives to PCBs usage, inadvertent losses to and potential formation in the environment, and current regulatory authorities for PCBs' control.

4. PCBs have been manufactured in several different blends known as "Aroclors." Different Aroclors were manufactured for different specific applications. The nonflammable character of the PCB Aroclors made them useful for such applications as capacitors, transformer insulating fluids, heat transfer fluids, and hydraulic fluids.

5. The different Aroclors are generally identified by a numerical code. Tables 1.1-1, 1.1-2, and 1.1-4 of the Report, which are included in Exhibits 3, 4, and 5, respectively, set forth the utilization of various PCB Aroclors in different industries in the United States.

6. The Aroclors identified at the Site were 1016, 1242, 1248, and 1254. Of these, Aroclor 1016 was found in much smaller concentrations than Aroclors 1242, 1248 and 1254, but all four Aroclors were generally found in the same localized area of the Site.

7. Aroclor 1016, found at the Site in very low concentrations and at shallower depths than the other three Aroclors, was produced by Monsanto Corporation beginning in September 1971, and was used only in the manufacture of capacitors. Aroclor 1248 was last produced by Monsanto in 1971, and its primary usage was in hydraulic fluids and in lubricants such as vacuum pump oils. Aroclor 1254 was primarily used as an electrical transformer fluid but was also used in hydraulic fluids and cutting oils for metal shaping operations. Aroclor 1242 had many uses, and among them were hydraulic fluids and lubricants.

8. Because of the relatively high cost of PCB-containing hydraulic fluids and lubricants, they were only used where there was high risk of fire or explosion; examples include die casting machines and similar high-temperature foundry operations, coal mining machines, and natural gas pipeline compressors. All of these applications experienced leaks and other losses of PCBs during normal operation, and in the case of foundry operations such as die casting, the leaked or lost fluids typically were removed from the floor and combined with other wastes for disposal.

9. Data gathered for the Report and subsequent information obtained by Versar concerning Aroclor usage indicated minimal, if any, usage of PCB-containing hydraulic fluids in

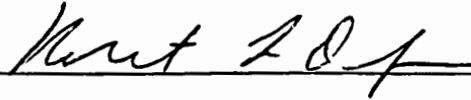
light earth-moving equipment such as was tested at the Site.

10. Decachlorobiphenyl, or fully chlorinated biphenyl, is another PCB which was found in conjunction with the foundry sand throughout the Site. This material was widely used by foundries in the investment casting process, and it would have been a normal component of disposed foundry sand from a facility utilizing this process. The distribution of this PCB at the Site is consistent with little or no movement of the compound due to ground water flow since deposition of the sand.

11. It is my understanding that when Versar prepared the Phase III Report, Mr. Dahlberg considered potential sources of the PCB contamination to include a surface spill as well as contaminated foundry sand; based upon test data indicating the highest concentrations (98 PPM) of Aroclors at the surface, Versar recommended treating the Site as a surface release. Based upon the information that has been developed regarding the Aroclors 1242, 1248, and 1254 at the Site, the industrial uses of those specific Aroclors in the 1970s, and the fact that these Aroclors were identified in foundry sand that was deposited at the Site in the 1970s, I conclude to a reasonable degree of certainty that these PCBs were released into the foundry sand during the course of industrial operations at the source foundry, prior to shipment of the foundry sand to the Site. These PCB Aroclors were not a normal constituent of foundry sand. Rather, the most likely explanation is that there was an accidental inclusion of waste hydraulic and/or cutting oils from operations at the foundry, resulting in contamination of an isolated load of foundry sand that was thereafter deposited at the Site. The smaller amounts of Aroclor 1016 found could have resulted from atmospheric deposition or from contamination of foundry sand by fluid leakage from motor start capacitors.

12. This conclusion is also supported by the distribution of the Aroclors at the Site. These data, particularly the horizontal and vertical distribution of the Aroclors and the higher concentrations of Aroclors 1242, 1248 and 1254 that were found at subsurface levels, are more consistent with the deposit and grading of a contaminated load of foundry sand than they would be with a surface spill and subsequent migration of the PCB contamination.

Dated this 11th day of January, 1996.



Robert L. Durfee

Subscribed and sworn to before me,
the undersigned Notary Public, this
11th day of January, 1996.



Notary Public, State of Maryland

My Commission Expires: March 1, 1998

FINAL

DUPLICATE

**PHASE III ENVIRONMENTAL ASSESSMENT
AND CONCEPTUAL ACTION PLAN**

FORMER EAST LOT FOUNDRY SAND FILL AREA

AT

**AKERMAN H.W., INC
1005 PERKINS AVENUE
WAUKESHA, WISCONSIN**

Prepared for:

**VME AMERICAS, INC.
ONE WEST PACK SQUARE
ASHEVILLE, NORTH CAROLINA 28801**

Prepared by:

**VERSAR INC.
1520 KENSINGTON ROAD
SUITE 115
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VERSAR PROJECT NUMBER 1871-002

NOVEMBER 1993

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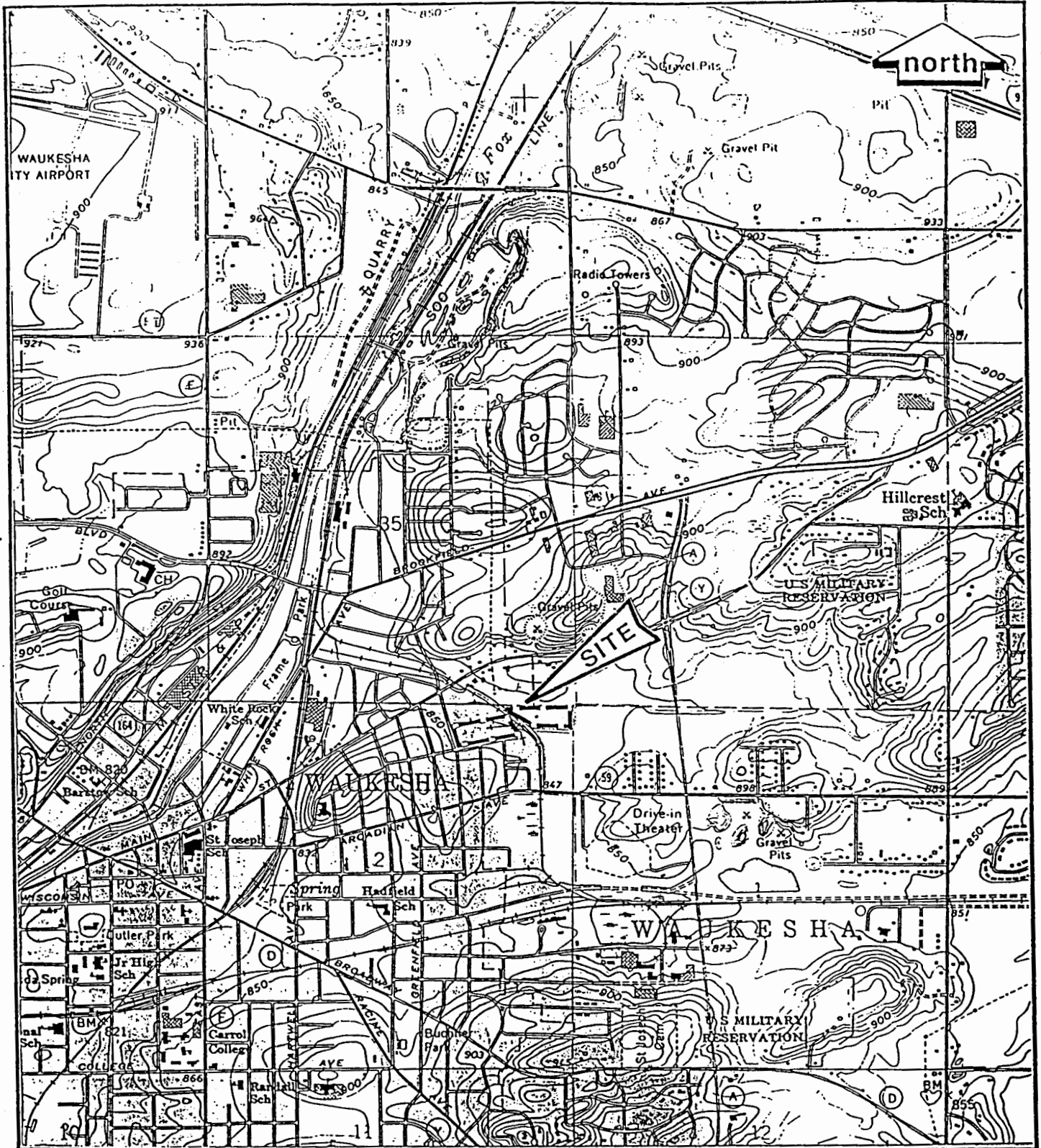
1.0 INTRODUCTION

Versar Inc. was retained by VME Americas, Inc. to perform environmental consulting and engineering services at the former VME Akerman facility, located at 1005 Perkins Avenue in Waukesha, Wisconsin. The facility is segregated into east and west parcels by an unnamed stream. The west parcel is associated with production buildings and associated yards and lots. The east parcel is an area developed consisting of gravel and asphalt covered lot surrounded by trees and brush. Versar previously performed Phase I, and II Environmental Assessments on both east and west lots. The Phase IIB and this Assessment was performed on a segregated area within the east parcel only. Refer to Figure I for site location.

1.1 Purpose

The east parcel was used for testing light earth moving equipment produced at the west parcel facility. The east lot has a central gravel covered area surrounded with brush and trees to the north, east, and south. A small area east of the gravel surface is of disturbed topography and has surface material consisting of foundry sand, concrete and cinder fragments, sandy gravel, and some surface soil. This area is overgrown with annual grasses as well as brush and small to medium sized trees. Soil analytical results from several test pits and surface grab composites indicated the presence of polychlorinatedbiphenols (PCBs). The source of PCBs is unknown and it appears that the contamination is localized.

The purpose of the Phase III Assessment was to determine the approximate extent of PCB contamination within the area of disturbed soil and evaluate possible alternatives to mitigate contamination. State of Wisconsin clean up guideline PCB action level is concentrations greater than 5 parts per million (ppm). PCB contamination found to be above 50 ppm would be considered hazardous and regulated under guidelines provided by the Toxic Substance Control Act (TSCA). TSCA regulated contaminated soils would require disposal at one of the following; TSCA regulated landfill, hazardous waste landfill permitted for organic contaminants, or thermally destroyed at a properly permitted incinerator. Soils with PCB concentration between 5 and 50 ppm would be not be considered hazardous and could be either closed in place or disposed of in a sanitary or special waste landfill permitted to accept PCB waste in that concentration range, depending on acceptable procedures regulated by the Wisconsin Department



Waukesha, WI USGS 7.5-minute-series topographic quadrangle map, 1958. Photorevised 1971. **Versar INC.**
 Dashed line encloses site location. SCALE 1:24000 Photoinspected 1978.

Quadrangle
Location

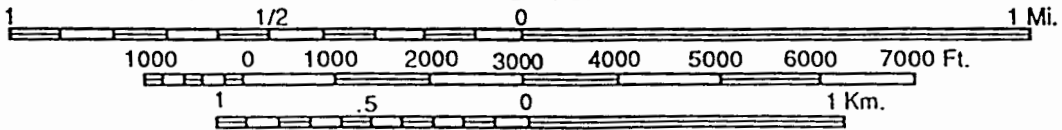


Figure 1.

Site Location Map.

Akerman Excavators, Waukesha, Wisconsin

of Natural Resources (WDNR). This investigation gathers site specific data related to satisfying PCB contaminated soil disposal under an emergency removal action.

1.2 Scope of Work

This report compiles data gathered during the Phase I, II, IIB and III east lot investigations and presents a conceptual strategy for PCB contaminated soil removal. Specific data from the Phase I, II and IIB are contained in Appendices A, B, and C, respectively. The results of the Phase III analyses are contained in Appendix D.

The area of disturbed soil visually appears to be approximately 150 feet square. The area was segregated into 9, 50 foot by 50 foot grid cells, with twelve exterior grid cell sides. Soil borings were advanced into each grid cell and along each exterior grid cell line. Soil samples were retained from the surface and at 2-foot depth intervals in each boring. Surface samples were also collected from soils outside of each external grid cell line. Refer to Figure 2 for site layout with sampling grid location.

Soil boring locations within each grid and along each exterior grid cell line were randomly determined as described in the systematic random sampling section of a U.S. EPA soil sampling guidance document. Surface sample locations outside each exterior grid cell line were placed to cover potential data gaps from random borehole placement.

Once the PCB contaminated area was delineated horizontally and identified as a surface release, samples were collected on a grid within the isolated area from 0 to 6 inches, 12 to 18 inches, and 24 to 30 inches. This sampling activity was intended to define the extent and depth for removal of hazardous versus special waste materials.

2.0 BACKGROUND

2.1 Phase I Assessment

As part of the Phase I Assessment the eastern lot was identified as an area used for testing light excavating/earth moving equipment. The lot is located in a regionally low lying area and fill was presumed to have been hauled to this location for grade adjustments. Foundry sand and fragments of concrete, wood, and cinders were also observed in the eastern portion of the east lot. Versar recommended investigating the fill for the presence of any environmental concerns. Historical photos obtained during the Phase I assessment are presented in Appendix A.

2.2 Phase II and IIB Assessments

A surface composite sample of soils within the disturbed fill area was analyzed and found to contain PCBs. A series of subsurface investigative techniques were then employed to determine the areal extent and PCB concentration of the fill. Refer to Appendix B1 for a summary of the surface fill analytical results and B2 for Chain-of-Custody Forms.

A series of seven test pits were advanced into the east lot. These test pits were to define the areal extent of fill. The test pits were originally to be within a grid set into the area of surface disturbance. After the initial two test pits it became apparent that the areal extent of fill was much larger than previously assumed. The remaining test pits were then located throughout the entire eastern half of the lot. Soil samples were taken from each test pit and the types of earth materials encountered in each test pit were noted. The test pits revealed that the fill was primarily foundry sand with minor amounts of concrete, brick, wood, metal, and cinder fragments. Appendix C1 presents laboratory analytical results and Appendix C2 contains test pit logs. Phase IIB Figures and Chain-of-Custody forms are located in Appendices C3 and C4, respectively. Analytical results indicate the presence of PCBs in test pits 1 and 2 only. These test pits were located within the area of surface disturbance.

At the conclusion of Phase IIB three soil borings were advanced on the east lot for the purpose of installing groundwater monitoring wells. The fill and natural soils encountered at each soil boring were described by a Versar geologist. The fill material ranged between 5 and 9.5 feet in

thickness. Natural deposits of peat, silty clay, and gravely sand are found under the fill. Dark brown peat is identified as the uppermost natural deposit and overlies a deposit of gray silty clay. Gravely sand saturated with groundwater was the basal unit encountered in all of the boreholes. The monitoring wells were installed into the gravely sand unit. The annular space between borehole and well casing was sealed from the fill by placement of bentonite pellets and then bentonite/cement grout. Soil boring and well logs are shown in Appendix D1.

The wells were developed by purging with a pump on the drill rig. The wells were then sampled for parameters associated with contaminants commonly found in foundry sand. The analytical results indicate the absence of any of those parameters in the groundwater found under the site. Groundwater laboratory analytical results are presented in Appendix D2. Chain-of-Custody forms for these samples are in Appendix D3. Depth to water elevations were taken from each well, and a registered land surveyor was contracted to survey in the well locations as associated elevations off of a USGS Benchmark. Common datums along the unnamed stream were also set. This information was utilized to develop groundwater potentiometric surface maps and assess the potential for hydraulic connection to the stream. The groundwater flows from east to west across the east lot and appears to be connected hydraulically to the stream.

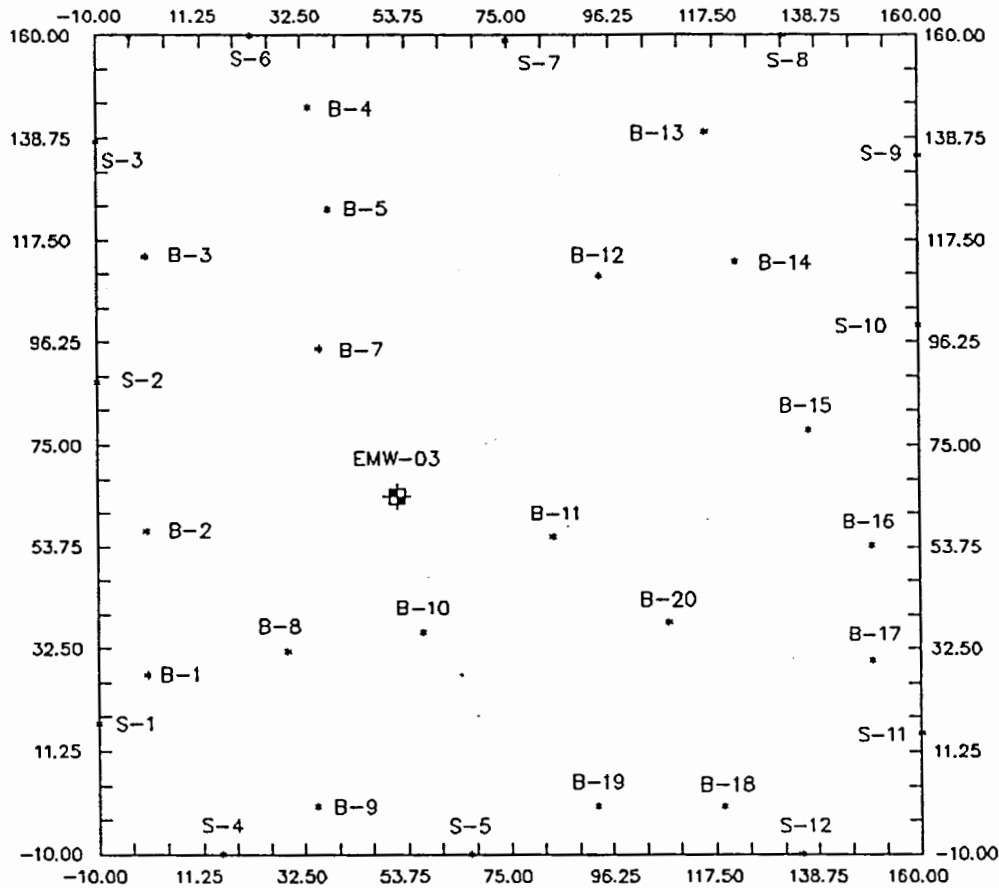
3.0 PHASE III DATA COLLECTION PROCEDURES

3.1 Soil Boring Locations and Sample Intervals

One soil boring was advanced into each of the 9 grid cells and one boring was located along each of the 12 exterior grid cell lines. The coordinates used for locating the borings were selected by using a table of randomly generated numbers between 1 and 50. Two table columns were used for locating borings in the grid cells while only one column was used for selecting locations along an exterior grid cell line. This random soil boring location technique was utilized to reduce any location bias from field personnel and because the exact fill sequence, horizontal lifts, load placement or surface discharge of the PCB contamination was not known. Using the random coordinate sampling method distributed on a uniform grid, combined with a field analysis of random sample depths, would help to determine if the PCB contamination was a surface discharge, placed and spread, or placed by load. Refer to Figure 3 for soil boring and surface grab sample locations.


A new location was selected if the boring was located within 20 feet of a previously selected boring location. Borings were also moved for access reasons due to grade terrain or tree overgrowth. The table of random numbers was also used for adjusting boring locations. A total of 20 of 21 soil borings were completed. One soil boring was not completed, boring 21 (B-21) due to access limitations along the exterior grid cell line. A surface sample was taken at this location only.

Soil borings were continuously sampled to a depth which penetrated the peat horizon. Undisturbed soil samples were obtained from depth by driving a split spoon sampler ahead of the advancing augers. Soil samples were retained for field screening and possible analysis from surface and from the following depths below grade; 2 feet, 4 feet, 6 feet, and 8 feet. Some borings were advanced deeper to penetrate the peat and had samples retained from 10 and 12-foot depths. At the completion of each borehole, annular space was backfilled with bentonite chips. Drilling equipment was steam cleaned before starting field activities and between boring locations. Drill cuttings were stockpiled on-site and covered with plastic. Split spoon samplers were thoroughly scrubbed with and rinsed between sampling intervals. Soils retained were placed into appropriate laboratory provided glass ware, labeled, and immediately placed on ice. Two



LEGEND

* - SAMPLE LOCATION WITH FIELD CONCENTRATION LEVEL
 B-19

TITLE:		FIGURE 3 SOIL BORING AND SURFACE GRAB SAMPLE LOCATIONS	
DESIGNED: DJD	APPROVED: DJD	FOR: VME AMERICAS, INC.	
DRAWN: JDJ	DATE: 10/19/93		
CHECKED: DJD	SCALE: AS NOTED		
 1520 KENSINGTON ROAD OAK BROOK, IL. 60521		PROJECT NO.	1871.003
		DRAWNG NO.	18713A3

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borings were selected to have Shelby Tubes pushed into the lower part of the peat and the underlying silty clay and the tubes are being held at Versar offices. Boring logs are in Appendix D4.

3.2 Surface Perimeter Sample Locations

Surface grab sample locations along the perimeter of the grid configuration were selected to fill potential data gaps. The grab samples were placed between an exterior boring location and the farthest grid node from that boring. Grab samples were also offset 10 feet away from the exterior grid cell line. Sample locations for surface grabs were not moved for access reasons. Surface soils were placed into lab glass ware, labeled, and placed on ice.

3.3 Selecting Horizons for Field Screening

Soils collected were analyzed initially subjected for field PCB screening with immunoassay field kits calibrated for positive response to PCB concentrations of greater than 5 ppm and 50 ppm. This would allow 44 samples to be screened for PCBs with results in the range of less than 5 ppm, between 5 and 50 ppm, or greater than 50 ppm. The immunoassay technique utilizes the following steps;

A series of soil samples collected at the VME site were analyzed for PCBs in accordance with the proposed USEPA SW-846 Method 4020, an immunoassay-based field test method for PCBs, using an EnSys PCB RIS[®] Soil Test System. Specifications of the EnSys field kits included a two level test kit designed to identify soil sample concentrations of PCB Aroclor 1248 below 5 ppm, between 5 and 50 ppm, and above 50 ppm. EnSys designs their field screening kits with an intentional bias towards generating false positives, i.e., determining that a soil concentration exceeds a target level when in reality its actual concentration is less than the target level. Details regarding the specific data objectives, sample preparation, quality assurance, method specifications, and documentation procedures are outlined below.

Level I field screening methods, such as immunoassays, are characterized by the use of portable field equipment and instruments that can provide real-time data to assist in the selection of optimum sampling location. Data generated provided for the determination of whether PCBs

were present or absent at the customized target concentration ranges of the field kit, specifically established at 5 and 50 ppm. Sample preparation and analysis were conducted in a work station away from the actual remediation activity. Samples which were collected, containerized, and labelled were brought to the work station and field screened. The screening consisted of weighing a specified amount of sample, performing an extraction, and subjecting the extract to an immunoassay. The screening method ultimately measures PCB concentration as a function of light absorption (inverse relationship) relative to a standard in a photometer. A series of samples were subsequently submitted to NET-Midwest (Bartlett, Illinois) for PCB analysis (SW-846 Method 8080) for laboratory confirmation.

The QA measures detailed below provided a level of assurance based on establishing that complete and appropriate documentation during the field screening process was occurring, and that instruments were being calibrated and functioning properly. Versar's plan will include the following QA/QC measures:

- a) sample documentation including sample identification, location, depth, sampling personnel identification, time and date of collection, analyst identification, time and date of field analysis, raw data, calculations, final results, and observations as part of complete record keeping as pertains to the analyses in established notebooks;
- b) calibration of field instrumentation (e.g. such as the photometer, pipette, and scale). According to the manufacturer's instructions (EnSys) optical density measurements of duplicate standards were taken. A valid test is indicated when the magnitude of the standards are within 0.20 optical density units of each other;
- c) laboratory confirmation of select samples to validate screening capabilities within the three ranges of concentration.

Sample records are presented in Appendix D5.

The interior borings located in each of the grid cells were first selected for field screening. The borings were divided into three east to west cross sections with three boreholes per cross section. A table of randomly generated numbers from 1 to 3 was utilized in the selection of what boreholes and which horizons would be screened for PCBs. An initial number of 12 samples were randomly selected for the initial screening. The subsequent 32 samples selected for field screening were manually selected based upon the initial screening results. This round of screening was used to resolve both the extent of elevated PCB contamination within the grid and to verify lower PCB concentrations at the edges of the horizontal and vertical sampling grids. Soils from interior cell borings, exterior grid cell line borings, and exterior surface grab samples were used for the second round of sampling.

3.4 Selecting Samples for Laboratory Analysis

Samples were then sent to NET Laboratories located in Bartlett, Illinois under proper chain of custody procedures. NET analyzed 17 soil samples for PCBs with U.S. EPA Method 8080 from Solid Waste 846. This PCB analysis was used to verify the results of the immunoassay field screening technique. Soil samples analyzed at NET were from borings outside and within the area of elevated PCB concentration. Some samples were analyzed at specific soil boring horizons while other samples were composited from an entire borehole. The purpose of laboratory sample confirmation analysis was to provide results that are acceptable to the WDNR and to verify the conclusions resulting from the field screening tests.

Samples were selected to determine the following:

- 1) Confirmation of clean (less than 5 ppm concentration action level) perimeter (horizontal isolation);
- 2) Confirmation of clean base (vertical isolation);
- 3) Confirmation of general extent of area above 5 ppm;
- 4) Determination of highest concentrations; and
- 5) Potential determination of the PCB source placement method (i.e., surface discharge, load placement or horizontal lifts).

3.5 Isolated Sampling

Once the horizontal extent of the PCB contamination was identified and the results indicated the contamination was limited to a surface release, additional samples were collected at 18 surface locations and nine locations at depths of 0-6 inches, 12-18 inches, and 24-30 inches. This sample collection activity would identify the horizontal and vertical extent of contamination and would allow hazardous and special waste material quantities to be estimated. Samples were collected by hand with a stainless steel shovel and auger using the quality assurance and collection procedures previously described.

TABLE 1

VME SOIL BORING AND SURFACE GRAB
PCB FIELD SCREENING RESULTS

Results in parts per million (ppm)
Note: Blank areas were not analyzed

SAMPLE LOCATION	DEPTH OF SAMPLE IN FEET							
	Surface	2	4	6	8	9	10	12
B-1		>5			<5			
B-2			>5		>5			
B-3		<5		>5		<5		
B-4	<5				<5			
B-5		>5		<5	<5			
B-7		>5		>50	>50			
B-8					>50			
B-9					>5			
B-10	>50	<5	>50					
B-11	<5							
B-12		<5		<5				
B-13							<5	
B-14	<5		<5				<5	
B-15			<5				>5	<5
B-16		<5		<5				
B-17				<5		<5		
B-18	<5				<5			
B-19			<5					
B-20				>5				
S-1	>5							
S-3	<5							
S-5	<5							
S-7	<5							
S-9	<5							
S-11	<5							

4.0 SITE CONDITIONS AND RESULTS

4.1 Earth Materials Encountered

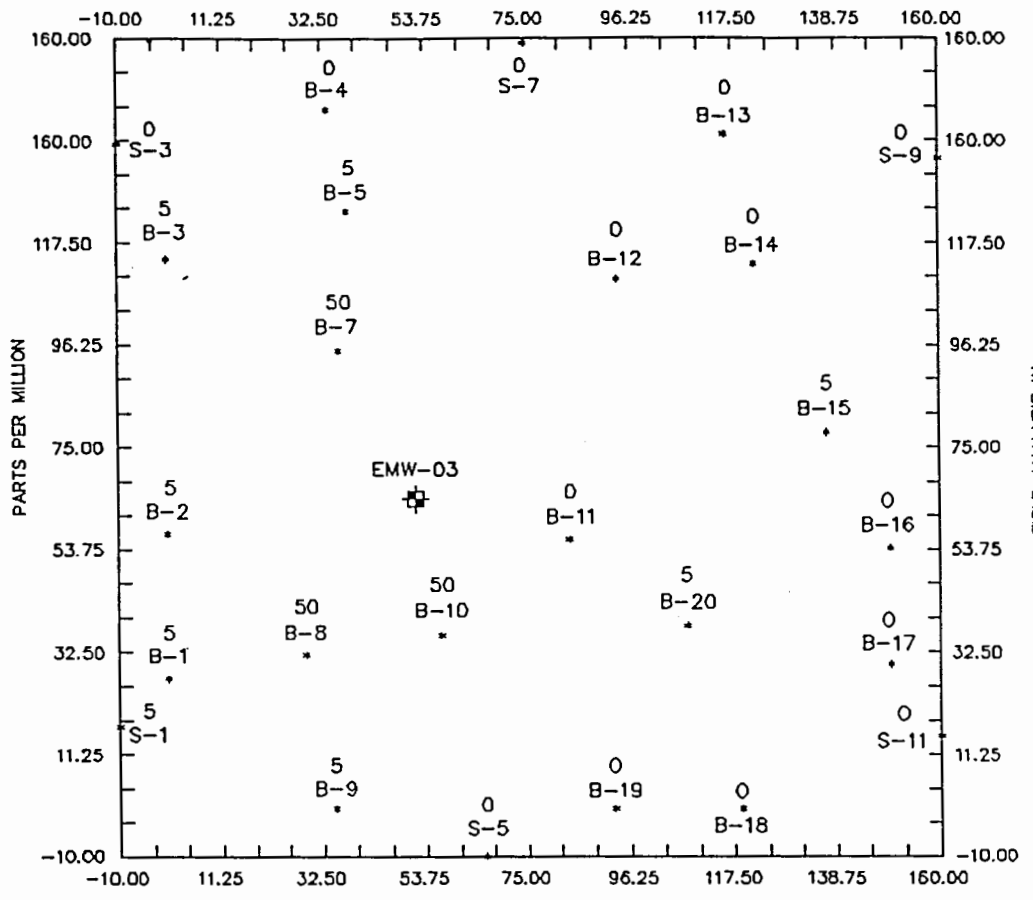
The fill that was drilled through started at surface grade and extended to a depth which ranged between 8 and 10 feet. The fill consisted of primarily dark gray foundry sand with minor amounts of cinder slag, wood, brick, concrete, and metal fragments, as well as, silt and gravel. The peat deposit was found to be directly under the fill and was underlain by an aquitard of silty clay. The gravely sand under the confining unit was not penetrated. The silty clay unit acts as a aquitard to the vertical movement of groundwater across the site. The peat unit also acts as a vertical confining unit for any migrating PCBs. PCBs are relatively immobile and are absorbed onto the surfaces of organic carbon found within peat.

4.2 Contamination Defined with Field Screening Techniques

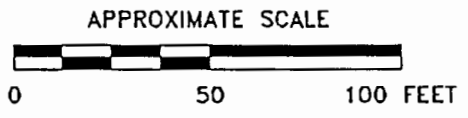
The results of immunoassay indicates that foundry sand fill with elevated concentrations of PCBs is located in the southwest portion of the grid cells. PCB concentrations outside this area drop quickly. The technique used to place the foundry sand fill associated with PCB contamination is not known, however, it appears that the elevated PCB contamination increases toward the surface and is fairly isolated. PCB concentration validation samples were analyzed and those results will be utilized for determining contamination extent. Refer to Table 1 for a summary of the Field Screening Results and Figure 4 for a composite of the areal distribution.

4.3 Additional Areas of Surface Disturbance

From observations of field personnel the area of surface disturbance extends past the boundaries initially indicated during the Phase II Assessment. Surface disturbance and fill extends into the wooded area to the east and north of the grid cells. Field screening indicates, however, that PCB contamination does not extend outside the previously investigated area.



LEGEND



○ - SAMPLE LOCATION WITH FIELD CONCENTRATION LEVEL

NO.	REVISIONS	BY	CHK	APP	DATE
TITLE: FIGURE 4 COMPOSITE CONCENTRATIONS OF FIELD RESULTS					
DESIGNED: DJD	APPROVED: DJD	FOR: VME AMERICAS, INC.			
DRAWN: JDJ	DATE: 10/19/93				
CHECKED: DJD	SCALE: AS NOTED				
 1520 KENSINGTON ROAD OAK BROOK, IL. 60521		PROJECT NO.	1871.002		
		DRAWING NO.	18713A1		

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4.4 Subsurface Flow

Groundwater monitoring wells were installed and groundwater sampled during Phase II activities indicate that PCBs are not found within the aquifer under the site. The groundwater which flows from east to west under the site is likely recharged upgradient of the site and part of the aquifer discharges into the unnamed stream west of the site. The small percentage of precipitation onto the area of surface disturbance which enters into a perched subsurface system percolating through the fill and most likely begins to flow laterally at the base of the fill and in the peat horizon. Any PCBs which are mobile and enter the perched water flow regime will be quickly adsorbed by the organic carbon found in the peat horizon.

4.5 Laboratory Analytical Results

The laboratory results ranged from below detectable limits to 98 ppm. All of the individual and composite samples were below 0.5 ppm except B-10 surface (98 ppm) B-7 at 6 feet (4.88 ppm) S-1 (1.6 ppm) and a composite from B-1 at 8 feet, B-3 at 9 feet, B-14 at 10 feet, B-15 at 12 feet and B-16 at 10 feet (1.17 ppm).

Table 2 presents a comparison of the field and laboratory analytical results.

Vertical composite samples were selected from the entire horizontal at locations B-4, B-5, B-12, B-14, B-16, B-17, B-18, and B-19 to verify a perimeter below the 5 ppm action level all of these laboratory confirmation results were below 0.5 ppm or BDL.

A composite was also selected at the deepest sample at locations B-1, B-3, B-14, B-15, and B-16 for the same purpose. This composite sample laboratory analysis result was 1.17 ppm.

Only one laboratory confirmation sample result was above the action level of 5 ppm, that being the surface sample at B-10. These results correlate well with the field results, indicating a surface release in the vicinity of Boring B-10. This confirms the Phase II and IIB test pit and surface composite sampling that also indicated concentrations of PCBs in this vicinity were isolated and higher at the surface.

Figure 5 presents the laboratory confirmation results and the field results below 5 ppm.

TABLE 2

VME SOIL BORING AND SURFACE GRAB
PCB FIELD SCREENING RESULTS
AND LABORATORY CONFIRMATION RESULTS COMPARISON

Results in parts per million (ppm)
Note: Blank areas were not analyzed

SAMPLE LOCATION	DEPTH OF SAMPLE IN FEET								LABORATORY COMPOSITE SAMPLE RESULTS
	Surface	2	4	6	8	9	10	12	
B-1		>5			<5*				
B-2			>5		>5				
B-3		<5		>5		<5*			
B-4	<5				<5				C: 0'-8', 0.12
B-5		>5/BDL		<5	<5				C: 6'-8', 0.27
B-7		>5		>50/4.88	>50				
B-8					>50/0.32				
B-9					>5/.83				
B-10	>50/98	<5	>50/BDL						
B-11	<5								
B-12		<5		<5					C: 0'-8', 0.42
B-13							<5		
B-14	<5		<5				<5*		C: 0'-10', 0.23
B-15			<5				>5	<5*	
B-16		<5		<5			.		C: 0'-10', 0.76
B-17				<5		<5			C: 0'-9', BDL
B-18	<5				<5				C: 0'-8', BDL
B-19			<5						C: 0'-8', 0.41
B-20				>5					
S-1	>5/1.6								
S-3	<5								
S-5	<5								
S-7	<5								
S-9	<5								
S-11	<5								

KEY

BDL = BELOW DETECTABLE LIMITS
 * = COMPOSITE RESULTS OF 1.71 PPM
 C: 0'-8', 0.12 = COMPOSITE SAMPLE, ZERO TO EIGHT FEET, 0.12 ppm
 <5/0.42 = FIELD SCREENING RESULTS/LAB RESULTS

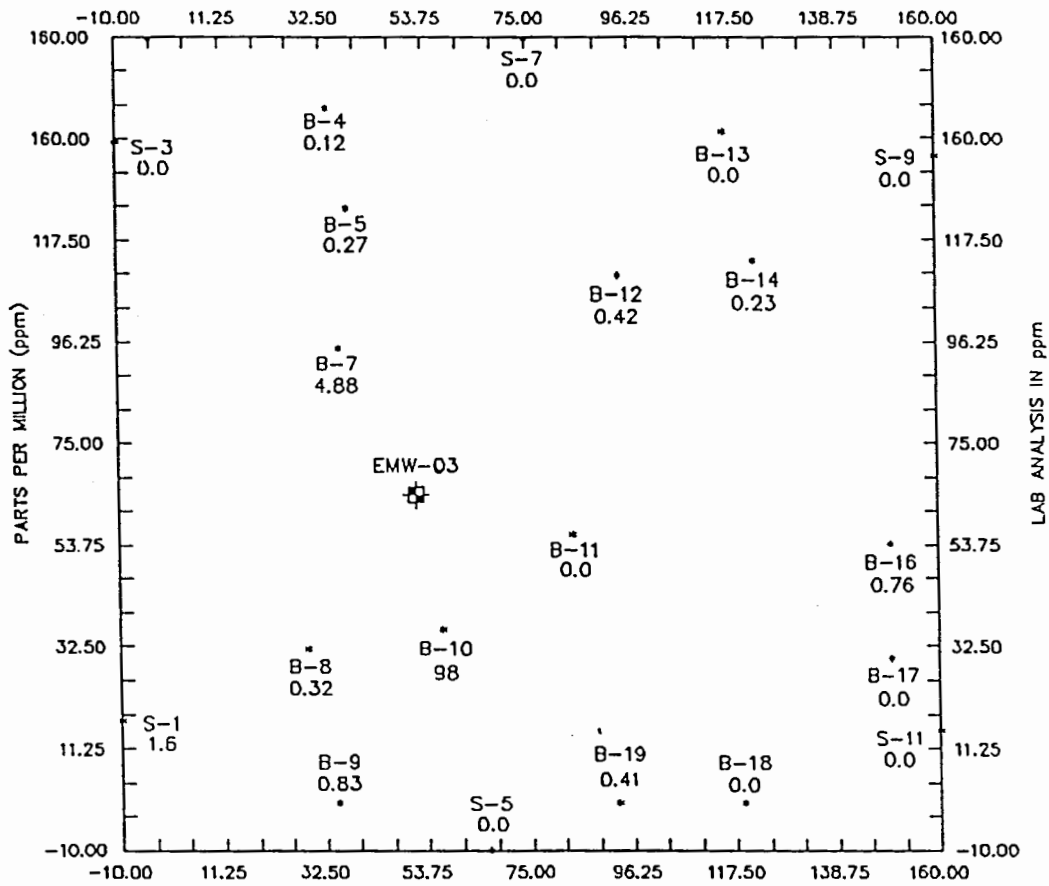
Field screening tests yield slightly higher results than the laboratory analysis, providing a conservative estimate as to the extent of contamination above the 5 ppm action level. As a result, the composite drawing of laboratory results (Figure 5) may exhibit a larger extent of 5 ppm contamination than actually exists in the field. The field screening results indicate that the contaminated area may extend west of the grid, however this area is generally based on field data.

Based on previous correlation between the field and laboratory results, laboratory confirmation in the vicinity of B-1, B-2, and B-3 should provide concentrations of less than 5 ppm.

4.6 Isolated Sampling Results

Eighteen of the samples were selected for initial analysis. At each of the sample locations where samples were collected at depth, the 0-6 inch and 12-18 inch samples were analyzed for PCB contamination. The remaining samples from the 24-30 inch horizon and the additional surface sample locations were held for potential analysis, if further horizontal and vertical definition was determined to be necessary. Refer to Figures 6, 7, and 8 for sample locations.

Based on the isolated sampling analytical results, Versar selected six additional samples for analysis. The rationale for additional sample selection was that the horizontal and vertical extent needed further definition below locations CS(core sample)-3.-4, and -6, and at surface locations SS(surface sample)-4, 5, and 7. Isoconcentration contours for the action levels of 5 PPM and 50 PPM for the depths of 0-6 inches, 12-18 inches, and 24-30 inches, are presented on Figures 6, 7, and 8, respectively. Analytical results are presented in Appendix D8.

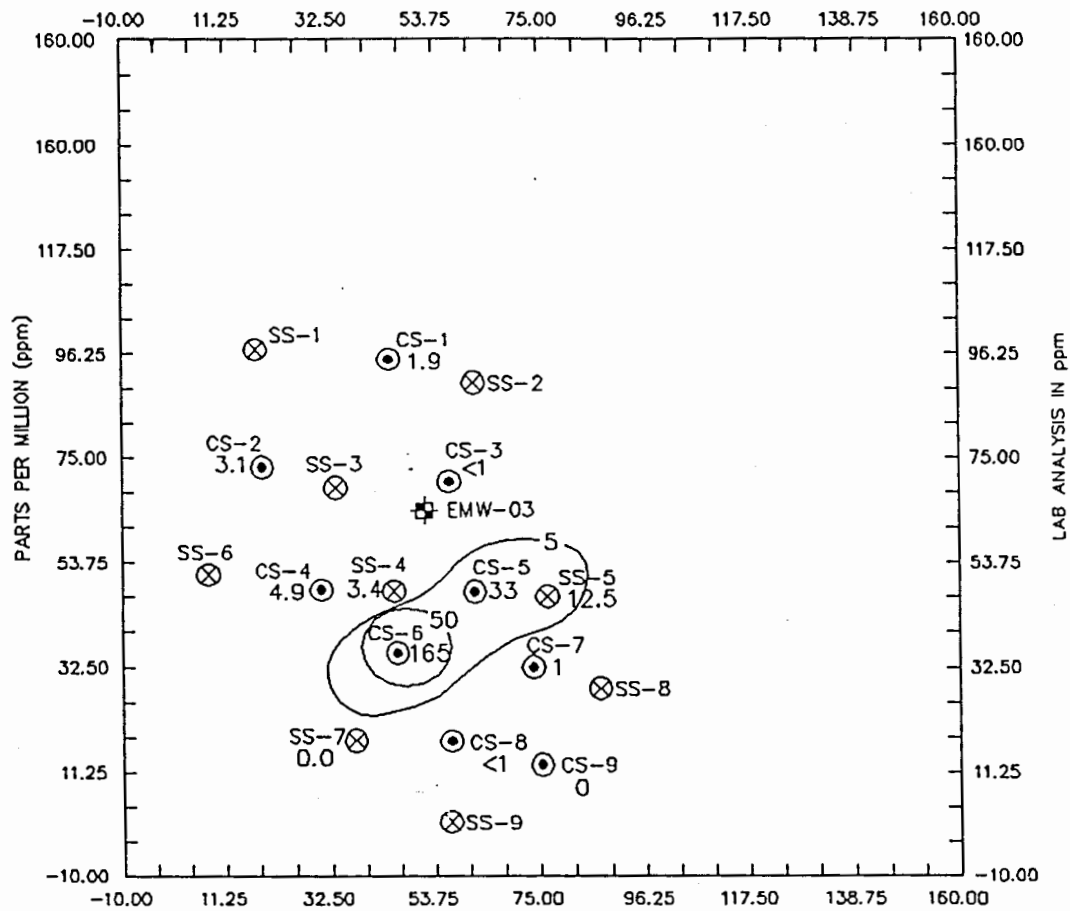


LEGEND

• - SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL


TITLE: FIGURE 5		
ANALYTICAL LABORATORY RESULTS		
DESIGNED: DJD	APPROVED: DJD	FOR: VME AMERICAS, INC.
DRAWN: JDJ	DATE: 10/19/93	
CHECKED: DJD	SCALE: AS NOTED	
Versar INC.		PROJECT NO. 1871.003
1520 KENSINGTON ROAD OAK BROOK, IL. 60521		DRAWING NO. 18713A2

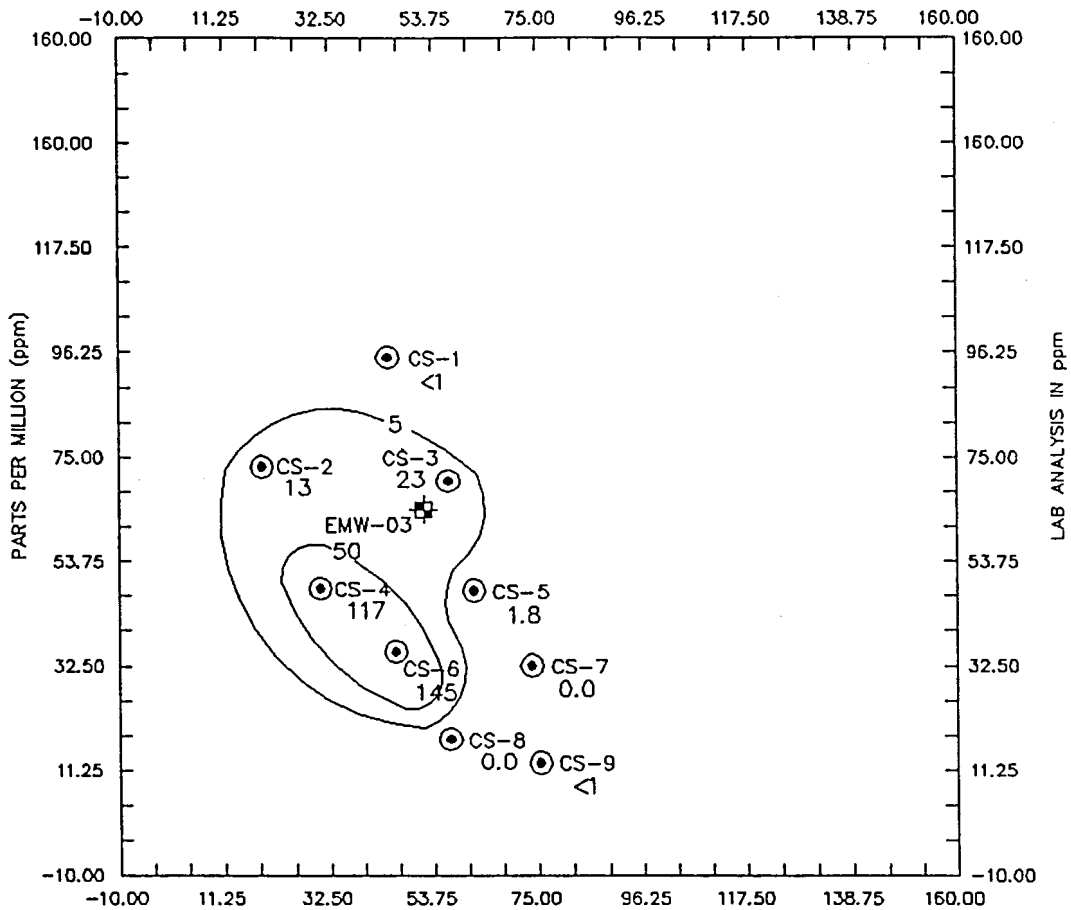
CAD FILE \1871003\18713A2.DWG



LEGEND

- ⊙ CS-2 - SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL
- ⊗ SS-1 - SURFACE SAMPLE ONLY

TITLE:		FIGURE 6	
ISOLATED SAMPLING ANALYTICAL LABORATORY RESULTS 0 - 6"			
DESIGNED: DJD	APPROVED: DJD	FOR: VME AMERICAS, INC.	
DRAWN: JDJ	DATE: 11/19/93		
CHECKED: DJD	SCALE: AS NOTED		
 1520 KENSINGTON ROAD OAK BROOK, IL. 60521		PROJECT NO. 1871.002	DRAWING NO. 18712A4



LEGEND

⊙CS-2 - SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL

TITLE: **FIGURE 7**
ISOLATED SAMPLING ANALYTICAL LABORATORY RESULTS 12"-18"

DESIGNED: DJD	APPROVED: DJD
DRAWN: JDJ	DATE: 11/19/93
CHECKED: DJD	SCALE: AS NOTED

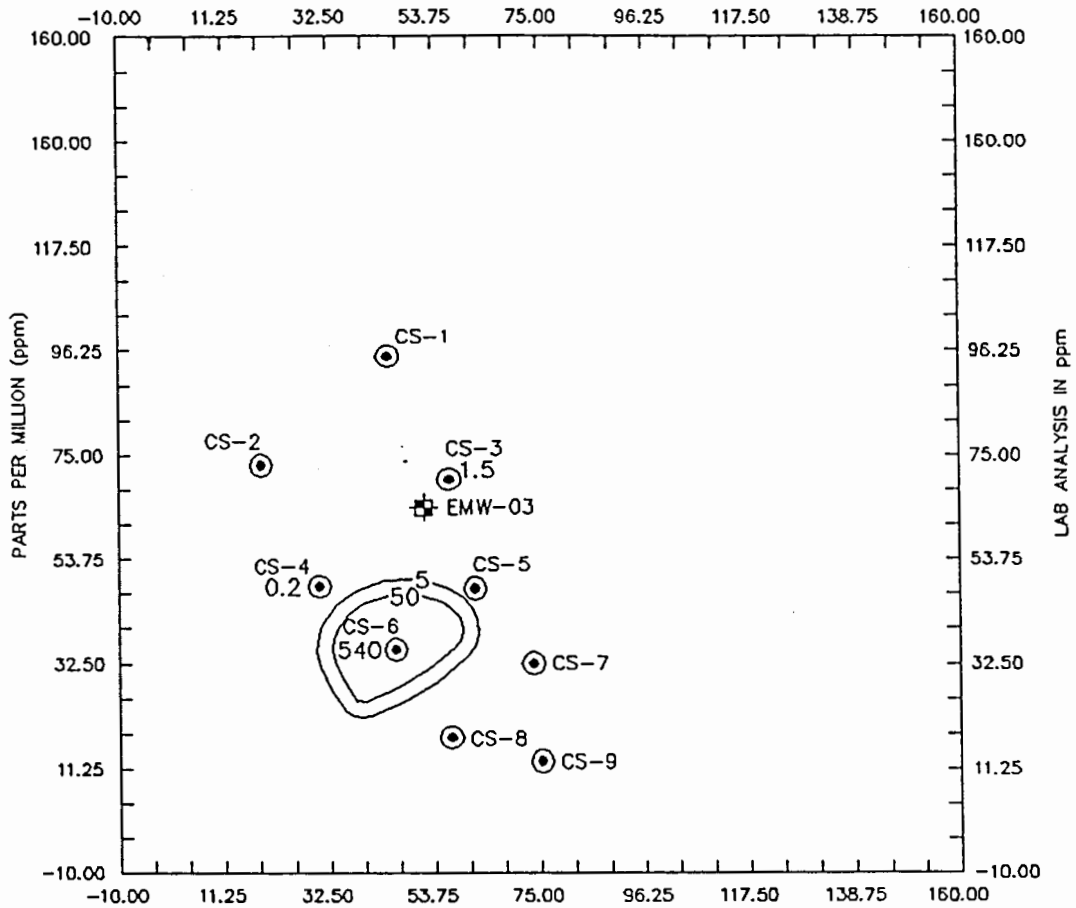
FOR:

VME AMERICAS, INC.

Vernal INC.

1520 KENSINGTON ROAD
OAK BROOK, IL. 60521

PROJECT NO.	1871.002
DRAWING NO.	18712A5



LEGEND

⊙ CS-2 - SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL

TITLE:		FIGURE 8	
ISOLATED SAMPLING ANALYTICAL LABORATORY RESULTS 24" - 30"			
DESIGNED: DJD	APPROVED: DJD	FOR: VME AMERICAS, INC.	
DRAWN: JDJ	DATE: 11/19/93		
CHECKED: DJD	SCALE: AS NOTED		
 1520 KENSINGTON ROAD OAK BROOK, IL. 60521		PROJECT NO.	1871.002
		DRAWING NO.	18712A6

5.0 CONCEPTUAL ACTION PLAN

5.1 Foundry Fill Area

As indicated in the Phase IIB reports, according to Ms. Frances Koonces of the Wisconsin Department of Natural Resources (WDNR), due to extensive backfilling with foundry fill in the Waukesha area, the WDNR may allow the foundry fill to remain in place. Should any future construction be planned for that portion of the property, the WDNR will require notice and will review development plans prior to construction. The WDNR may place restriction on building activities or design prior to approving any future projects on the eastern half of the property.

According to Mr. Ken Hein of the WDNR, precedence indicates the property will likely be listed on WDNR's Registry of Abandoned Landfills. Due to foundry waste currently being classified as a solid (non-hazardous) waste, the fill is viewed as an abandoned solid waste landfill. The Registry is not a current action or enforcement list, it will be used in the future to direct WDNR to properties that may require additional investigation and, possibly, clean-up action. Current listing on the Registry will not require any additional investigation in the immediate future.

Appropriate actions would include access restrictions and inclusion on the WDNR's registry of abandoned landfills.

5.2 PCB Contaminated Area

According to Mr. Tim Mulhoo, Division of Environmental Quality of the WDNR, the practical maximum concentration goal of total PCBs allowed in soil is 5 ppm. In some cases, PCB concentrations of up to 25 ppm in soil have been allowed.

With respect to closure for the PCB impacted area, concentrations of PCBs above 50 ppm are classified as hazardous. Typically, landfills in Wisconsin that are allowed to accept PCB contaminated soil only allow up to approximately 35 ppm for disposal as a special waste. Soils with concentrations above approximately 35 ppm could be removed and transported out-of-state to a hazardous waste landfill or incinerator. Soils between 35 and 5 ppm could be removed and transported to a special waste landfill. Soils with concentrations from 5 to 25 ppm may be

allowed to remain on-site. The final concentration ranges separating removal action, special waste, and hazardous waste are subject to discussion with the WDNR and appropriate receiving facilities.

Confirmation samples could be collected in the isolated contamination area, on a grid and at depth intervals acceptable to WDNR. The final confirmation sampling would occur during an immediate removal activity, under the observation of the WDNR.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the Phase III investigation was to identify the extent of PCB contamination above the 5 ppm action level. Associated with this purpose is the evaluation of potential mitigative measures to limit exposure to the contaminated materials by either in place closure, removal, or some combination of the two methods.

The results of the Phase II, IIB, and III Investigations provide the following general conclusions.

- Laboratory analytical results indicate contaminants in the fill are not present in groundwater and surface water.
- Soil borings for monitoring wells and soil sampling, and test pit data indicate a clay layer of not less than 2.0 feet is beneath the entire fill area, limiting the potential flow into the underlying groundwater. The layer is performing as a natural clay liner for the fill area.
- Laboratory and field analysis of test pits, soil borings, and surface samples all indicate that the PCB contamination above the action limit of 5 ppm is isolated in the vicinity of B-10 and concentrated near the surface.
- PCBs are relatively immobile and it appears that the cause of the contamination may have been a surface release, and as a result, an immediate removal of the contaminated soil should be considered as the remedial action.

6.1 Recommendations

Inquiries to the WDNR have indicated that VME Americas Inc. should contact the WDNR and arrange an initial meeting to discuss the results of the on-site investigations and determine an action plan for PCB contaminated soil removal from the east lot.

Based on the information presented in this report, Versar recommends that VME contact the WDNR on the basis that a surface release has occurred and an immediate removal of the contaminated soil can be initiated upon confirmation from the WDNR.

7.0 STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as follows:

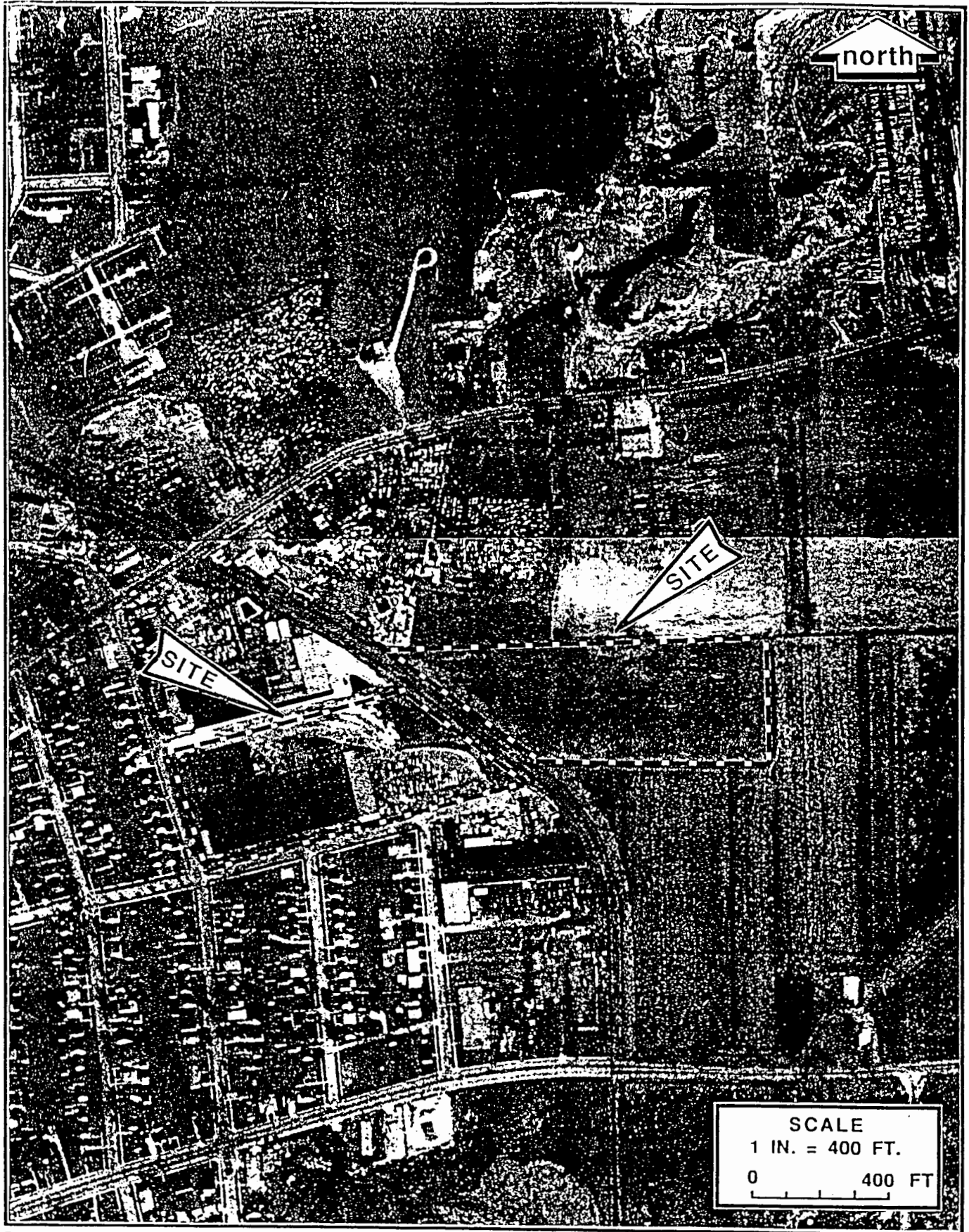
- The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence of oil or hazardous materials and substances in the environment as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.
- Versar derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, conclusions, and recommendations expressed in the report.
- In preparing this report, Versar has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, Versar has not attempted to verify the accuracy or completeness of such information.
- The data reported and the findings, observations, conclusions, and recommendations expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.
- Because of the limitations stated above, the findings, observations, conclusions, and recommendations expressed by Versar in this report are limited to the information obtained and the surface and subsurface investigation undertaken and should not be considered an opinion concerning the compliance of any past or current owner or operator of the Site with any federal, state, or local law or regulation. No warranty or guarantee, whether express or implied is made with respect to the data reported or findings, observations, conclusions, and recommendations expressed in this report. Further, such data, findings, observations, conclusions, and recommendations are based solely upon Site conditions in existence at the time of investigation.
- This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.

8.0 REFERENCES

"Removal Program Representative Sampling Guidance", Volume 1: Soil, Interim Final U.S. EPA, November 1991.

"Guidance of Remedial Actions for Superfund Sites with PCB Contamination", U.S. EPA, August 1990.

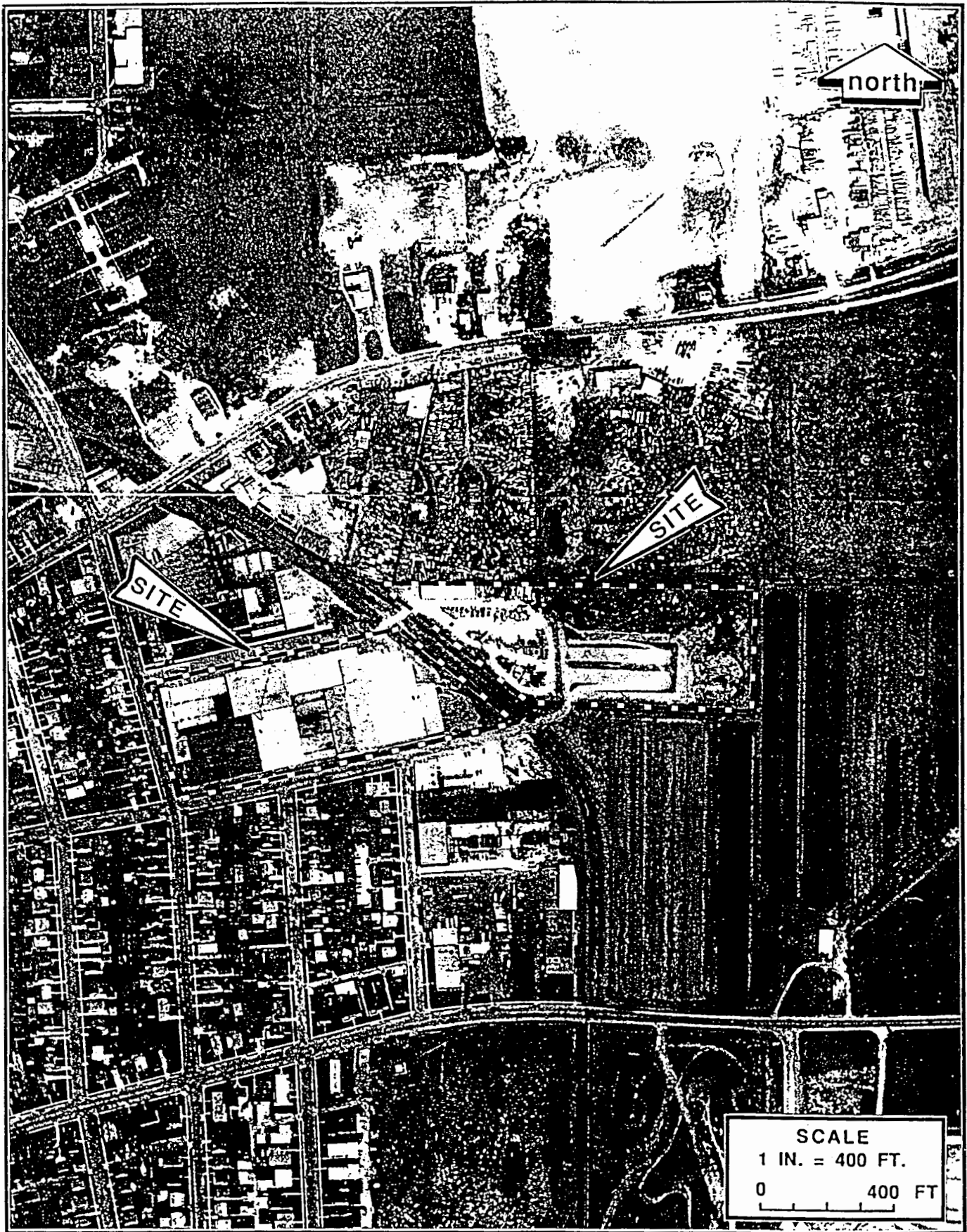
APPENDIX A1
HISTORICAL AERIAL PHOTOS, 1963, 1975, 1985



Dashed line encloses site location

Historical Aerial Photo - 1963.
Akerman Excavators, Waukesha, Wisconsin

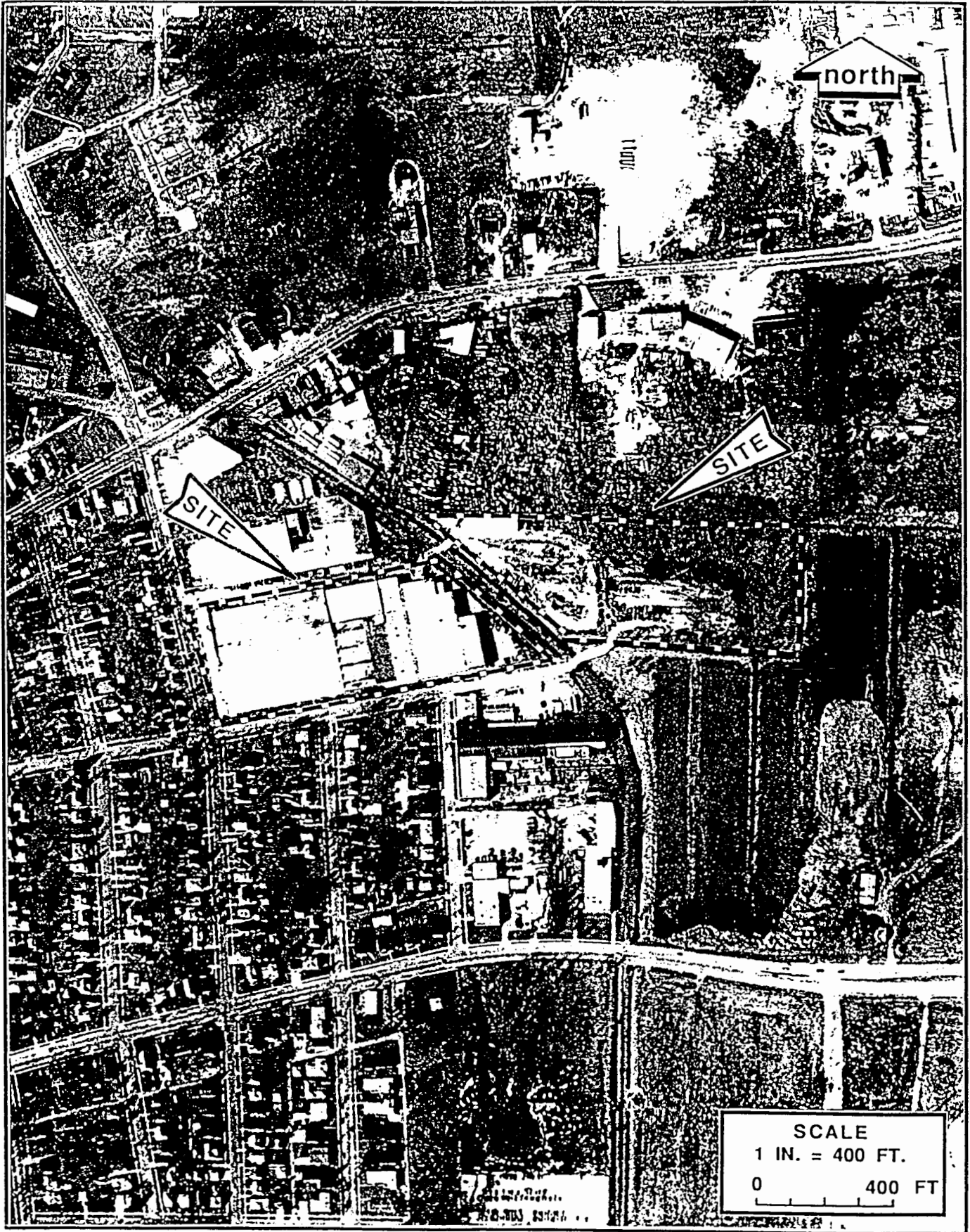
Versar INC.



Dashed line encloses site location

Historical Aerial Photo - 1975.
Akerman Excavators, Waukesha, Wisconsin

Versar INC.



Dashed line encloses site location

Historical Aerial Photo - 1985.
Akerman Excavators, Waukesha, Wisconsin

Versar INC.

APPENDIX B1
SURFACE FILL ANALYTICAL RESULTS

Table 5
Surface Fill Analysis Results

Parameter	Concentration
Methylene Chloride	0.025 ppm
2-Chlorophenol	0.55 ppm
2,4-Dichlorophenol	0.50 ppm
4-Nitrophenol	0.52 ppm
Acenaphthene	0.61 ppm
Benzo(B)Fluoranthene	1.2 ppm
Dimethyl Phthalate	1.3 ppm
Di-N-Butyl Phthalate	2.2 ppm
1,2,-Diphenylhydrazine	0.42 ppm
Fluorene	0.59 ppm
Naphthalene	1.5 ppm
Nitrobenzene	1.2 ppm
N-Nitrosodiphenylamine	0.95 ppm
Phenanthrene	1.4 ppm
4,4-DDD	33 ppb
Dieldrin	140 ppb
Endosulfan I	17 ppb
Endosulfan Sulfate	10 ppb
Endrin Aldehyde	27 ppb
Heptachlor Epoxide	330 ppb
PCBs (Aroclor 1248)	42 ppm

ppm = parts per million
ppb = parts per billion



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LABORATORY REPORT

PAGE 1

E102 8475972 W31
CS/07/* / /

VERSAR, INC. - MIDWEST REGIONAL OFFICE
1520 KENSINGTON ROAD SUITE 115
OAK BROOK, IL 60521
ATTN: M. PLACE/J. SMITH

CHAIN OF CUSTODY

SAMPLE 92210-E04004 SOIL-SURF/DUMP/PROJECT: VME
DATE COLLECTED 07/28/92 DATE RECEIVED 07/28/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
2-CHLOROPHENOL	0.55	PPM	08/04/92	SW846 8040	
2,4-DICHLOROPHENOL	0.50	PPM	08/04/92	SW846 8040	
2,4-DIMETHYLPHENOL	<0.50	PPM	08/04/92	SW846 8040	
4,6-DINITRO-2-METHYLPHENOL	<0.50	PPM	08/04/92	SW846 8040	
2,4-DINITROPHENOL	<0.50	PPM	08/04/92	SW846 8040	
2-NITROPHENOL	<0.50	PPM	08/04/92	SW846 8040	
4-NITROPHENOL	0.52	PPM	08/04/92	SW846 8040	
4-CHLORO-3-METHYLPHENOL	<0.50	PPM	08/04/92	SW846 8040	
PENTACHLOROPHENOL	<0.50	PPM	08/04/92	SW846 8040	
PHENOL	<0.050	PPM	08/04/92	SW846 8040	
2,4,6-TRICHLOROPHENOL	<0.050	PPM	08/04/92	SW846 8040	
ACENAPHTHENE	0.61	PPM	08/04/92	SW846 8100	
ACENAPHTYLENE	<2.0	@ PPM	08/04/92	SW846 8100	
ANTHRACENE	<2.0	@ PPM	08/04/92	SW846 8100	
BENZIDINE	<2.0	@ PPM	08/04/92	SW846 8000(FID)	
BENZO (A) ANTHRACENE	<2.0	@ PPM	08/04/92	SW846 8100	
BENZO (A) PYRENE	<2.0	@ PPM	08/04/92	SW846 8100	
BENZO(B) FLUORANTHENE	1.2	PPM	08/04/92	SW846 8100	
BENZO(G,H,I) PERYLENE	<2.0	@ PPM	08/04/92	SW846 8100	
BENZO(K) FLUORANTHENE	<2.0	@ PPM	08/04/92	SW846 8100	
BIS (2-CHLOROETHOXY) METHA	<2.0	@ PPM	08/04/92	SW846 8110	
BIS (2-CHLOROETHYL) ETHER	<2.0	@ PPM	08/04/92	SW846 8110	
BIS (2-CHLOROISOPROPYL) ET	<2.0	@ PPM	08/04/92	SW846 8110	
BIS (2-ETHYLHEXYL) PHTHALA	<2.0	@ PPM	08/04/92	SW846 8060	
4-BROMOPHENYL PHENYL ETHER	<2.0	@ PPM	08/04/92	SW846 8110	
BUTYL BENZYL PHTHALATE	<2.0	@ PPM	08/04/92	SW846 8060	
2-CHLORONAPHTHALENE	<2.0	@ PPM	08/04/92	SW846 8120	
4-CHLOROPHENYL PHENYL ETHE	<2.0	@ PPM	08/04/92	SW846 8110	
CHRYSENE	<2.0	@ PPM	08/04/92	SW846 8100	

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

@ = ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE. # = ELEVATED DETECTION LIMIT DUE TO SAMPLE CONCENTRATION.

\$ = ELEVATED DETECTION LIMIT DUE TO SAMPLE QUANTITY. + = ELEVATED DETECTION LIMIT DUE TO EXTRACT VOLUME.

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PAGE 2

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VERSAR, INC. - MIDWEST REGIONAL OFFICE
1520 KENSINGTON ROAD SUITE 115
OAK BROOK, IL 60521
ATTN: M.PLACE/J.SMITH

CHAIN OF CUSTODY

SAMPLE 92210-E04004 SOIL-SURF/DUMP/PROJECT: VME
DATE COLLECTED 07/28/92 DATE RECEIVED 07/28/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
DIBENZO(A,H)ANTHRACENE	<2.0	@ PPM	08/04/92	SW846 8100	
1,2-DICHLOROBENZENE	<2.0	@ PPM	08/04/92	SW846 8120	
1,3-DICHLOROBENZENE	<2.0	@ PPM	08/04/92	SW846 8120	
1,4-DICHLOROBENZENE	<2.0	@ PPM	08/04/92	SW846 8120	
3,3'-DICHLOROBENZIDINE	<2.0	@ PPM	08/04/92	SW846 8000(FID)	
DIETHYL PHTHALATE	<2.0	@ PPM	08/04/92	SW846 8060	
DIMETHYL PHTHALATE	1.3	PPM	08/04/92	SW846 8060	
DI-N-BUTYL PHTHALATE	2.2	PPM	08/04/92	SW846 8060	
2,4-DINITROTOLUENE	<2.0	@ PPM	08/04/92	SW846 8090	
2,6-DINITROTOLUENE	<2.0	@ PPM	08/04/92	SW846 8090	
DI-N-OCTYL PHTHALATE	<2.0	@ PPM	08/04/92	SW846 8060	
1,2-DIPHENYLHYDRAZINE	0.42	PPM	08/04/92	SW846 8000(FID)	
FLUORANTHENE	<2.0	@ PPM	08/04/92	SW846 8100	
FLUORENE	0.59	PPM	08/04/92	SW846 8100	
HEXACHLOROBENZENE	<2.0	@ PPM	08/04/92	SW846 8120	
HEXACHLOROBUTADIANE	<2.0	@ PPM	08/04/92	SW846 8120	
HEXACHLOROCYCLOPENTADIENE	<2.0	@ PPM	08/04/92	SW846 8120	
HEXACHLOROETHANE	<2.0	@ PPM	08/04/92	SW846 8120	
INDENO(1,2,3,C,D)PYRENE	<2.0	@ PPM	08/04/92	SW846 8100	
ISOPHORONE	<2.0	@ PPM	08/04/92	SW846 8090	
NAPHTHALENE	1.5	PPM	08/04/92	SW846 8100	
NITROBENZENE	1.2	PPM	08/04/92	SW846 8090	
N-NITROSODIMETHYLAMINE	<2.0	@ PPM	08/04/92	SW846 8070	
N-NITroso-DI-N-PROPYLAMINE	<2.0	@ PPM	08/04/92	SW846 8070	
N-NITROSODIPHENYLAMINE	0.95	PPM	08/04/92	SW846 8070	
PHENANTHRENE	1.4	PPM	08/04/92	SW846 8100	
PYRENE	<2.0	@ PPM	08/04/92	SW846 8100	
1,2,4-TRICHLOROBENZENE	<2.0	@ PPM	08/04/92	SW846 8120	
ALDRIN	<2.0	@ PPB	08/04/92	SW846 8080	

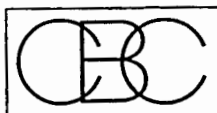
PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

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VERSAR, INC. - MIDWEST REGIONAL OFFICE 1520 KENSINGTON ROADSUITE 115 OAK BROOK, IL 60521 ATTN: M.PLACE/J.SMITH

CHAIN OF CUSTODY

SAMPLE 92210-E04004 SOIL-SURF/DUMP/PROJECT: VME DATE COLLECTED 07/28/92 DATE RECEIVED 07/28/92 PRESERVED: YES TEMPERATURE: ON ICE CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

Table with columns: TEST NAME, RESULT, UNITS, ANALYZED, METHOD, LIMIT. Lists various chemical tests and their results.

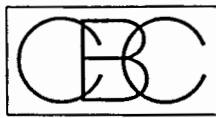
PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

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VERSAR, INC. - MIDWEST REGIONAL OFFICE 1520 KENSINGTON ROAD SUITE 115 OAK BROOK, IL 60521 ATTN: M. PLACE/J. SMITH

CHAIN OF CUSTODY

SAMPLE 92210-E04004 SOIL-SURF/DUMP/PROJECT: VME DATE COLLECTED 07/28/92 DATE RECEIVED 07/28/92 PRESERVED: YES TEMPERATURE: ON ICE CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

Table with 6 columns: EST NAME, RESULT, UNITS, ANALYZED, METHOD, LIMIT. Lists various chemical compounds and their detection results.

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

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APPENDIX B2
CHAIN-OF-CUSTODY FORMS

210

PROJECT NO.		PROJECT NAME						PARAMETERS				INDUSTRIAL HYGIENE SAMPLE		Y	N
		VME (PROJECT MANAGER: MIKE RACE)										8475973 7-28-92 92210			
SAMPLERS: (Signature)					(Printed)										
Janice Smith-Bagheri					JANICE SMITH-BAGHERI										
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	GC AC, IDS, GC BIN	GC VOC	GC BIN	PCBS	TPH	PCBS/PCES	PARAMETERS	MATRIX	RES
SOIL-SURF	7/28/92		X		DUMP	3	X						EQ4004	SOIL	NONE
ELEV-2	7/28/92			X	ELEV-2	1		X					EQ4005	OIL	NONE
STREAM-UP	7/28/92			X	STREAM	4				X			EQ4002	WATER	HCL
STREAM-DOWN	7/28/92			X	STREAM	4				X			EQ4003	WATER	HCL
Relinquished by: (Signature)			Date / Time		Received by: (Signature)			Relinquished by: (Signature)			Date / Time		Received by: (Signature)		
Janice Smith-Bagheri			7/28/92 1:25		Wendy L. Bishop			Stacy Mattila			7/28/92		Stacy Mattila		
(Printed)					(Printed)			(Printed)					(Printed)		
JANICE SMITH-BAGHERI					WENDY L. BISHOP			STACY MATTILA					STACY MATTILA		
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks					
Stacy Mattila			7/28/92 3:20		Stacy Mattila					HAND DELIVERED TO LAB. IMMEDIATELY PLACED ON ICE AFTER SAMPLE COLLECTED. QA/QC PACKAGE "B" REQUIRED.					
(Printed)					(Printed)										
STACY MATTILA					STACY MATTILA										

APPENDIX C1
SUMMARY OF LABORATORY RESULTS

TABLE 2
Results of Laboratory Analysis

Parameter	Parameter Concentration ⁽¹⁾							Acceptance Limits
	TP-1 (5'-6') ⁽²⁾	TP-2 (5-6')	TP-3 (8-9')	TP-4 (6-7')	TP-5 (5-6')	TP-6 (5-6')	TP-7 (4-5')	
TCLP Volatiles								
Tetrachloroethylene	0.013	0.024	<0.005	<0.005	<0.005	<0.005	0.054	0.7
Trichloroethylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.017	0.5
TCLP Acid Extractables and Base/Neutrals	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(3)
TCLP Metals								
Barium	0.6	0.5	0.6	0.4	0.5	0.3	0.4	100.0
Nickel	<0.1	<0.1	0.2	<0.1	0.2	0.4	<0.1	35.0
Zinc	0.5	0.3	0.4	0.2	0.4	0.2	0.1	200.0
TCLP Phenol	<0.12	0.33	0.20	<0.12	<0.12	<0.12	<0.12	2000 mg/l
Chlorine	<0.015%	<0.015%	0.016%	<0.015%	<0.015%	<0.015%	<0.015%	<1.0%
Cyanide	<5.0 mg/kg	<5.0 mg/kg	<5.0 mg/kg	<5.0 mg/kg	<5.0 mg/kg	<5.0 mg/kg	<5.0 mg/kg	50 mg/l
Reactive Sulfide	<1.3 mg/kg	49 mg/kg	<1.3 mg/kg	<1.3 mg/kg	<1.3 mg/kg	4.8 mg/kg	<1.3 mg/kg	50 mg/l
Closed Cup Flash-Point	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>140°F
PCBs	4.5 mg/kg	2.5 mg/kg	<0.5 mg/kg	<0.5 mg/kg	<0.5 mg/kg	<0.5 mg/kg	<0.5 mg/kg	<Detection Limits

(1) Concentrations shown as mg/l unless otherwise noted. The units mg/l and mg/kg are approximately equal to parts per million.

(2) Sample interval shown as feet below ground surface.

(3) Acceptance limits for TCLP Acid Extractables and Base/Neutrals are shown in Table 1.

Depth (feet)

TP-1

0 to $\frac{3}{4}$: Top soil over gravel fill.
 $\frac{3}{4}$ to $6\frac{1}{2}$: Foundry fill consisting of black (N2/0) foundry sand, casting molds of foundry sand, some slag, minor amounts of lumber, wire, plastic.
 $6\frac{1}{2}$ to $7\frac{1}{2}$: Brown silty clay.
 $7\frac{1}{2}$ to 9: Gray (N6/0) silty clay.

TP-2

0 to $\frac{3}{4}$: Gravel fill over sand base.
 $\frac{3}{4}$ to $6\frac{1}{2}$: Foundry fill consisting of black (N2/0) foundry sand, casting molds of foundry sand, some slag, minor amounts of lumber, wire, plastic.
 $6\frac{1}{2}$ to 10: Brown silty clay.
10 to 11: Gray (N6/0) silty clay.

TP-3

0 to $4\frac{1}{2}$: Fill consisting of subrounded gravel.
 $4\frac{1}{2}$ to $9\frac{1}{2}$: Foundry fill consisting of black (N2/0) foundry sand, casting molds of foundry sand, minor amounts of lumber and wire.
 $9\frac{1}{2}$ to 13: Brown silty clay.
13 to 14: Gray (N6/0) silty clay.

TP-4

0 to 7: Foundry fill consisting of black (N2/0) foundry sand, little wire, casting molds of foundry sand, some white silica foundry sand, some slag, moist to wet.
7 to 11: Gray (N6/0) silty clay, trace subrounded gravel, moist.

TP-5

0 to 1: White gravel fill.
1 to $6\frac{1}{2}$: Foundry fill consisting of black (N2/0) foundry sand, little wire and lumber scraps, trace yellow (5Y7/8) foundry sand castings, trace oil filters, moist grading downward to wet.
 $6\frac{1}{2}$ to $8\frac{1}{2}$: Very dark gray (5Y3/1) organic clay, moist.
 $8\frac{1}{2}$ to 9: Light gray (N7/0) silt, moist.

Depth (feet)

TP-6

- 0 to 8: Foundry fill consisting of black (N2/0) foundry sand, some pockets of yellowish brown (10YR5/6) foundry sand, trace pockets of white (10YR8/2) foundry sand, little wire and lumber scraps, moist grading downward to wet.
- 8 to 10: Grayish brown (2.5Y5/2) organic clay with gastropods and plant matter, moist.

TP-7

- 0 to 1: Light gray (10YR6/1) limestone gravel, angular, gravel up to 4 inches in diameter, wet.
- 1 to 5: Light brownish gray (10YR6/2) sand and gravel with some clay, subrounded, gravel up to 4 inches in diameter, some broken cement blocks, wet.
- 5 to 6: Black (N2/0) organic clay, moist.
- 6 to 6½: Dark grayish brown (2.5Y4/2) organic clay with gastropods and plant matter, moist.

APPENDIX C3
ANALYTICAL RESULTS



QUALITY
ANALYTICAL
LABS, INC.

Project #: 920515
Date : 10/01/92
Amended

VERSAR
Suite 115
1520 Kensington
Oak Brook, IL 60521-2139

ATTN: Janice R. Smith-Bagheri

Sampling Date: 09/08,09/92
Analyses Date: 09/14-10/01/92

Identification: Seven samples taken by Janice R. Smith-Bagheri
identified as:

VME
PROJECT #1871.1

Completed report.

Results follow:

Project #: 920515

Page 2 of 15

Amended

Sample ID: TP-1-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	0.013
Trichloroethylene	0.005	BDL
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-1-1 (cont'd)

TCLP METALS

Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.6
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	BDL
Zinc	0.1	0.5
TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		7.6

Method: GC/ECD

PCBs: 0.5 mg/Kg 4.5 mg/Kg

Sample ID: TP-2-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	0.024
Trichloroethylene	0.005	BDL
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-2-1 (cont'd)

TCLP METALS

Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.5
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	BDL
Zinc	0.1	0.3

TCLP Phenol:	0.12	0.33
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	49. mg/Kg
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		7.5

Method: GC/ECD

PCBs:	0.5 mg/Kg	2.5 mg/Kg
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Sample ID: TP-3-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	BDL
Trichloroethylene	0.005	BDL
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-3-1 (cont'd)

TCLP METALS

Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.6
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	0.2
Zinc	0.1	0.4

TCLP Phenol:	0.12	0.20
Chlorine:	0.015%	0.016%
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		7.3

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL
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Project #: 920515

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Amended

Sample ID: TP-4-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	BDL
Trichloroethylene	0.005	BDL
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-4-1 (cont'd)

TCLP METALS

Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.4
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	BDL
Zinc	0.1	0.2
TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		7.6

Method: GC/ECD

PCBs: 0.5 mg/Kg BDL

Sample ID: TP-5-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	BDL
Trichloroethylene	0.005	BDL
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-5-1 (cont'd)

TCLP METALS

Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.5
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	0.2
Zinc	0.1	0.4

TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		8.1

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL
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Sample ID: TP-6-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	BDL
Trichloroethylene	0.005	BDL
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-6-1 (cont'd)

TCLP METALS

Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.3
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	0.4
Zinc	0.1	0.2

TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	4.8 mg/Kg
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		7.6

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL
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Sample ID: TP-7-1

TCLP VOLATILES

Method: SW-846 8240 (modified to capillary).

Parameter	MDL (mg/L)	Analysis (mg/L)
Benzene	0.005	BDL
Carbon tetrachloride	0.005	BDL
Chlorobenzene	0.005	BDL
Chloroform	0.005	BDL
1,2-Dichloroethane	0.005	BDL
1,1-Dichloroethylene	0.005	BDL
Methyl ethyl ketone	0.25	BDL
Tetrachloroethylene	0.005	0.054
Trichloroethylene	0.005	0.017
Vinyl chloride	0.005	BDL

TCLP ACID EXTRACTABLES

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
o-Cresol	0.05	BDL
m & p-Cresol	0.05	BDL
Pentachlorophenol	0.25	BDL
2,4,5-Trichlorophenol	0.05	BDL
2,4,6-Trichlorophenol	0.05	BDL

TCLP BASE/NEUTRALS

Method: SW-846 8270

Parameter	MDL (mg/L)	Analysis (mg/L)
1,4-Dichlorobenzene	0.05	BDL
2,4-Dinitrotoluene	0.05	BDL
Hexachloroethane	0.05	BDL
Hexachlorobutadiene	0.05	BDL
Hexachlorobenzene	0.05	BDL
Nitrobenzene	0.05	BDL
Pyridine	0.05	BDL

Sample ID: TP-7-1 (cont'd)

TCLP METALS

Method: Standard Method
Parameter

	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.4
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	BDL
Zinc	0.1	0.1

TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200 ⁰ F
pH: (10% solution)		8.5

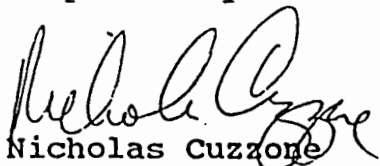
Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL
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MDL = Method Detection Limit

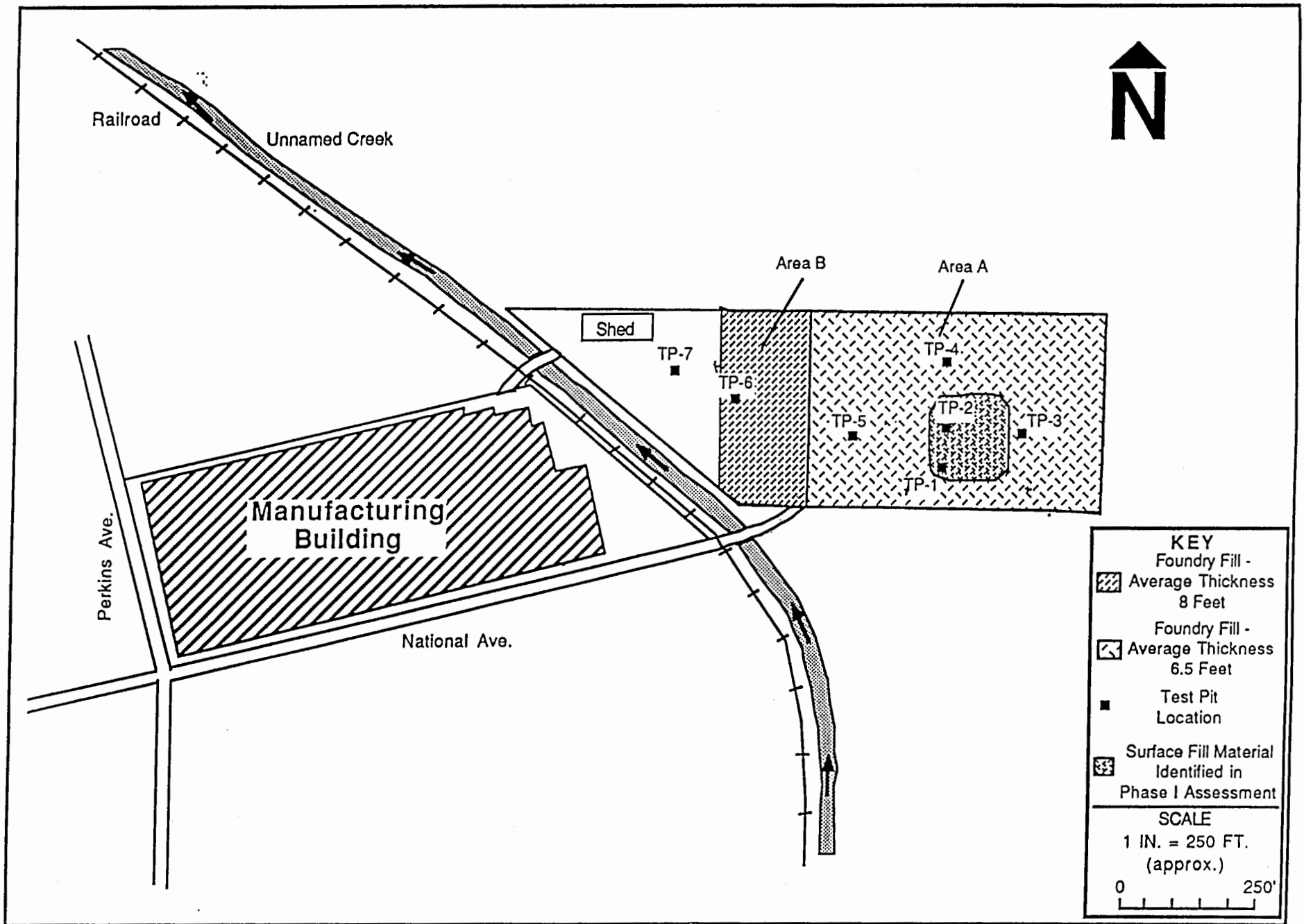
BDL = Below Detection Limit

Respectfully submitted,

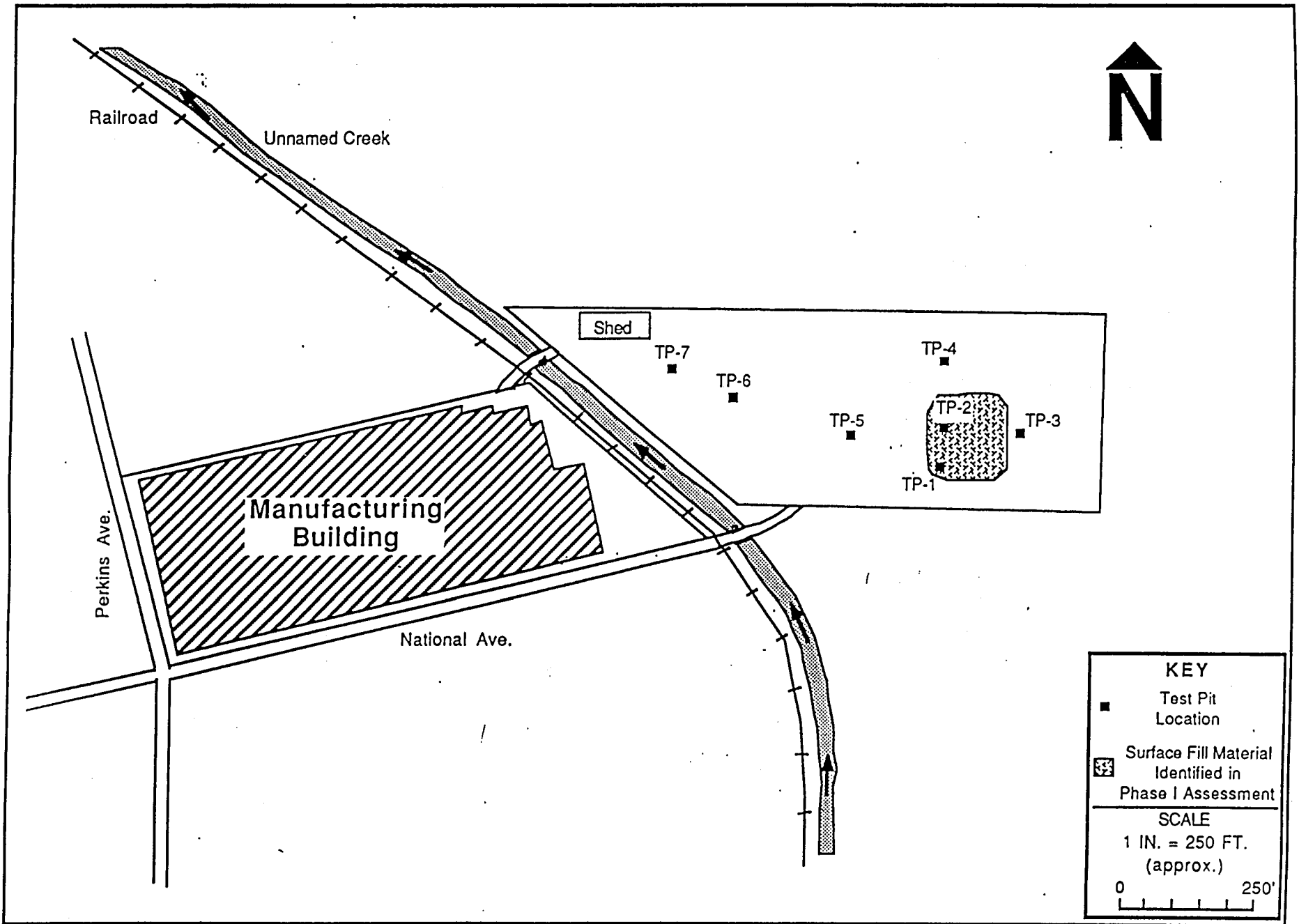


Nicholas Cuzzone
Lab Manager
Quality Analytical Labs, Inc.

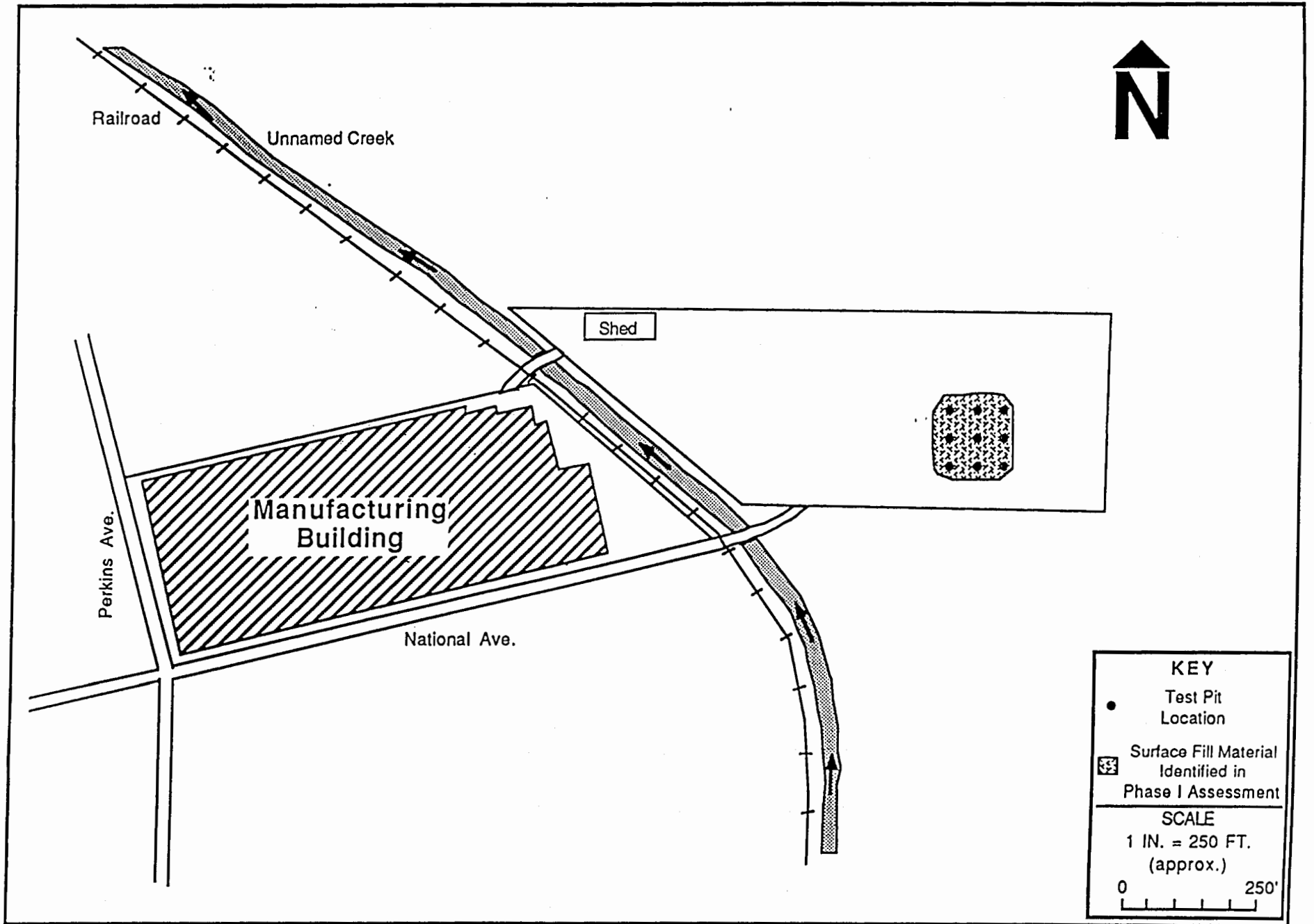
APPENDIX C4
PHASE IIB FIGURES



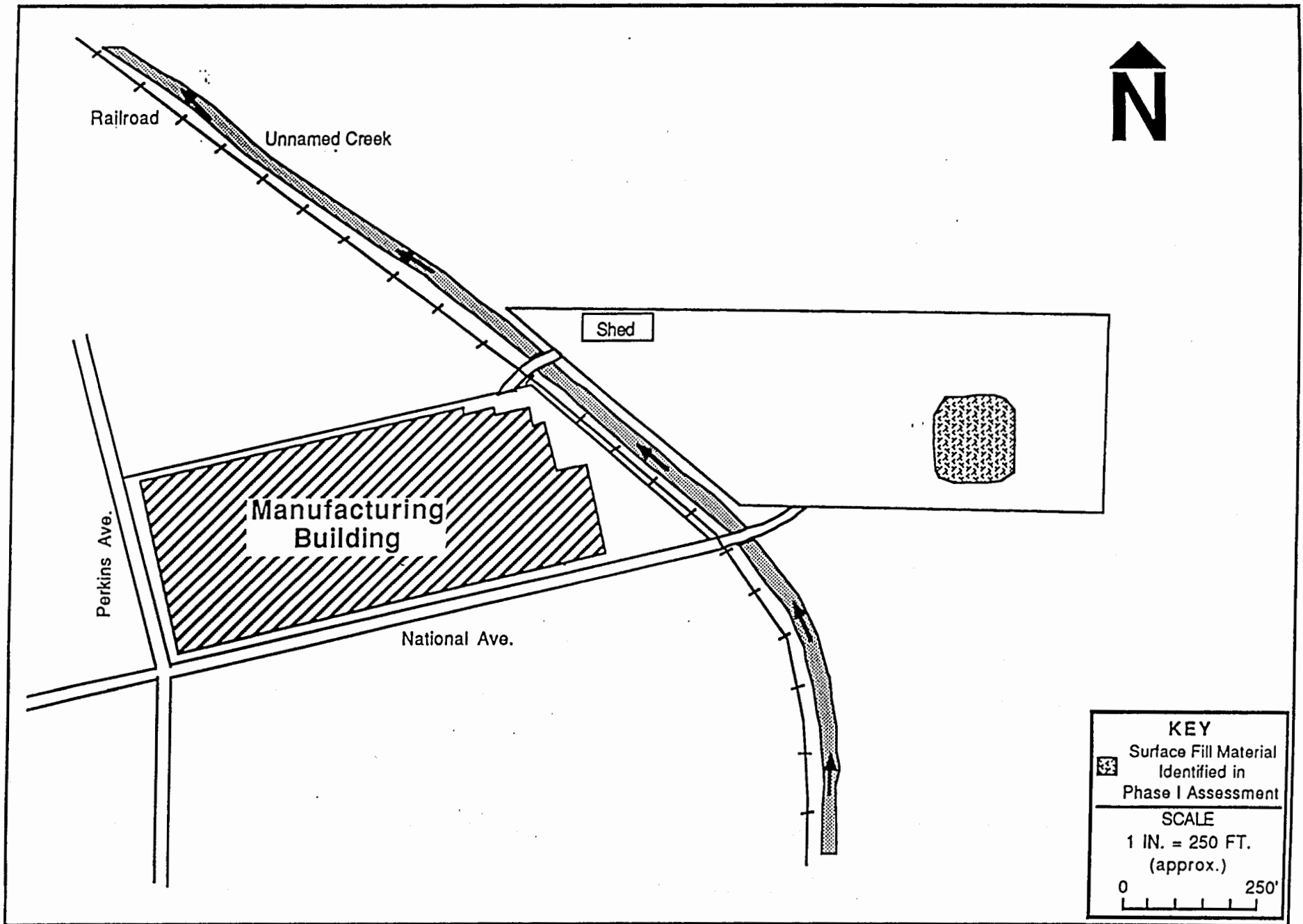
Foundry Fill Areas
 VME/Akerman Excavators, Waukesha, Wisconsin



Test Pit Locations
 VME/Akerman Excavators, Waukesha, Wisconsin



Proposed Test Pit Locations
 VME/Akerman Excavators, Waukesha, Wisconsin



Property Features Map
 VME/Akerman Excavators, Waukesha, Wisconsin

APPENDIX C5
CHAIN-OF-CUSTODY FORMS

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-16

Boring Drilled By (Firm name and name of crew chief)
Vensor Inc / Michael Melton, Geologist
Long Engineering / Dunkling, Miller
 Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N. 2,479,437 E S/C/N Lat _____ Long _____ Local Grid Location (If applicable) _____ Feet _____ Feet

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	18		1	Misc fill silty sand w/ fragments of concrete, wood, chunks of metal, dark gray, loose to med dense, moist				0.0						
			2					0.0						
			3											
2	21		4					0.0						
			5					grades not @ 4.7'						
3	17		6	8" silty sand fill zone, med to lt brownish gray, firm, moist				0.0						
			7					grades saturated @ 7'						
4	22		8					0.0						
			9					peat (PT) dark brown, firm, moist	PT					
			10											
			11											
			12											

I hereby certify that the information on this form is true and correct to the best of my knowledge.
 Signature Michael Melton Firm Vensor 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.

PCB SOILS FIELD SCREENING LOG

DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
1:30	RL	B-16-2 8-24, 13:55	10 g	6	+0.38 +0.72	<5 <50	8016		
2:30		B-16-6 8-24, 16:01		7	+0.79 +1.33	<5 <50	8017		
2:30		B-17-6 8-24, 16:40		7	+1.23 +1.24	<5 <50			
2:30		B-17-7 8-24, 16:45		7	+0.51 +0.03	<5 <50			
2:30		B-18-5 8-25, 8:33		7	+1.06 +0.80	<5 <50			
3:00		B-18-8 8-25, 8:46		8	+0.80 +1.03	<5 <50	8014		
3:00		B-19-4 8-25, 8:04		8	+0.83 +1.17	<5 <50			
3:00		S-1 8-23, 17:05		8	-0.65 +0.14	>5 <50			
3:00		S-3 8-23, 15:16		8	+1.14 +1.14	<5 <50			
4:00		S-5 8-24, 9:12		9	+0.61 +0.93	<5 <50	8015		

000006

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-17

Boring Drilled By (Firm name and name of crew chief) Venser Inc / Michael Melton, Geologist Date Drilling Started 08/24/93 Date Drilling Completed 08/24/93 Drilling Method HSA
Aug Engineering / Dr. King, Driller
 M M D D Y Y M M D D Y Y

NR Facility Well No: _____ Unique Well No: _____ Common Well Name _____ Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Boring Location State Plane 375,808 N, 2,479,437 E S/C/N Lat 0 Local Grid Location (If applicable) _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E Long 0 Feet N E
 S W

County Waukesha DNR County Code 68 Civil Town/City/Village Waukesha

Sample Number and Type	Length Att. & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	17	5/5	1	Misc fill silty sand at end of wood fragments, med grayish brown, loose to med dense, moist, no gravel, trace clay				0.0						
			2	grades med gray @ 1.7'				0.0						
			3											
2	20	5/5	4					0.0						
			5	grades wet @ 5'										
3	12	4/6	6					0.0						
			7											
4	21	50/3"	8					0.0						
			9	peat (pt) lakebank, firm, moist	pt			0.0						
5	5T	50/3"	11	silty clay (cc) med gray, firm, moist, trace fine sand, trace root fragments, varred	cl									
			12											

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

Signature Michael Melton Firm Venser 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.

Facility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-18

Boring Drilled By (Firm name and name of crew chief)
Versar Inc / Michael Melton, Geologist
Long Engineering / Don King, Driller
 Date Drilling Started 08/25/93 Date Drilling Completed 08/25/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

DNR Facility Well No. _____ Unique Well No. _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Drilling Location
 Site Plane 375, 808 N, 2, 479, 437 E S/C/N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E W
 Local Grid Location (If applicable)
 N E
 S W

County Waukesha DNR County Code 6-8 Civil Town/City/ or Village Waukesha

Sample Limb and Type	Length Att. & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	Misc fill silty sand w/ fragments of concrete, wood and cinders, mod brownish gray, loose to med dense, moist, trace gravel, w/ clay				0.0							
	22	3/4	2	grades medium gray @ 2.5'				0.0							
		4/5	3												
	20	2/4	4	grades dark gray @ 4'				0.0							
		4/3	5												
	18		6	grades wet at 5.5'				0.0							
			7												
	6	2/2	8	grades saturated @ approx 7.5'				0.0							
		1/1	9	peat (pt) dark brown, firm, moist, w/ silt/clay	pt										
			10												
			11												
			12												

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

Signature Michael Melton Firm Versar 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.

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

Utility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-19

Boring Drilled By (Firm name and name of crew chief)
Vensar Inc / Michael Melton, Geologist
Long Engineering / Dan King, Driller
 Date Drilling Started 08/25/93 Date Drilling Completed 08/25/93 Drilling Method HSA
 M M D D Y Y M M D D Y Y

DNR Facility Well No. _____ Unique Well No. _____ Common Well Name _____
 Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Drilling Location
 State Plane 375,808 N, 2,479,437 E S1/4 N Lat _____ Long _____
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E W Local Grid Location (If applicable)
 N E
 S W

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	Misc fill silty sand fragments of cinders, clay and wood, med ly rplish brown, loose to med dense, moist, w/ gravel, surface clay				0.0							
1	22	3/7	2	grades dark gray @ 2'				0.0							
2	20	2/4	4					0.0							
3	18	3/6	6	grades wet @ 6'				0.0							
4	16	2/2	8	grades sat water @ 7.2'				0.0							
		1/1	9	peat (Pt) dark brown, fine, moist, w/ silt/clay	pt										
			10												
			11												
			12												

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

Signature Michael Melton Firm Vensar 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.

Utility/Project Name VME License/Permit/Monitoring Number _____ Boring Number B-20

Boring Drilled By (Firm name and name of crew chief) Veusar Inc / Michael Melton, Geologist Date Drilling Started 08/25/93 Date Drilling Completed 08/25/93 Drilling Method HSA
Long Engineering / Dan King, Driller
 M M D D Y Y M M D D Y Y

DNR Facility Well No. _____ Unique Well No. _____ Common Well Name _____ Final Static Water Level _____ Feet MSL Surface Elevation _____ Feet MSL Borehole Diameter 2 inches

Drilling Location Site Plane 375,808 N, 2,479,437 E S/C/N Lat _____ Long _____ Local Grid Location (If applicable) _____ Feet _____ Feet
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W N E S W

County Waukesha DNR County Code 6.8 Civil Town/City/ or Village Waukesha

Sample Number and Type	Length, Att. & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	16	8/8	1	Misc fill w/ gilty sand w/ frags of concrete, cinders & wood, weed grass, loose loam dense, moist, trace gravel				0.0						
			2	grades dark grey @ 2'				0.0						
2	22	6/3	3											
			4				0.0							
3	20	4/5	5											
			6	grades wet @ 5.5'				0.0						
4	18	2/3	7											
			8	grades saturated @ 7.8'				0.0						
		1/2	9	peat (pt) dark brown, firm, moist, w/ silt/clay										
			10											
			11											
			12											

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

Signature Michael Melton Firm Veusar 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.

APPENDIX D5
FIELD SCREENING LOG BOOK

PCB SOILS FIELD SCREENING LOG

8/25/93 DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] ($</>$ 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
1900	Bc	STANDARDS B-10-5	10 g	1	-0.01	NA	8024	NA	5-1 to the left
2000		8-24, 10:30 B-10-2		2	-0.83 -0.54	> 5 > 50			
2000		8-24, 10:34 B-10-4		2	+0.51 +0.54	< 5 < 50			
2031		8-24, 10:37 B-20-6		3	-0.05 -0.03	> 5 > 50			
2031		8-25, 9:12 B-8-8		3	-0.34 +0.19	> 5 < 50	↓		
2146		8-24, 8:58 B-7-2		4	-0.51 -0.33	> 5 > 50	8023		
2146		8-24, 8:15 B-7-6		4	-0.15 +0.19	> 5 < 50			
2146		8-24, 8:24 B-7-8		4	-0.23 -0.10	> 5 > 50			
2146		8-24, 8:28 B-7-8		4	-0.15 -0.06	> 5 > 50	↓		
2406	↓	B-11-5 8-24, 11:02	↓	5	+0.22 +0.61	< 5 < 50	8022		

Equipment Calibrations
 scale 10g = 10g
 Pipette 40ul = 40ul
 Photometer 0.70 - 0.90 = 0.81

000002

PCB SOILS FIELD SCREENING LOG

DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
2400	<i>DC</i>	B-15-4 8-24, 15:12	1.0 g	5	+0.54 +0.68	< 5 < 50	8022		
2400		B-15-10 8-24, 15:22		5	-0.21 +0.15	> 5 < 50			
2400		B-5-2 8-23, 16:06		5	-0.08 +0.13	> 5 < 50			

PCB SOILS FIELD SCREENING LOG

DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
4:00	BC	S-7 8-23, 17:25	10 g	9	+0.35 +1.03	< 5 < 50	8015		
4:00	↓	S-9 8-24 10:24	↓	9	+0.58 +0.93	< 5 < 50	↓		
4:00	↓	S-11 8-24, 17:20	↓	9	+0.85 +0.95	< 5 < 50	↓		

000007

APPENDIX D6
LABORATORY ANALYTICAL RESULTS



NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

CASE NARRATIVE

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

09/29/1993

NET Job Number: 93.07730

Project Description: 1871002; VME

Sample Number	Sample Description	Date Taken	Date Received
227056	B17-S thru 9; Comp	08/23/1993	08/27/1993
227057	B18-S thru 8; Comp	08/23/1993	08/30/1993
227058	B9-8	08/23/1993	08/30/1993
227059	B5-2	08/23/1993	08/30/1993
227060	B15-12, B3-9, B1-8, B16-10, B14-10; Co	08/23/1993	08/30/1993
227061	B14-S thru 10; Comp	08/23/1993	08/30/1993
227062	B17-9	08/23/1993	08/30/1993
227063	B12-S thru 8; Comp	08/23/1993	08/30/1993
227064	B16-S thru 10; Comp	08/23/1993	08/30/1993
227065	B19-S thru 8; Comp	08/23/1993	08/30/1993
227066	B4-S thru 8; Comp	08/23/1993	08/30/1993
227067	B5-6 & 8; Comp	08/23/1993	08/30/1993
227068	S1	08/23/1993	08/30/1993
227069	B10-S	08/23/1993	08/30/1993
227070	B10-4	08/23/1993	08/30/1993
227071	B7-6	08/23/1993	08/30/1993
227072	B8-8	08/23/1993	08/30/1993

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms.

The following comments should be noted for the indicated fraction;

PCB Analysis

Included here is your "Level III" QC Report in addition to the "Analytical Report". Upon further review of your data, the following corrections apply to the "Analytical Report":

Sample 227058 has a positive result for PCB-1254 not reported on the original report (dated 09/10/1993).

Sample 227060 gives a non-estimated result for PCB-1016. The original report showed an estimated concentration due to the analyte quantitated above the linear range of the calibration curve. This PCB was reanalyzed at a dilution within the range of the calibration curve.





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

CASE NARRATIVE

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

09/29/1993

NET Job Number: 93.07730

Project Description: 1871002; VME

PCB Analysis (continued)

Sample 227064 gives a non-estimated result for PCB-1016 at a 10x dilution. Sample 227064 has a positive result for PCB-1254 not reported on the original report.

Sample 227068 shows lower reporting limits for the PCBs other than PCB-1254. Further review of the data allowed for the lower reporting limits.

Analysis dates are corrected on this report. All holding times were met.

All Quality Control Indicators are within control limits.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your samples were analyzed. Should you have any questions concerning procedures or results, do not hesitate to call.

Approved by:

A handwritten signature in black ink, appearing to read "Ray Kalicki", is written over the printed name.

Ray Kalicki
Coordinator
Quality Assurance





NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

09/28/1993

CORRECTED REPORT

NET Job Number: 93.07730

Enclosed is the Quality Control Data and Analytical Results for the following samples submitted to NET, Inc. Bartlett Division for analysis:

Project Description: 1871002; VME

Sample Number	Sample Description	Date Taken	Date Received
227056	B17-S thru 9; Comp	08/23/1993	08/27/1993
227057	B18-S thru 8; Comp	08/23/1993	08/30/1993
227058	B9-8	08/23/1993	08/30/1993
227059	B5-2	08/23/1993	08/30/1993
227060	B15-12, B3-9, B1-8, B16-10, B14-10; Co	08/23/1993	08/30/1993
227061	B14-S thru 10; Comp	08/23/1993	08/30/1993
227062	B17-9	08/23/1993	08/30/1993
227063	B12-S thru 8; Comp	08/23/1993	08/30/1993
227064	B16-S thru 10; Comp	08/23/1993	08/30/1993
227065	B19-S thru 8; Comp	08/23/1993	08/30/1993
227066	B4-S thru 8; Comp	08/23/1993	08/30/1993
227067	B5-6 & 8; Comp	08/23/1993	08/30/1993
227068	S1	08/23/1993	08/30/1993
227069	B10-S	08/23/1993	08/30/1993
227070	B10-4	08/23/1993	08/30/1993
227071	B7-6	08/23/1993	08/30/1993
227072	B8-8	08/23/1993	08/30/1993

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please do not hesitate to call.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:

Neal E. Cleghorn
Operations Manager



PROJECT NO. 1871.1		PROJECT NAME VME					PARAMETERS										INDUSTRIAL HYGIENE SAMPLE		Y N			
SAMPLERS: (Signature) <i>Janice R. Smith-Bagheri</i>					(Printed) JANICE R. SMITH-BAGHERI					NO. OF CONTAINERS SEE ATTACHED										REMARKS		
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION																	
TP-1-1	9/8/92	845		X	TP-1					2					SOIL							
TP-2-1	9/8/92	1000		X	TP-2					2					SOIL							
TP-3-1	9/8/92	1150		X	TP-3					2					SOIL							
TP-4-1	9/8/92	1445		X	TP-4					2					SOIL							
TP-5-1	9/9/92	900		X	TP-5					2					SOIL							
TP-6-1	9/9/92	1045		X	TP-6					2					SOIL							
TP-7-1	9/9/92	1245		X	TP-7					2					SOIL							
Relinquished by: (Signature) <i>Janice R. Smith-Bagheri</i>		Date / Time 9/14/92		Received by: (Signature) <i>Jeff Fata</i>		Date / Time 9/14/92		Relinquished by: (Signature)		Date / Time		Received by: (Signature)										
(Printed) JANICE SMITH-BAGHERI				(Printed) JEFF FATA 12:35				(Printed)				(Printed)										
Relinquished by: (Signature) <i>Jeff Fata</i>		Date / Time 9/14/92 2:50		Received for Laboratory by: (Signature) <i>JS</i>		Date / Time 9/14/92 2:30		Remarks IMMEDIATELY PLACED ON ICE IN COOLER.														
(Printed) JEFF FATA				(Printed)																		

APPENDIX D1
SOIL BORING AND WELL LOGS



ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

CORRECTED REPORT

09/28/1993

Sample No. : 227056

NET Job No.: 93.07730

Sample Description: B17-S thru 9; Comp
1871002; VME

Date Taken: 08/23/1993
Time Taken:

Date Received: 08/27/1993
Time Received: 13:40

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	90.0	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/02/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchloroendate	na	%	09/04/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	100	%	09/04/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	124	%	09/04/1993	29-128	seh	8080 (1)



READ INSTRUCTIONS ON BACK OF MANIFEST

DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE

ATT. DIS. REJ. PR.

Required under authority of Act 64, P 1979, as amended and Act 136, P.A. 1989. Failure to file is punishable under section 239.548 MCL or Section 10 of Act 136, P.A. 1989.

Please print or type.

Form Approved OMB No. 2050-0039 Expires 9-3-

UNIFORM HAZARDOUS WASTE MANIFEST

Generator's US EPA ID No.

Manifest Document No.

2 Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: VME AMERICAS, INC. 1005 PERKINS AVENUE NAUKESHA, WI 53186

VME AMERICAS, INC. ONE PARK SQUARE BB&T BUILDING, SUITE 507 ASHEVILLE, N.C. 28801

A. State Manifest Document Number: MI 2662980

B. State Generator's ID

4. Generator's Phone (5704) 257-4660

6. US EPA ID Number

C. State Transporter's ID

5. Transporter 1 Company Name: SUPERIOR HAZARDOUS WASTE GROUP, INC.

8. US EPA ID Number

D. Transporter's Phone (800) 359-1488

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

9. Designated Facility Name and Site Address: WAYNE DISPOSAL 49350 N. SERVICE DRIVE BELLEVILLE, MI 48111

10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone (313) 697-7830

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER): HM

12. Containers

13. Total Quantity

14. Unit Wt/Vol

15. Waste No

NON-REGULATED SPECIAL WASTE

No. Type

Quantity

Unit Wt/Vol

Waste No

13. Additional Descriptions for Materials Listed Above

14. Handling Codes for Wastes Listed Above

11 A. WS# 19-090 APPROVAL 071894WBD

a/ / b/ / c/ / d/ /

15. Special Handling Instructions and Additional Information

PROJECT NO: 20257

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR: If I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

AS AGENT FOR VME AMERICAS / MR MARK DEARONG

Printed/Typed Name: TERRY D. FREUDENKICH

Signature

Date: 06/03/97

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

19. Discrepancy Indication Space

FILE MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM IN MICHIGAN AT 1-800-357-4709 OR OUT OF STATE AT 817-375-7669 AND THE NATIONAL RESPONSE CENTER AT 1-800-224-3832 24 HOURS PER DAY

~~DELIVERED BY~~ *TC W*

NO SALVAGING ON PREMISES

CUSTOMER COPY

WAYNE
SERVICES INC.
1349 HURON
Ypsilanti, Michigan 48197

Office: (313)485-6460
I-94 Landfill (313)697-7830

NON-HAZARDOUS WASTE
JMC

6/06/94

WRITTEN BY: DATE:

ACCT. NAME: MINERAL SPRINGS CORPORATION

ACCOUNT NUMBER: 1490 SHORT NAME: MINSPR

NHCS - 5 - 3
CODE Approval # 312904480

REMARKS: EPA# W1D009325275
VME AMERICAS
Manifest # MI2662930
Hauler SUPERIOR-3.5HL
Time In 4:15 PM Time Out 6:33 PM
G- 1 T- 1 N-

I understand and acknowledge that entry is permitted only at my own risk. I, both personally and on behalf of my employer release Wayne Disposal, Inc. and/or Michigan Disposal, Inc. from any and all liability not caused by its gross negligence or willful misconduct.

Ticket # 1044001

[Signature]
DELIVERED BY

413
128
41

NO SALVAGING ON PREMISES

STRAIGHT BILL OF LADING
ORIGINAL - NOT NEGOTIABLE

Shipper's No. _____

Carrier's No. **100-3022**

S.E.S.H.W.G. INC.
(NAME OF CARRIER)

SCAC _____

Date **2/25/94**

TO: Consignee SESHWGI MINERAL SPRINGS FACILITY	FROM: Shipper VME
Street 1275 Mineral Springs Drive	Street 1005 Perkins Ave
Destination Port Washington, WI Zip 53074	Origin Waukesha, WI Zip 53186

Route: _____ Notes: _____ Vehicle Number: _____

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	PACKING GROUP	WEIGHT (S.D. OR 1K correction)	RATE	LABELS REQUIRED (or exemption)
8dr		NON-REGULATED SPECIAL WASTE						
		55 Gal. Drum/NS # 19.074						
		Approval # 1110						
		2 - AT ST 10015 Hydraulic Oil						
		6 - AT ST 10016						
		Project # 20257						
		Outside						

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

COD Amt. \$

C. O. D. FEE: Prepaid Collect \$ _____

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____

Where the applicable tariff provisions specify a limitation of the carrier's liability (NMFC Item 172), if there is no release or value declaration by the shipper, and the shipper does not declare a value or release the carrier's liability, that liability shall be limited to the extent provided by NMFC Item 172. California intrastate shipments must comply with NMFC Item 172.

FREIGHT CHARGES
PREPAID COLLECT

Signature of Consignor: _____

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

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

PLACARDS REQUIRED **PLACARDS SUPPLIED** **YES** **NO - FURNISHED BY CARRIER**

DRIVERS SIGNATURE: _____

SPECIAL INSTRUCTIONS: _____

SHIPPER: **VME AMERICAS INC**
PER: **Mark E. Dwyer**
DATE: **1/11/94**

CARRIER: **SESHWGI INC**
PER: _____
DATE: **2-23-94**

EMERGENCY RESPONSE TELEPHONE NUMBER: _____

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

6202

HECHIMOVICH
SANITARY LANDFILL, INC.
387-2943 387-3010

*Project
20257*

"FORGET THE REST—CALL THE BEST"

N7296 Hwy. V
Horicon, WI 53032

WEIGHT 9 TRUCK NO.
03:27 PM 11/01/93
58 ID NO.
57800 lb Gross

03:44 PM 11/01/93
58 ID NO.
57780 lb TrGrs
38250 lb TrTar
19520 lb TrNet

PROFILE # *Verbal 930187*

GENERATOR *WME Sales - Waukesha, WI*
GENERATOR *[Signature]*
SIGNATURE *[Signature]*

DATE *10-25-93*

REMARKS *soil*

DRIVER ON

OFF

WEIGHT RECORDED BY *[Signature]*

DRIVER'S SIGNATURE *[Signature]*

Prof.
20257

6201

HECHIMOVICH
SANITARY LANDFILL, INC.

387-2943 387-3010

"FORGET THE REST—CALL THE BEST"

N7296 Hwy. V
Horicon, WI 53032

WEIGHTS TRUCK NO.
12:26 PM 11/01/93
17 ID NO.
58580 1b Gross

12:50 PM 11/01/93
17 ID NO.
58580 1b TrGrs
29200 1b TrGrs

PROFILE # W-11-930187

GENERATOR VME SALES - Waukesha

GENERATOR SIGNATURE [Signature]

DATE 10/25/93

REMARKS SOIL

DRIVER ON OFF

WEIGHT RECORDED BY [Signature]

DRIVER'S SIGNATURE [Signature]

14.90