



DEPARTMENT OF
NATURAL RESOURCES
SED
1997 JUN 27 AM 11:48

December 2, 1993

Mr. David Edquist
Gibbs, Roper, Loots & Williams, S.C.
735 North Water Street
Milwaukee, WI 53202

Re: Perkins Avenue Site
1005 Perkins Avenue, Waukesha, WI
Versar Project Number 1871.003

Dear Mr. Edquist:

In agreement with our proposal and contract dated October 7, 1993, Versar, Inc. (Versar) hereby submits the following summary of the groundwater investigation results for the west lot of the subject facility. This letter contains a brief review of the investigation completed to date, conclusions that developed from the available data, and recommendations for potential additional actions.

This letter should be reviewed in conjunction with additional background information contained in the Phase I and Phase II reports submitted earlier by Versar.

Phase I Assessment

As part of the July 1992 Phase I Environmental Property Transfer Assessment, five underground storage tanks (USTs) were identified on the western portion of the subject property; one UST located inside the manufacturing building and four USTs clustered in the northern parking area. The USTs were no longer in service and were removed during the week of October 11, 1993. As you are aware, the required notification, observation and report submittal to the Wisconsin Department of Natural Resources (WDNR) has been completed. In addition to recommending removal of the USTs, the Phase I recommendations included an investigation adjacent to the USTs (prior to their removal) for the purpose of determining whether a release may have occurred. A Phase II investigation was authorized to implement that recommendation.

Phase II Investigation

A Phase II investigation was conducted in October 1992 in the vicinity of the USTs. Soil borings were advanced and soil samples were collected and analyzed in a laboratory for constituents related to the former tank contents. Boring logs are contained in Attachment A. Soil sampling analytical results are presented in Attachment B. The analytical results from the Phase II investigation indicated that soil within the USTs backfill contained petroleum constituents greater than the allowable 10 parts per million (ppm), as designated by the WDNR. Tank regulations established by the WDNR mandate that if the limit of 10 ppm is exceeded, a groundwater assessment must be conducted. Pursuant to the regulations, a groundwater assessment was authorized.

Mr. David Edquist
Gibbs, Roper, Loots & Williams
Versar Project No. 1871.003

December 2, 1993
Page 2

Groundwater Assessment

Three shallow groundwater monitoring wells were installed in May 1993 as part of the groundwater assessment. Two wells were installed in the interpreted downgradient direction from the USTs, toward the unnamed creek to the east, and one well was installed upgradient, toward Perkins Avenue. Soil borings advanced for the purpose of constructing the wells indicate that a layer of silt and clay resides to a depth of 6 to 10 feet below grade. Boring and well logs are contained in Attachment C. Below the silt and clay is a permeable sand and gravel within which the monitoring wells are screened. The borings were terminated at approximately 16 feet below grade and the bottom elevation of the saturated sand and gravel was not identified. Groundwater elevations within the monitoring wells indicate a low-gradient flow toward the creek, however, due to the location of the wells the groundwater flow gradient along creek could not be accurately determined. As a result of the low-gradient and the variable ground covers on and adjacent to the subject property such as bituminous pavement, natural soils and buildings, the groundwater flow gradient along the stream may occasionally change during precipitation events and high stream flow conditions. In addition, the potential for gravel backfill associated with storm sewers in this vicinity may also cause localized variations in the groundwater flow patterns. The relation of the storm sewer elevations to the groundwater surface was not researched, however, for this assessment.

Groundwater samples were collected from each well and analyzed for the compounds listed within the WDNR regulations. The analytical results confirmed that the release from the USTs had not impacted groundwater, however, volatile organic compounds (VOCs) were detected in the two downgradient wells (MW-02 and MW-03). Laboratory analytical results are shown in Attachment D. The detected VOCs are commonly used as degreasing agents and some may represent degradation products of parent material. The VOCs detected are listed in Table 1 - Analytical Summary and are not believed to be related to the tank contents.

Since the detected VOCs are unrelated to former tank contents, their source remained unknown. In an effort to estimate the vertical and horizontal extent of VOC contamination and establish a potential source, an additional groundwater assessment was authorized. This portion of the investigation consisted of a hydropunch groundwater sampling technique at nine locations. Locations were selected up-, down-, and cross-gradient from the two monitoring wells where the VOCs were detected. In addition, samples were collected in the upper and lower aquifers to define the vertical extent of contamination. Each of the hydropunch borings were used to collect groundwater samples and were subsequently abandoned using bentonite grout. The boring logs are contained in Attachment E. The approximate locations of the borings are shown on Attachment F.

Mr. David Edquist
Gibbs, Roper, Loots & Williams
Versar Project No. 1871.003

December 2, 1993
Page 3

Varying thicknesses of borrow fill was placed across the site. The fill consists of a conglomeration of earth materials which includes, but is not limited to: clay, silt, sand, gravel, spent casting sand, brick, wood, metal, and concrete.

The entire southeastern portion of Wisconsin is a glaciated with drift deposits overlying an erosional sedimentary bedrock surface. Unconsolidated natural deposits begin with a remnant of modern soil and end with erosional sands unconformably overlying bedrock. Unconsolidated natural deposits, under the site, are referred to the New Berlin Formation. This formation consist of glacial till, outwash, and lacustrine deposits.

The uppermost unit is a silty clay to clayey silt till with trace amounts of matrix bound sand and gravel. The till starts several feet below grade and extends to an average depth of 9 feet. Poorly sorted outwash sands and sandy gravels underlie the till. The sand deposit is saturated and contains trace amounts of fine grained material. The outwash base is located approximately 22 feet below surface grade. Lacustrine silts and clayey silts are located under the outwash. The deposit contains trace amounts of matrix bound sand and is reported to be quite uniform. The silt deposit grades into a fine sand at approximately 40 feet below surface grade. The fine sand deposit is poorly sorted and contains silt/clay and coarser fractions of sand. The sand is the erosional deposits which marks the transition between pre glacial and glacial events. The deposit ends approximately 45 feet below grade. Silurian aged dolomite bedrock underlies the erosional sand. The dolomite is reported to be fractured and contains groundwater. Older aged formations of sedimentary bedrock underlie the silurian dolomite for many hundreds of feet.

During the groundwater investigation that utilized the hydropunch technique, Versar personnel located on the subject property, a drawing that indicated the possible existance on a sixth underground storage tank. Upon review of the data Versar received during the Phase I Assessment from the Department of Labor and Human Relations (DILHR), and from the local Fire Marshall Office, the existance of only five tanks were known at the time of registration by VME personnel. As you are aware, the five known tanks have been removed without contamination of the groundwater and soil. The existance of the sixth tank was not known to VME since the tank was not registered when the other tanks were registered. Consistant with this understanding of the tank, when Versar reviewed field notes related to the Phase I Assessment, we confirmed that upon questioning, on-site personnel understood that the paint booth area, where the tank is apparantly located, drained to the sanitary sewer. Versar therefore concluded that, based on available data, only five USTs were located on the subject property. In addition, during the Phase I Assessment, the area where the tank is apparently located was covered with stockpiled material, rendering access or visual observation impossible.

Mr. David Edquist
 Gibbs, Roper, Loots & Williams
 Versar Project No. 1871.003

December 2, 1993
 Page 4

During the removal of the five USTs, a sample of the contents of the sixth tank was collected by the tank removal contractor, to determine if the contamination in the groundwater had come from the tank. The laboratory analytical results of the tank sampling are included in Attachment G. The results indicate, when compared with the previously obtained groundwater sample laboratory analytical results, that the contents of the sixth tank have not been released to the groundwater and therefore the tank does not appear to be the source of the groundwater contamination.

Laboratory analytical results from the hydropunch groundwater samples, presented in Table 2 and Attachment H, confirm the previous analytical results from the monitoring wells and indicate the following:

COMPOUNDS	SAMPLE LOCATION				(PAL) PREVENTIVE ACTION LIMIT	(ES) ENFORCEMENT STANDARD
	MW-01	MW-02	MW-03	MW-03D**		
	Volatile in Parts Per Billion (ppb)					
1,1-Dichloroethane	ND	30	11	11	85	850
1,1-Dichloroethene	ND	ND	ND	10	.024	7
cis-1,2-Dichloroethene	ND	ND	ND	8	10	100
Hexachlorobutadiene	ND	ND	ND	2	***	***
1,1,1-Trichloroethane	ND	330	42	49	40	200
Trichloroethene	ND	370	37	42	.18	5
trans-1,2-Dichloroethene	ND	ND	8.3	ND	20	100

MW = Monitoring Well
 EB = Equipment Blank
 ND = Not Detected

*** = Not Established
 ** = MW-03D is a duplicate sample of MW-03
 * = Only Compounds detected are presented in Table.

PALs and ESs, are provided in the Leaking Underground Storage Tank (LUST) Analytical Guidance (PUBL-SW-138) by the Wisconsin Department of Natural Resources, dated June 1991. PALs and ESs are established by WAC NR 140.

Mr. David Edquist
 Gibbs, Roper, Loots & Williams
 Versar Project No. 1871.003

December 2, 1993
 Page 5

Versar
 INC.

TABLE 2
 HYDROPUNCH ANALYTICAL SUMMARY

		1,1-Dichloroethane	1,2-Dichloroethene	CIS-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Hexachlorobutadiene	1,1,1-Trichloroethane	Trichloroethene
Sample Location	Depth	Concentrations in parts per billion (ppb)						
HP-1	17	6.7	2.9	ND	ND	ND	8.2	6.3
HP-1	48	ND	ND	ND	ND	ND	ND	ND
HP-2	18	2.7	ND	ND	ND	ND	1.5	8.3
HP-2	42	ND	ND	ND	ND	ND	ND	ND
HP-7	14	2.3	ND	ND	ND	ND	1.2	7.8
HP-3	42	ND	ND	ND	ND	ND	ND	ND
HP-4	13	8.6	ND	2.9	ND	ND	ND	29
HP-4	44	ND	ND	ND	ND	ND	ND	ND
HP-5	13.5	ND	ND	ND	ND	ND	ND	ND
HP-5	43.6	ND	ND	ND	ND	ND	3.6	ND
HP-6	15.6	ND	ND	ND	ND	ND	ND	ND
HP-7	15.6	7.6	ND	5.5	ND	ND	19	16
HP-8	15.5	ND	ND	ND	ND	ND	ND	ND
HP-9	15.5	5.8	ND	ND	ND	ND	53	75
HP-9	34	4.4	ND	ND	ND	ND	ND	ND

ND = non detect

Mr. David Edquist
Gibbs, Roper, Loots & Williams
Versar Project No. 1871.003

December 2, 1993
Page 6

1. The detected contaminants are generally confined to the upper sand aquifer. Only two compounds were found in the lower aquifer in locations HP-5 and HP-9 and the low concentration and the fact that the associated compounds were not identified suggests that their presence was a result of cross contamination from the upper aquifer or from sample handling techniques in the field or in the laboratory.
2. The highest concentrations of VOCs are located near the northern property line of the subject facility suggesting the groundwater flow direction in the immediate vicinity may be to the southeast. Refer to Attachments I, J, and K for isoconcentration contours of the primary compounds detected in the groundwater samples from both rounds of sampling events.
3. Chemicals detected further from the apparent source direction show a higher concentration of "daughter" chemicals of the potential source compounds suggesting a longer period in the environment. The release therefore appears not to be recent.
4. The sampling location closest to the stream has not been impacted indicating the potential for the reversed flow gradient as previously suspected.
5. The source of the contamination has not been confirmed, however, it could be concluded from the available data that the source could be off site, to the north of the facility. Contamination concentrations increase toward the northern property line and decrease toward the south, on to the subject property.
6. The horizontal extent of the investigation was not sufficient to determine the potential for receptors. In addition, vertical groundwater flow gradients are not known and the potential for hydraulic connection and discharge to the unnamed stream is not defined.
7. The analytical results of the sixth tank contents indicates that the tank has not released its contents to the groundwater and the source of the groundwater contamination is not this tank.

Recommendations

Similar to the recommendations contained in the Phase II report, since the source of the contamination is likely off-site and not clearly defined, and there is no record, evidence, or knowledge of a release or spill of the identified chemicals, notification requirements to the WDNR are subject to legal interpretation. In addition, since the property was acquired on February 12, 1993 by Dominick J. Giuffre and Frank P. Giuffre d/b/a D. F. Company, notification requirements may be the responsibility of the current owner.



Mr. David Edquist
Gibbs, Roper, Loots & Williams
Versar Project No. 1871.003

December 2, 1993
Page 7

In addition, because the results of the groundwater could be interpreted to indicate an off-site source to the north of the subject property, the adjacent property owner could be contacted to determine if they currently use or have at some time in the past have used chemical associated with the VOCs detected in the groundwater.

Thank you for this opportunity to provide additional environmental services. Should you have any questions or concerns regarding this proposal, please contact Doug Dahlberg or me at (708)990-7555.

Very truly yours,

Michael B. Place, CPG
Department Head,
Geosciences

Douglas J. Dahlberg P.E.
Project Manager

DJD/nd

cc: Jon Hill, VME

Facility/Project Name <u>VME</u>		License/Permit/Monitoring Number		Boring Number <u>USB-1</u>	
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael Melton, Geologist</u> <u>Young Engineering / Drilling, Driller</u>		Date Drilling Started <u>08/24/1983</u> MM DD YY	Date Drilling Completed <u>08/24/1983</u> MM DD YY	Drilling Method <u>HSA</u>	
DNR Facility Well No.	WIR/Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter inches
Boring Location State Plane <u>375,808</u> N. <u>2,479,437</u> E S/C/N		Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable) N <input type="checkbox"/> E <input type="checkbox"/>		
NE 1/4 of <u>NE</u> 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19</u> E		Long <u>0° 0' 0"</u>	Feet S <input type="checkbox"/> Feet W <input type="checkbox"/>		
County	DNR County Code <u>68</u>		Civil Town/City or Village <u>Waukesha</u>		

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	Soil Properties					P 200	RQD/Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
			1	Asphalt cover fill material										
ss-1	1/2	4	1	1-1.3' Very dark grayish brown clay, soft, some gravel (slag fragments)	c4			φ						
		6	2											
		5	3											
		3	4											
ss-2	1/2	4	4	4-5.2' yellowish brown (10YR 5/4) CL	CL			φ						
		4	5	silty clay, mottled gray, 10%										
		8	6	gravel, moist				φ						
		6	7											
ss-3	1/2	9	8	7-8' yellowish brown (10YR 5/4) SP	SP			φ						
		8	9	sand, fine to medium, subangular to subrounded 10-20%				φ						
		11	10	gravel, wet										
ss-4	1/2	9	11	10-11.2' yellowish brown (10YR 5/4) SP	SP			φ						
		12	11	sand, fine to coarse, subrounded										
		11	12	to subangular 20-30% gravel, wet				φ						

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 <u>VME</u>				License/Permit/Monitoring Number			Boring Number <u>VS B-2</u>								
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael McHorn, Geologist</u> <u>Wing Engineering / Mark King, Driller</u>				Date Drilling Started <u>08/24/93</u> M M D D Y Y	Date Drilling Completed <u>08/24/93</u> M M D D Y Y	Drilling Method <u>HSA</u>									
DNR Facility/Well No. <u>WIR-1</u>		Common Well Name		Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches									
Boring Location State Plane <u>375,808 N, 2,479,437 E</u>		S/C/N		Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable) N <input type="checkbox"/> S <input type="checkbox"/>	E <input type="checkbox"/> W <input type="checkbox"/>	Feet <u>0</u>	Feet <u>0</u> W <input type="checkbox"/>							
County <u>Waukesha</u>				DNR County Code <u>68</u>	Civil Town/City or Village <u>Waukesha</u>										
Sample Number and Type	Length Alt. & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		U.S.C.S.	Graphitic Log	Well Diagram	PID/FID	Soil Properties				P 200	ROD/Comments
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
				0-0.5 Cement .5 fill material + wood											
SS-1	1.4 1/2	2 2	1	1-1.4 Very dark grayish (10YR 3 1/2) 2 Silty clay, organic matter.		CL			φ						
				4 moist											
				3											
				4											
SS-2	1.5 2	9 11	5	4-7.5 as above. Slack (10 YR) 5 cinders, limestone fragments		CL			φ						
				10											
				17 6 (10YR 6/4) fine clayey sand, 5-10% gravel											
				7											
SS-3	1/2 4	8 8	8	7-8 brownish yellow (10YR 6/4) Sand, fine to medium, moderately		SP			φ						
				9 8											
				9											
				8											
				10											
SS-4	1.1 2	3 9	11	10-11.1 yellowish brown (10YR 5 1/3) Sand, fine to coarse, very poorly		SC			φ						
				10 11											
				12											
I hereby certify that the information on this form is true and correct to the best of my knowledge.															
Signature <u>Michael McHorn</u>				Firm <u>Versar Inc</u>											
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.															

- | | |
|---|--|
| <input type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Haz. Waste |
| <input type="checkbox"/> Emergency Response | <input type="checkbox"/> Underground Tanks |
| <input type="checkbox"/> Wastewater | <input type="checkbox"/> Water Resources |
| <input type="checkbox"/> Superfund | <input type="checkbox"/> Other |

Page 1 of 2

Facility/Project Name VME	License/Permit/Monitoring Number			Boring Number VSB-3
Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael McHorn, Geologist	Date Drilling Started 08/24/1983	Date Drilling Completed 08/24/1983	Drilling Method HSA	
DNR Facility/Well No. W100 DNR Unique Well No. W100	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 7 inches
Boring Location State Plane 375,808 N, 2,479,437 E S/C/N	Lat 0° 0' 0"	Long 0° 0' 0"	Local Grid Location (If applicable) □ N □ E Feet □ S Feet □ W	
NE 1/4 of NE 1/4 of Section 2 , T 6 N, R 19 E/W	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	U S C S	Graphic Log	Well Diagram	Soil Properties					P 200	ROD/ Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
				Asphalt cover				Ø						
SS-1	1.5 1/2	7 4	1	1-1.7 black silty clay (104R) (gravel fill), slightly moist, slight sand	CL			Ø						
			2											
			6	1.7 to 2.5 brown (104R 5/3)sA6 clay				Ø						
			3											
			4											
SS-2	.2 1/2	9 17	5	4-4.2 Black (104R) silty clay, gravel fragments, moist	CL			Ø						
			20											
			16	6										
			7											
SS-3	1 1/2	3 7	8	7-7.5 light yellowish brown (104R 5/4) sA6 sand, fine to coarse, well sorted,				Ø						
			8	stone gravel, moist										
			6	9	7.5-8 yellowish brown (104R 5/6)									
			10											
SS-4	1 1/2	3 6	11	10-11 as above, grading downward to pale brown (104R 6/2), wet	SW			Ø						
			10											
			12											

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

Signature

Michael McHorn

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 <u>VME</u>		License/Permit/Monitoring Number		Boring Number <u>US B-4 (R)</u>
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael Mellon, Geologist</u> <u>Young Engineering / Paul Kling, Driller</u>		Date Drilling Started <u>08/24/93</u> M M D D Y Y	Date Drilling Completed <u>08/24/93</u> M M D D Y Y	Drilling Method <u>HSA</u>
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane <u>375,808</u> N. <u>2,479,437</u> E S/C/N		Lat <u>0</u> ° <u>0</u> ' <u>0</u> "	Local Grid Location (If applicable) N <input type="checkbox"/> E <input type="checkbox"/>	
NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19</u> E/W		Long <u>0</u> ° <u>0</u> ' <u>0</u> "	S <input type="checkbox"/> Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	
County <u>Waukesha</u>	DNR County Code <u>618</u>	Civil Town/City/ or Village <u>Waukesha</u>		

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	Soil Properties					P 200	RQD/Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
				Asphalt Cover										
1SS	.6	7	1	1-1.6 brown (10y12 4/3) silty clay, trace gravel, slightly moist,	CL			10						
	1	3	2											
	3													
	5	3												
			4											
SS-2	1.3	21	1	4-5.3 light yellowish brown (10y12 6/4)	CL			4						
	2	11	5	silty sand, fine, trace gravel,	CL									
	12			moderately well sorted, slightly moist										
	13	6												
			7											
SS-3	.9	10	7	7-7.9 light yellowish brown	SW			4						
	2	8	8	(10y12 6/4) sand, fine to medium,	SW									
	7			moderately well sorted, laminations,										
	8	9		wet										
			10											
SS-4	1	6	10-11	yellowish brown (10y12 5/6)	SP			4						
	2	5	11	sand, fine to med, well sorted,	SP									
	6			grades down to brown (10y12 5/3)										
	8	12		wet										

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

Signature

Michael Mellon

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.

Sample Number and Type	Soil/Rock Description And Geologic Origin For Each Major Unit			Soil Properties				RQD/ Comments
	Length Att. Recovered (m)	Blow Counts	Depth in Feet	U S C S	Graphic Log	Well Diagram	PID/FID	
55-7	7 2	9 16 66 46	13 14 15	13-13.7 Grayish brown (10YR 5/2) Sand, fine gravel, subangular Very poorly sorted, wet	GW	φ		
55-6	1.1 1/2	35 12	16 17	16-17.1 Pale brown (10YR 6/3) sand fine to medium, moderately well sorted, subangular to subrounded	SW	φ		
55-7	1.2 2	41 21 20 19 26 21	19 20 21 22 23 24	19-20.2 light brownish gray, (10YR 6/2) sand (fine to coarse) and gravel, very poorly sorted, wet GW	SW	φ		

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

Page 1 of 1

Facility/Project Name	VME	License/Permit/Monitoring Number	Boring Number
		VS B-5	
Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael McLean, Geologist Morgan Engineering / Mark King, Driller		Date Drilling Started 08/24/93 M M D D Y Y	Date Drilling Completed 08/24/93 M M D D Y Y
DNR Facility Well No.	W1 Unique Well No.	Common Well Name	Final Static Water Level Feet MSL
		Surface Elevation Feet MSL	
Boring Location State Plane		Lat <u>0</u>	Borehole Diameter <u>7</u> inches
NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19E</u>		Long <u>0</u>	Local Grid Location (If applicable)
		<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County	Waukesha	DNR County Code <u>6-8</u>	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	Soil Properties					
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200
1SS-1	.8	6	1	1-1.4 Dark brown (10YR 3/3) sand	SC								
	2	5	2	and gravel, very poorly sorted, wet									
SS-2	1.3	2	3	1.4- 1.8 black (10YR) sand, fine, very well sorted wet	SP								
	2	1	5										
	2	2	7										
SS-3	1.7	1	8	4-5.3 black organic clay, moist	OL								
	2	4	8	7.5- 8.7 gray (10YR 6/1) silty									
	5	5	9	clay, grading down to clayey silt, moist	CL								
	6	9	10										
SS-4	1.3	12	11	10-10.2 as above, wet	OL								
	2	16	11	10.2-11.3 gravel, 20% sand,	GW								
	16	20	12	Fine to coarse, Subrounded to Subangular, very poorly sorted, wet									

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 <u>VME</u>		License/Permit/Monitoring Number		Boring Number <u>US B-C</u>	
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael McHorn, Geologist</u> <u>Young Engineering / Dunkling, Driller</u>		Date Drilling Started <u>08/27/93</u> M M D D Y Y	Date Drilling Completed <u>08/27/93</u> M M D D Y Y	Drilling Method <u>HSA</u>	
DNR Facility Well No.	WI Circum Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter inches
Boring Location State Plane <u>375,808</u> N. <u>2,479,437</u> E S/C/N		Lat <u>0</u> ° <u>0</u> '	Long <u>0</u> ° <u>0</u> '	Local Grid Location (If applicable) □ N <u> </u> □ E <u> </u> Feet □ S <u> </u> □ W <u> </u>	
County <u>Waukesha</u>	DNR County Code <u>6-8</u>		Civil Town/City/ or Village <u>Waukesha</u>		

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	Soil Properties					P 200	RQD/Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
BS-1	1/2	8	1	1-1.5 black (10YR) silty clay, Slightly moist,	CL			φ						
		6	2											
		5	3	1.5-2 dark grayish brown (10YR 4/2)										
		7	3	Silty clay, Slightly moist										
			4											
SS-2	1/2	16	1	4-5.5 yellowish brown (10YR 5/6)	ML			φ						
		12	5	fine sandy silt, mottled gray,										
		12	7	Trace subrounded to subangular gravel, slightly moist										
		10	6											
			7											
SS-3	1/2	10	1	7-8.3 CS above, grading down	ML			φ						
		12	8	to yellowish brown (10YR 5/6)										
		10	8	Sand, fair to medium, 15% gravel	SCW			φ						
		10	9	subrounded to subangular wavy										
			10											
SS-4	1/2	7	1	10-11 Pale brown (10YR 6/3) sand, SCW				φ						
		11	11	moderately well sorted, fine to medium, some coarse sand,										
		10	12	Trace gravel, wet.										

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

Signature

Michael McHorn

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.

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

Page 1 of 21

Facility/Project Name <u>VME</u>		License/Permit/Monitoring Number		Boring Number <u>USB-7</u>
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael McHorn, Geologist</u> <u>Wing Engineering / Mark Miller</u>		Date Drilling Started <u>08/27/93</u> M M D D Y Y	Date Drilling Completed <u>08/27/93</u> M M D D Y Y	Drilling Method <u>HSA</u>
DNR Facility Well No.	WTR Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane <u>375,808 N, 2,479,437 E S/C/N</u>		Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable) □ N □ E	
NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> , N, R <u>19E</u> E/W		Long <u>0° 0' 0"</u>	Feet <u>0</u> S Feet <u>0</u> W	
County <u>Waukesha</u>	DNR County Code <u>6-8</u>		Civil Town/City or Village <u>Waukesha</u>	

Number and Type	Length Alt. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Soil Properties							RQD/Comments
						Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
				Asphalt Cover									
SS-1	1	22	1	1-1.5 Gravel fill	GW			∅					
	1/2	32	2	1.5-2 black (coydr) clay, organic, cc									
	11			Slightly moist									
	5	3											
			d										
SS-2	1.3	21	4	4-5.3 yellowish brown (coydr/6) ML				∅					
	1/2	10	5	Sandy Silt, traces silt									
	15			gravel, slightly moist									
	13	6											
			7										
SS-3	1.3	8	7	7-8.3 Yellowish brown (coydr/6)	SW			∅					
	1/2	7	8	Sand, fine to medium, traces silt									
	8			rounded gravel, moderately well sorted, wet									
	8	9											
			10										
SS-4	1.3	5	10	10-10.5 yellowish brown (coydr/6)	SW			∅					
	1/2	5	11	Silty Sand, wet									
	7												
	10	12		10.5-11.5 grayish brown (coydr/6)	SW			∅					
				sand, fine to coarse, trace gravel, wet									

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

Signature Michael McHornFirm 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 USB-8
Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael McHorn, Geologist Urbang Engineering / Don Kling, Driller	Date Drilling Started 08/27/98 M M D D Y Y	Date Drilling Completed 08/27/98 M M D D Y Y	Drilling Method HSA	
DNR Facility Well No. / WI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter inches
Boring Location State Plane 375,808 N. 2,479,437 E S/C/N NE 1/4 of NE 1/4 of Section 2 , T 6 N. R. 19 E/W		Lat 0° 0' 0" Long 0° 0' 0"	Local Grid Location (If applicable) □ N □ E Feet □ S Feet □ 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			
				Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index				P 200	ROD/ Comments		
			1											
SS-1	1.5 1/2	18 12	2	1-1.2 Very Pale brown (COYR 8/3) clayey GCL Gravel fill			.5							
			3	1.2-2 black (COYD) clayey sandy gravel fill										
			4											
SS-2	1.3 1/2	11 4	5	4-4.6 as above 4.6 - 5.2 brownish yellow (COYR 6/6) CL	6C		20*							
			6	Fine sandy clay gradually becoming SC to clayey sand										
			7											
SS-3	1.3 2	7 1/5	8	7-8.3 brownish yellow (COYR 6/6) Silty fine sand, trace gravel, wet	SM		10*							
			9											
			10											
			11	*Moisture may have affected PSD										
			12	Readings not reliable										

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

Signature

Michael McHorn

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.

Number and Type	ample
Length Att. & Recovered (in)	Blow Counts
Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit
	U S C S
	Graphic Log
	Well Diagram
	PID/FID
	Compressive Strength
	Moisture Content
	Liquid Limit
	Plasticity Index
	P 200
	RQD/ Comments

Facility/Project Name VME	License/Permit/Monitoring Number			Boring Number USB-9
Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael McHorn, Geologist Long Engineering / Don Kling, Driller		Date Drilling Started 08/12/7193	Date Drilling Completed 08/12/2193	Drilling Method HSA
DNR Facility Well No.	WR Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane 375,808 N. 2,479,437 E S/C/N NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19E		Lat 0° 0' 0"	Long 0° 0' 0"	Local Grid Location (If applicable) □ N □ E Feet □ S Feet □ 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	Soil Properties					P 200	RQD/ Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
SS-1	1/2	10	1	1-1.5 Gravel Coll	GW			1						
	2	6	2	1.5-1.7 black (COYR) clay	CH			1						
	5		5	1.7-2 Olive gray (5Y 1/2) clay										
	4	3	4	Sand										
			4											
SS-2	1/2	2	2	4-5 Olive gray (5Y 1/2) clay, some CL	CL			∅						
	4	5	4	Rust color staining	CL									
	6	6	6											
			7											
SS-3	1/2	5	4	7-8.2 Olive gray (5Y 1/2) fine sandy clay, some silt, moist	CL			∅						
	6	8	6	8.2-8.5 sand and gravel, moist	GW			∅						
	12	9	10											
SS-4	1/2	2	10	10-12 as above, wet	GW			∅						
	16	11	20											
	12													

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

Signature Michael McHorn 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.

- | | |
|---|--|
| <input type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Haz. Waste |
| <input type="checkbox"/> Emergency Response | <input type="checkbox"/> Underground Tanks |
| <input type="checkbox"/> Wastewater | <input type="checkbox"/> Water Resources |
| <input type="checkbox"/> Superfund | <input type="checkbox"/> Other _____ |

Page 1 of 1

Facility/Project Name	VME	License/Permit/Monitoring Number	Boring Number
Boring Drilled By (Firm name and name of crew chief)		Date Drilling Started	Date Drilling Completed
Versar Inc / Michael McHorn, Geologist		08/27/98	08/27/98
(Loring Engineering / Drilling, Driller)		MM DD YY	MM DD YY
DNR Facility Well No.	W. Unique Well No.	Common Well Name	Final Static Water Level Feet MSL
			Surface Elevation Feet MSL
Boring Location	Local Grid Location (If applicable)		
State Plane	375,808	N, 2,479,437	E S/C/N
NE 1/4 of NE 1/4 of Section	2	T 6 N, R 19E	Lat 0' 0" Long 0' 0"
County	Waukesha	DNR County Code	Civil Town/City/ or Village
6-8	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	Soil Properties					P 200	ROD/Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
SS-1	1.5	87	1	1-2.5 Brownish yellow (COYR 6/8) SW	SM									
	16	2	2	Sand, fine to medium, trace										
	16	2	3	gravel, moderately well sorted,										
	17	3	4	dry										
SS-2	0.5	69	5	4-4.2 brownish yellow (COYR 6/8) SM	SM									
	21	2	6	Silty sand, fine to medium, dry										
	12	2	7											
	2	2	8											
SS-3	1.5	76	7	7-7.6 as above	SM									
	2	6	8	7.6-8.3 black (COYR) friable clay	CC									
	9	9	9	clay, dry										
	12	9	10	8.3-8.5 yellowish brown (COYR 5/4) fine sandy clay, dry										
SS-4	2	20	10	10-12 light yellowish brown	SM									
	2	25	11	(COYR 6/4) silty, fine sand, granular										
	32	12	12	downward to clayey fine sand, trace gravel, moist										

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

Signature Michael McHorn 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 <u>VME</u>		License/Permit/Monitoring Number		Boring Number <u>USB-11</u>
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael McHerr, Geologist</u> <u>Abing Engineering / Dyl Kling, Driller</u>		Date Drilling Started <u>08/27/93</u> M M D D Y Y	Date Drilling Completed <u>08/27/93</u> M M D D Y Y	Drilling Method <u>HSA</u>
DNR Facility Well No.	WRI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane <u>375,808 N, 2,479,437</u> E S/C/N		Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable) □ N <u> </u> □ E <u> </u> Foot <u> </u> Feet <u> </u> □ S <u> </u> Feet <u> </u> □ W <u> </u>	
County	DNR County Code <u>6-8</u>		Civil Town/City or Village <u>Waukesha</u>	

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				P 200	ROD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
			1											
			2											
			3											
			4											
SS-1	.5 1/2	50/5	5	4-4.5 Very pale brown (10YR 2/4) Silty sand, trace gravel, dry	SM			Ø						
			6											
			7											
SS-2	2 1/2		8	7-7.5 as above 7.5-8.5 Black (10YR) silt, dry	SM			1.25						
			9	8.5-9 Dark yellowish brown (10YR 4/4) grading down to very pale brown (10YR 2/8) silty clay, some fine sand, dry	ML			2.75						
			10						1.0					
SS-3.	.5 1/2		11	10-10.5 as above	CL									
			12											

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

Signature

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.

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

ATTACHMENT B
SOIL SAMPLE LABORATORY
ANALYTICAL RESULTS
AND CHAIN OF CUSTODY



**ENVIRONMENTAL
LABORATORIES INC.**

7/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E04005 VSB-1/SOIL/PROJECT: VME
DATE COLLECTED 07/24/92 DATE RECEIVED 07/27/92
RESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

<u>TEST NAME</u>	<u>RESULT</u>	<u>UNITS</u>	<u>ANALYZED</u>	<u>METHOD</u>	<u>LIMIT</u>
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

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.

AIHA ACCREDITED

APPROVAL m.f.v



07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E02366 VSB-2/SOIL/PROJECT: VME
DATE COLLECTED 07/24/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

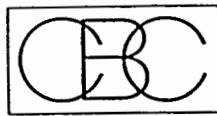
PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

↑ = 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.

AIHA ACCREDITED

APPROVAL M.J.V.



**ENVIRONMENTAL
LABORATORIES INC.**

07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

■ERSAR, INC. - MIDWEST REGIONAL OFFICE
520 KENSINGTON ROADSUITE 115
OAK BROOK , IL 60521
■TTN: M.PLACE/J.SMITH

CHAIN OF CUSTODY

SAMPLE 92209-E02367 VSB-3/SOIL/PROJECT: VME
DATE COLLECTED 07/24/92 DATE RECEIVED 07/27/92
RESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

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.

AIHA ACCREDITED

APPROVAL M.F.W.



07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E02368 VSB-4/SOIL/PROJECT: VME
DATE COLLECTED 07/24/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL PETROLEUM HYDROCARBONS	55	PPM	07/28/92	IN-HOUSE METHOD	
				BASED ON SIMILARITIES TO A MINERAL SPIRIT STANDARD	

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.

AIHA ACCREDITED

APPROVAL M.J.W.



07/30/92

LABORATORY REPORT

PAGE .1

E102 8475972 W31

VERSAR, INC. - MIDWEST REGIONAL OFFICE
7520 KENSINGTON ROAD SUITE 115
OAK BROOK , IL 60521
ATTN: M.PLACE/J.SMITH

CHAIN OF CUSTODY

SAMPLE 92209-E02369 VSB-5/SOIL/PROJECT: VME
DATE COLLECTED 07/24/92 DATE RECEIVED 07/27/92
RESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE-INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

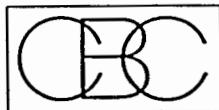
PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

Q = 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.

AIHA ACCREDITED

APPROVAL m.j.r.



**ENVIRONMENTAL
LABORATORIES INC.**

07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

VERSAR, INC. - MIDWEST REGIONAL OFFICE
7520 KENSINGTON ROAD SUITE 115
OAK BROOK , IL 60521
ATTN: M.PLACE/J.SMITH

CHAIN OF CUSTODY

SAMPLE 92209-E04006 VSB-6/SOIL/PROJECT: VME
DATE COLLECTED 07/27/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

<u>TEST NAME</u>	<u>RESULT</u>	<u>UNITS</u>	<u>ANALYZED</u>	<u>METHOD</u>	<u>LIMIT</u>
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

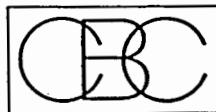
PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

* = 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.

AIHA ACCREDITED

APPROVAL M-T



**ENVIRONMENTAL
LABORATORIES INC.**

07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E04007 VSB-7/SOIL/PROJECT: VME
DATE COLLECTED 07/27/92 DATE RECEIVED 07/27/92
RESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

<u>EST NAME</u>	<u>RESULT</u>	<u>UNITS</u>	<u>ANALYZED</u>	<u>METHOD</u>	<u>LIMIT</u>
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

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.

AIHA ACCREDITED

APPROVAL m.Tw.



**ENVIRONMENTAL
LABORATORIES INC.**

07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E04008 VSB-8/SOIL/PROJECT: VME
DATE COLLECTED 07/27/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

<u>TEST NAME</u>	<u>RESULT</u>	<u>UNITS</u>	<u>ANALYZED</u>	<u>METHOD</u>	<u>LIMIT</u>
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

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.

AIHA ACCREDITED

APPROVAL M.J.R.



07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

VERSAR, INC. - MIDWEST REGIONAL OFFICE
7520 KENSINGTON ROAD SUITE 115
OAK BROOK , IL 60521
ATTN: M.PLACE/J.SMITH

CHAIN OF CUSTODY

SAMPLE 92209-E04009 VSB-9/SOIL/PROJECT: VME
DATE COLLECTED 07/27/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

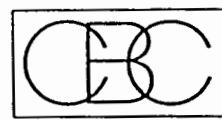
PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.

* = 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.

AIHA ACCREDITED

APPROVAL *m.r.*



**ENVIRONMENTAL
LABORATORIES INC.**

07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E04010 VSB-10/SOIL/PROJECT: VME
DATE COLLECTED 07/27/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT.-INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

<u>TEST NAME</u>	<u>RESULT</u>	<u>UNITS</u>	<u>ANALYZED</u>	<u>METHOD</u>	<u>LIMIT</u>
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

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.

AIHA ACCREDITED

APPROVAL 21:7/2



07/30/92

LABORATORY REPORT

PAGE 1

E102 8475972 W31

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

CHAIN OF CUSTODY

SAMPLE 92209-E04011 VSB-11/SOIL/PROJECT: VME
DATE COLLECTED 07/27/92 DATE RECEIVED 07/27/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM	07/28/92	IN-HOUSE METHOD	

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.

Q = 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.

AIHA ACCREDITED

APPROVAL *mjh*

E102

PROJECT NO.	PROJECT NAME VME (PROJECT MANAGER: MIKE PLACE)					PARAMETERS	INDUSTRIAL HYGIENE SAMPLE
SAMPLERS: (Signature) <i>Jamie R. Smith Bagheri</i>	(Printed) JANICE R. SMITH BAGHERI					NO. OF CONTAINERS TPH - NO PRES.	Y N
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION		
VSB-1/SS-3	7/24/92		X	VSB-1	1 X	E0400\$	SOIL
VSB-2/SS-3	7/24/92		X	VSB-2	1 X	E02366	
VSB-3/SS-5	7/24/92		X	VSB-3	1 X	E02367	
VSB-4/SS-1	7/24/92		X	VSB-4	1 X	E02368	
VSB-5/SS-3	7/24/92		X	VSB-5	1 X	E02369	
VSB-6/SS-4	7/27/92		X	VSB-6	1 X	E04006	
VSB-7/SS-3	7/27/92		X	VSB-7	1 X	E04007	
VSB-8/SS-3	7/27/92		X	VSB-8	1 X	E04008	
VSB-9/SS-3	7/27/92		X	VSB-9	1 X	E04009	
VSB-10/SS-3	7/27/92		X	VSB-10	1 X	E04010	
VSB-11/SS-2	7/27/92		X	VSB-11	1 X	E04011	
Relinquished by: (Signature) <i>Jamie R. Smith Bagheri</i> (Printed)		Date / Time 7/27/92 8:30 PM	Received by: (Signature) <i>Stacy Mattila</i> (Printed)		Relinquished by: (Signature) <i>Stacy Mattila</i> (Printed)	Date / Time 7/27/92 8:33	Received by: (Signature) <i>Stacy Mattila</i> (Printed)
Relinquished by: (Signature) <i>JANICE R. SMITH BAGHERI</i> (Printed)		Date / Time	Received for Laboratory by: (Signature)		Date / Time	Remarks	IMMEDIATELY PLACED ON ICE IN COOLER AFTER SAMPLE COLLECTED,
			(Printed)				

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME					PARAMETERS	8475972		INDUSTRIAL HYGIENE SAMPLE	Y N		
	VME (PROJECT MANAGER: MIKE RACE)						7-28-92					
SAMPLERS: (Signature)	(Printed)											
<i>JANICE SMITH-BASHERI</i>												
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	GC A/F'S	GC VOC'S	PCBS	TPH	MATRIX	PRES.
SOIL-SURF	7/28/92	X	DUMP			3	X				SOIL	NONE
ELEV-2	7/28/92	X	ELEV-2			1	X				OIL	NONE
STREAM-UP	7/28/92	X	STREAM			4	X				WATER	HCl
STREAM-DOWN	7/28/92	X	STREAM			4	X				WATER	HCl
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)	(Printed)	(Printed)	(Printed)	(Printed)	(Printed)	(Printed)	(Printed)
<i>JANICE SMITH-BASHERI</i>	7/28/92 1:25	<i>LINDA BISHOP</i> 7/28/92 1:25	<i>JANICE SMITH-BASHERI</i>									
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	HAND DELIVERED TO LAB.							
<i>SALLY MATHILA</i>	7/28/92 3:20	<i>LINDA BISHOP</i>			IMMEDIATELY PLACED ON ICE AFTER SAMPLE COLLECTED.							
(Printed)		(Printed)			QA/QC PACKAGE "B" REQUIRED.							
<i>SALLY MATHILA</i>												

Page 1 of 1

Facility/Project Name Akerman /VME				License/Permit/Monitoring Number			Boring Number SBMW-01							
Boring Drilled By (Firm name and name of crew chief) Versar Inc.: Alan Esko (Geologist) Wana Engineering: Dan Kling (Driller)				Date Drilling Started 05/11/1993	Date Drilling Completed 05/11/1993	Drilling Method 4 1/4 HSA								
DNR Facility Well No. / WI Unique Well No.		Common Well Name WMW-01		Final Static Water Level 839.37 Feet MSL	Surface Elevation 847.86 Feet MSL	Borehole Diameter 8.25 inches								
Boring Location State Plane 374,347.06 N. 2,479,440.96 E S/C/N NE 1/4 of NE 1/4 of Section 2 . T 6 N. R 19 E BW				Lat 0° 0' 0"	Long 0° 0' 0"	Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> 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		U S C S	Graphic Log	Well Diagram	P/D/FID	Soil Properties				P 200	RQD/ Comments
			1	2					3	4	5	6		
1 SS	17"	3 1/3 / 3 1/3	2	Ac Pavement ~4" Gravel Fill ~8"	CL	PVC Pipe Pellets/Cone 8ppm	Filter Pack	.5- 1.0						
2 SS	15"	2 1/2 / 3 1/2	4	Silty Clay (CL), black/grey, tc sand, organics, med. stiff, moist	SC	PVC Pipe Pellets/Cone 2	Filter Pack	.5- 1.5						
3 SS	14"	1 1/2 / 3	6	Sandy Clay, brown, soft-md.stiff, moist-wet	CH	PVC Pipe Screen	3	.25						
4 S	18"	2 1/2 / 4	8	Grades to tc sand, brown/grey mottled, wet, H. plastic, soft	SC	PVC Pipe Screen	.6							
5 SS	9"	4 1/4 / 4	10	Clayey Sand, brown, tc gravel, loose	SW	PVC Pipe Screen	3							
6 SS	19"	8 1/4 / 6	12	Grades to Sand, fn-cs, little gravel, brown, saturated, loose	SP	PVC Pipe Screen	5							
7 S	12"	1 1/2 / 6	14	Grades to fn-med., some gravel, med. dense	SW	Filter Pack	2							
				End of Boring @ 16'	GW									

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

Signature

Alan J. Esko

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 Pakerman / VME	Local Grid Location of Well ft. <input type="checkbox"/> N. <input checked="" type="checkbox"/> S. ft. <input type="checkbox"/> E. <input checked="" type="checkbox"/> W.	Well Name WMW-01
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane 374,347.06 ft. N, 2,479,440.96 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 Distance Well Is From Waste/Source Boundary 174 ft. NE 1/4 of NE 1/4 of Sec. 2, T. 6, N. R. 19 E.	Date Well Installed 05/11/93 m m d d y y
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input checked="" 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	Well Installed By: (Person's Name and Firm) Dan Kling Wang Engineering

A. Protective pipe, top elevation 847.92 ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation 847.65 ft. MSL	2. Protective cover pipe: a. Inside diameter: 8.0 in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 04 Other <input checked="" type="checkbox"/> Flush Mount Cast
C. Land surface elevation 847.86 ft. MSL	d. Additional protection? If yes, describe: _____ Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
D. Surface seal, bottom ft. MSL or 1.0 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 type="checkbox"/> SM <input type="checkbox"/> SC <input checked="" type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input checked="" type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Concrete Other <input checked="" type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input 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. _____ 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 3 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: a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> b. Manufacturer Northern Ill. Pump c. Slot size: 0.010 in. d. Slotted length: 10.0 ft.
E. Bentonite seal, top ft. MSL or 1.0 ft.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Natural <input checked="" type="checkbox"/> Other <input type="checkbox"/>
F. Fine sand, top ft. MSL or N/A ft.	
G. Filter pack, top ft. MSL or 3.0 ft.	
H. Screen joint, top ft. MSL or 4.5 ft.	
I. Well bottom ft. MSL or 14.5 ft.	
J. Filter pack, bottom ft. MSL or 16.0 ft.	
K. Borehole, bottom ft. MSL or _____ ft.	
L. Borehole, diameter in.	
M. O.D. well casing in.	
N. I.D. well casing in.	

The diagram illustrates a vertical monitoring well borehole. At the top, there is a protective pipe assembly. Below it, the well casing extends downwards. The borehole is filled with various materials: a bentonite seal at the top, followed by fine sand, a filter pack, and a screen joint. The well bottom is shown at 14.5 ft MSL. The borehole diameter is indicated as 8.25 in. The outer boundary of the borehole is labeled as 2.25 in. O.D. well casing and 2.00 in. I.D. well casing.

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

Signature

Firm **Versar, Inc.**

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>WMW-01</u>
Facility License, Permit or Monitoring Number _____	County Code <u>68</u>	Wis. Unique Well Number _____

1. Can this well be purged dry?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Before Development	After Development
2. Well development method			
surged with bailer and bailed	<input type="checkbox"/> 41	a. <u>8.7</u> ft.	<u>8.7</u> ft.
surged with bailer and pumped	<input type="checkbox"/> 61	b. <u>05/13/93</u>	<u>05/13/93</u>
surged with block and bailed	<input type="checkbox"/> 42	m m d d y y	m m d d y y
surged with block and pumped	<input checked="" type="checkbox"/> 62	c. <u>12:45</u> <input type="checkbox"/> a.m. <u>12:45</u> <input checked="" type="checkbox"/> p.m.	<u>13:15</u> <input type="checkbox"/> a.m. <u>13:15</u> <input type="checkbox"/> p.m.
surged with block, bailed and pumped	<input type="checkbox"/> 70		
compressed air	<input type="checkbox"/> 20		
bailed only	<input type="checkbox"/> 10		
pumped only	<input type="checkbox"/> 51		
pumped slowly	<input checked="" type="checkbox"/> 50		
Other _____	<input type="checkbox"/>		
3. Time spent developing well	_____ <u>30</u> min.		
4. Depth of well (from top of well casing)	_____ <u>14.3</u> ft.		
5. Inside diameter of well	_____ <u>2.00</u> in.		
6. Volume of water in filter pack and well casing	_____ <u>.9</u> gal.		
7. Volume of water removed from well	_____ <u>9.0</u> gal.		
8. Volume of water added (if any)	_____ <u>0.0</u> gal.		
9. Source of water added _____			
10. Analysis performed on water added?	<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, attach results)		
11. Depth to Water (from top of well casing)	a. <u>8.7</u> ft.		
Date	b. <u>05/13/93</u>		
Time	c. <u>12:45</u> <input type="checkbox"/> a.m. <u>12:45</u> <input checked="" type="checkbox"/> p.m.		
12. Sediment in well bottom	_____ <u>.2</u> inches		<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15	Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25	
(Describe)	<u>Park brown</u>	<u>Slightly Turbid</u>	
Fill in if drilling fluids were used and well is at solid waste facility:			
14. Total suspended solids	_____ <u> </u> mg/l	_____ <u> </u> mg/l	
15. COD	_____ <u> </u> mg/l	_____ <u> </u> mg/l	

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

16. Additional comments on development: Moderate to Good Recharge

Well developed by: Person's Name and Firm Name: <u>Alan G. Esko</u> Firm: <u>Versar, Inc.</u>	I hereby certify that the above information is true and correct to the best of my knowledge. Signature: <u>Alan G. Esko</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.

Facility/Project Name <u>Akerman VME</u>		License/Permit/Monitoring Number		Boring Number <u>SBMW-02</u>
Boring Drilled By (Firm name and name of crew chief) <u>Alan Esko ~ Versar, Inc</u>		Date Drilling Started <u>05/11/93</u>	Date Drilling Completed <u>05/11/93</u>	Drilling Method <u>4 1/4 HSA</u>
DNR Facility Well No.	WY Unique Well No.	Common Well Name <u>WMW-02</u>	Final Static Water Level <u>839.55</u> Feet MSL	Surface Elevation <u>846.46</u> Feet MSL
Boring Location State Plane <u>374,692.94</u> N, <u>2,479,520.20</u> E (S/C/N)		Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable) NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19</u> E/W	Long <u>0° 0' 0"</u>
County	Waukesha	DNR County Code <u>6-8</u>	Civil Town/City or Village <u>Waukesha</u>	

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	P/D/FID	Soil Properties				RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1-S	18"	6/6	2	Ac Pavement ~3" Sand + Gravel Fill ~8"	CL				2.0				
			4	Silty Clay, black/grey, vry. Stiff, moist									
	18"	9	6	Clayey Silt, brown, little gravel, Sand, moist grades to	ML								
			8	Sandy Silt, brown, tc gravel, med. dense									
2 SS	18"	3/4/2	10	grades to Silty Sand, fn grained, brown, saturated, loose	SM								
	12"		12	Gravely Zone w/drilling	GW								
3-S	2'	7/8/9/11	14	Gravel, well graded, some sand (fn-cs), med. dense, saturated									
	12"		16	EOB@16'									

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

Signature Alan J. Esko 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 <i>Akerman / VME</i>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input checked="" type="checkbox"/> S. ft. <input type="checkbox"/> E. <input checked="" type="checkbox"/> W.	Well Name <i>WMW-02</i>
Facility License, Permit or Monitoring Number		Grid Origin Location Lat. _____ Long. _____ or St. Plane 374,692.94 ft. N, 2,479,520.2 ft. E.	Wis. Unique Well Number DNR Well Number <i>05111193</i>
Type of Well	Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source <i>NE 1/4 of NE 1/4 of Sec. 2, T. 6 N. R. 19 E.</i>	Date Well Installed <i>mm dd yy</i>
Distance Well Is From Waste/Source Boundary	<i>100</i> 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) <i>Dan Kling</i> <i>Wang Engineering</i>
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<p>A. Protective pipe, top elevation <i>-846.48</i> ft. MSL</p> <p>B. Well casing, top elevation <i>-846.11</i> ft. MSL</p> <p>C. Land surface elevation <i>-846.46</i> ft. MSL</p> <p>D. Surface seal, bottom <i>1.0</i> ft. MSL or <i>1.0</i> ft.</p>			
<p>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 type="checkbox"/> SP <input checked="" 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"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/></p> <p>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</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis):</p>			
E. Bentonite seal, top	<i>1.0</i> ft. MSL or <i>1.0</i> ft.	5. Annular space seal: a. Granular Bentonite <input type="checkbox"/> 3.3 b. Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 3.1 d. % Bentonite Bentonite-cement grout <input type="checkbox"/> 5.0 e. Ft³ volume added for any of the above <input type="checkbox"/> Tremie <input type="checkbox"/> Tremie pumped <input type="checkbox"/> Gravity	
F. Fine sand, top	<i>1/4</i> ft. MSL or <i>1/4</i> ft.	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 3.2 c. Other <input type="checkbox"/>	
G. Filter pack, top	<i>2.3</i> ft. MSL or <i>2.3</i> ft.	7. Fine sand material: Manufacturer, product name & mesh size a. <i>Industrial Sand, Canada, 10-20</i>	
H. Screen joint, top	<i>4.5</i> ft. MSL or <i>4.5</i> ft.	8. Filter pack material: Manufacturer, product name and mesh size a. <i>Industrial Sand, Canada, 10-20</i>	
I. Well bottom	<i>14.5</i> ft. MSL or <i>14.5</i> ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>	
J. Filter pack, bottom	<i>16.0</i> ft. MSL or <i>16.0</i> ft.	10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.01 Other <input type="checkbox"/>	
K. Borehole, bottom	<i>ft.</i> MSL or <i>ft.</i>	b. Manufacturer <i>No. Illinois Pump</i> c. Slot size: <i>0.01 in.</i> d. Slotted length: <i>10.0 ft.</i>	
L. Borehole, diameter	<i>8.25</i> in.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/>	
M. O.D. well casing	<i>2.25</i> in.		
N. I.D. well casing	<i>2.00</i> 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>WMW-02</u>
Facility License, Permit or Monitoring Number	County Code <u>68</u>	WIC Unique Well Number
DNR Well Number		

1. Can this well be purged dry?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Before Development	After Development
2. Well development method		11. Depth to Water (from top of well casing)	11. Depth to Water (from top of well casing)
surged with bailer and bailed	<input type="checkbox"/> 41	a. <u>7.4</u> ft.	<u>7.4</u> ft.
surged with bailer and pumped	<input type="checkbox"/> 61		
surged with block and bailed	<input type="checkbox"/> 42		
surged with block and pumped	<input checked="" type="checkbox"/> 62		
surged with block, bailed and pumped	<input type="checkbox"/> 70		
compressed air	<input type="checkbox"/> 20		
bailed only	<input type="checkbox"/> 10		
pumped only	<input type="checkbox"/> 51	12. Sediment in well bottom	<u>1.0</u> inches
pumped slowly	<input checked="" type="checkbox"/> 50	13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>dark brown</u>
Other _____	<input type="checkbox"/> [shaded]		Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>Slightly Turbid</u>
3. Time spent developing well	<u>35</u> min.		
4. Depth of well (from top of well casing)	<u>14.5</u> ft.		
5. Inside diameter of well	<u>2.00</u> in.		
6. Volume of water in filter pack and well casing	<u>1.1</u> gal.		
7. Volume of water removed from well	<u>8.0</u> gal.		
8. Volume of water added (if any)	<u>0.0</u> gal.		
9. Source of water added	_____	14. Total suspended solids	<u>.....</u> mg/l <u>.....</u> mg/l
10. Analysis performed on water added? (If yes, attach results)	<input type="checkbox"/> Yes <input type="checkbox"/> No	15. COD	<u>.....</u> mg/l <u>.....</u> mg/l

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

16. Additional comments on development:

Moderate to Good Recharge

Well developed by: Person's Name and Firm

Name: Alan EskeFirm: Versar, Inc

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

Signature: _____

Print Initials: AGEFirm: Versar, Inc

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

Facility/Project Name <u>Hakerman/VME</u>		License/Permit/Monitoring Number		Boring Number <u>SBMW-03</u>
Boring Drilled By (Firm name and name of crew chief) <u>Alan Esko ~ Versar, Inc.</u>		Date Drilling Started <u>05/11/93</u>	Date Drilling Completed <u>05/11/93</u>	Drilling Method <u>4 1/4 HSA</u>
DNR Facility License Well No.	Common Well Name <u>WMW-03</u>	Final Static Water Level <u>839.02</u> Feet MSL	Surface Elevation <u>844.67</u> Feet MSL	Borehole Diameter <u>8.25</u> inches
Boring Location State Plane <u>375,019.22</u> N. <u>2,479,429.38</u> E <u>S/C/N</u>		Lat <u>0° 0' 0"</u>	Long <u>0° 0' 0"</u>	Local Grid Location (If applicable)
NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19</u> E		Feet <input type="checkbox"/> N <input type="checkbox"/> S	Feet <input type="checkbox"/> E <input type="checkbox"/> W	
County <u>Waukesha</u>	DNR County Code <u>6-8</u>	Civil Town/City/ or Village <u>Waukesha</u>		

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	Soil Properties						ROD/ Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
SS	1'	6 1/8	11	PC Pavement ~ 6" Crushed Ls Gravel Fill ~ 6"	SM			28						
SS	17"	6 1/8	2	Clayey Sand, grades to Silty Sand, grey, t/c gravel, moist, med-dense										
SS	2'	9 1/4	4	No Recovery										
SS	NR	1 1/2		Grades to										
SS	2"	1/2		Organic Clay, Black-grey mottled, orgnics, soft, moist	01T			3	.25					
SS	9"	1/2												
SS	18"	3 1/4	6											
SS	16"	1/4												
SS	18"	4 1/8	8	Silty Clay, grey, vry. stiff, moist	CL				.25					
SS	14"	1/7	10											
SS	18"	6 1/0		Grayelly Sand, grey, saturated, med. dense, (fn-cs)	SW									
SS	18"	1/7	12											
SS	18"	1/7	14	SAA										
SS	12"	1/7	16	grades to dense										
				EOB @ 16' 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 <u>Akerman / VME</u>	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 <u>WMW-03</u>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane <u>375,019.22</u> ft. N <u>2,479,429.38</u> ft. E.	Wis. Unique Well Number DNR Well Number <u>05111193</u>
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source <u>NE 1/4 of NE 1/4 of Sec. 2, T. 6 N. R. 19 E.</u>	Date Well Installed <u>mm dd yy</u>
Distance Well Is From Waste/Source Boundary <u>150</u> 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) <u>Don King</u> <u>Wang Engineering</u>
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No		
A. Protective pipe, top elevation <u>-844.71</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
B. Well casing, top elevation <u>-844.37</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>.80</u> in. b. Length: _____ ft. c. Material: <u>Flush Mount Cast</u> d. Additional protection? If yes, describe: _____	
C. Land surface elevation <u>-844.67</u> ft. MSL	Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> [shaded]	
D. Surface seal, bottom _____ ft. MSL or <u>1.0</u> ft.	3. Surface seal: _____	
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 type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> [shaded] Other <input checked="" type="checkbox"/> [shaded]	
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input 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. _____ 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"/> [shaded]	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"/> [shaded]	
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. <u>Industrial Sand: Canada, 10-20</u> b. Volume added <u>3</u> 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"/> [shaded]	
17. Source of water (attach analysis):	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> [shaded]	
E. Bentonite seal, top _____ ft. MSL or <u>1.0</u> ft.	b. Manufacturer <u>No. Illinois Pump</u> c. Slot size: _____ d. Slotted length: <u>0.010</u> in. <u>10.0</u> ft.	
F. Fine sand, top _____ ft. MSL or <u>N/A</u> ft.	11. Backfill material (below filter pack): Native <input type="checkbox"/> None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/> [shaded]	
G. Filter pack, top _____ ft. MSL or <u>3.0</u> ft.		
H. Screen joint, top _____ ft. MSL or <u>4.5</u> ft.		
I. Well bottom _____ ft. MSL or <u>14.5</u> ft.		
J. Filter pack, bottom _____ ft. MSL or <u>16.0</u> ft.		
K. Borehole, bottom _____ ft. MSL or _____ ft.		
L. Borehole, diameter <u>.825</u> in.		
M. O.D. well casing <u>.225</u> in.		
N. I.D. well casing <u>.200</u> 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>Waukesha</u>	Well Name <u>WMW-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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
2. Well development method			
surged with bailer and bailed	<input type="checkbox"/> 41		
surged with bailer and pumped	<input type="checkbox"/> 61		
surged with block and bailed	<input type="checkbox"/> 42		
surged with block and pumped	<input checked="" type="checkbox"/> 62		
surged with block, bailed and pumped	<input type="checkbox"/> 70		
compressed air	<input type="checkbox"/> 20		
bailed only	<input type="checkbox"/> 10		
pumped only	<input type="checkbox"/> 51		
pumped slowly	<input checked="" type="checkbox"/> 50		
Other _____	<input type="checkbox"/> [grid]		
3. Time spent developing well	____ 60 min.		
4. Depth of well (from top of well casing)	____ 14.5 ft.		
5. Inside diameter of well	____ 2.0 in.		
6. Volume of water in filter pack and well casing	____ 1.4 gal.		
7. Volume of water removed from well	____ 15.0 gal.		
8. Volume of water added (if any)	____ 0.0 gal.		
9. Source of water added _____			
10. Analysis performed on water added?	<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, attach results)		
11. Depth to Water (from top of well casing)	a. ____ 5.95 ft. m m d d y y	Before Development	
Date	b. <u>05113193</u> m m d d y y	After Development	
Time	c. <u>13:41</u> <input type="checkbox"/> a.m. <u>14:40</u> <input type="checkbox"/> p.m.		
12. Sediment in well bottom	____ 1.0 inches		
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Highly Turbid</u> <u>dark brown</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	

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

16. Additional comments on development:

Good to Excellent Recharge

Well developed by: Person's Name and Firm

Name: Alan Esko

Firm: Versar, Inc.

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

Signature: _____

Print Initials: _____

Firm: _____

Page 1 of 3

Facility/Project Name <u>VME</u>				License/Permit/Monitoring Number			Boring Number <u>HFB-2</u>									
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael Melton, Geologist</u> <u>Abing Engineering / Don Abing, Driller</u>				Date Drilling Started <u>10/13/93</u> M M D D Y Y	Date Drilling Completed <u>10/13/93</u> M M D D Y Y	Drilling Method <u>HSA</u>										
Owner/Levy Well No.	WTR/Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Bohrhole Diameter inches											
Boring Location State Plane <u>375,808</u> N. <u>3,479,437</u> E S/C/N				Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable)											
NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19</u> E/W				Long <u>0° 0' 0"</u>	□ N <u>0° 0' 0"</u>	□ E <u>0° 0' 0"</u>	Feet <u>0</u>	Feet <u>0</u> W								
County <u>Waukesha</u>				DNR County Code <u>618</u>	Civil Town/City/ or Village <u>Waukesha</u>											
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	Soil Properties					P 200	RQD/Comments
				PID/FID	Compressive Strength	Moisture Content				Liquid Limit	Plasticity Index					
				<u>Asphalt pavement w/ gravel base</u>												
				<u>1</u>												
				<u>2</u>												
				<u>3</u>												
CS-1	1.7	5		<u>Cill, Brown fine to coarse</u>												
	1.5	7	d	<u>grained sand, gravel, w/ clay, moist</u>												
				<u>4</u>												
				<u>5</u>												
				<u>6</u>												
				<u>7</u>												
				<u>8</u>				SP								
S-2	1.5	4		<u>Sand (SP) brown, well dense,</u>												
	1.5	6	9	<u>Trace clay, wet</u>												
				<u>10</u>												
				<u>11</u>												
				<u>12</u>												
I hereby certify that the information on this form is true and correct to the best of my knowledge.																
Signature <u>Michael Melton</u>				Firm <u>Versar Inc</u>												

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.

Sample and Type	Soil/Rock Description And Geologic Origin For Each Major Unit		Blow Counts	Depth in Feet	Soil Properties	
	Length Att. Recovered (in)	U S C S			Graphic Log	Well Diagram
				13		
				14		
				15		
				16		
				17		
				18		
				19	Silt (ml) gray, loose, trace clay, silt	
				20		
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
				29		
				30		
				31		
				32		

**ATTACHMENT D
GROUNDWATER SAMPLE
LABORATORY ANALYTICAL RESULTS
AND CHAIN OF CUSTODY**

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME					PARAMETERS	INDUSTRIAL HYGIENE SAMPLE							
1871.001	VME Americas, Inc.							Y						
SAMPLERS: (Signature) Alan G. Echo					(Printed)	NO. OF CONTAINERS								
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	VOC's (5)	DRO (5)	TRPH (5)	PNA (5)	SVOC's (5)	PCB's (5)	Pests. (5)	PNA (5)	REMARKS
WMW-01	5/13/93	1310	X		Upgradient - UST	5	X	X	X	X				VOC's (8021)
WMW-02		1720			Down gradient - UST	5								DRO (8015) W.D.R. Modifies
WMW-03		1440				5								TRPH (8073) "
WMW-02D						5								
WMW-03D		↓				5	↓	↓	↓	↓				PNA's (8310)
EMW-01		1600			DISREGARD WELLS EMW-01, 02, 02D, AND 03. UNRELATED TO GROUNDWATER CONTAMINATION INVESTIGATION.		7	X	X	X	X	X		VOC's (8021)
EMW-02		1800					7							SVOC's (8270)
EMW-02D		↓					7							PCB's (8080)
EMW-03		1900			Upgradient		7		↓	↓	↓	↓	↓	Pests. (8080)
Trip Blank					Lab Prepared - w/ cooler		1	X						
Equip. Blank		1520		↓	Field Prepared		5	X	X	X	X			
Relinquished by: (Signature) (Printed)	Date / Time	Received by: (Signature) (Printed)	Relinquished by: (Signature) (Printed)	Date / Time	Received by: (Signature) (Printed)									
U. Kapustic (Printed)	5/13/93 24:00													
Relinquished by: (Signature) (Printed)	Date / Time	Received for Laboratory by: (Signature) (Printed)	Date / Time	Remarks										
U. Kapustic (Printed)	5/14/93 10:22	Denise Wilkins (Printed)	5/14/93 10:23	See Attached List for Specific Compounds; Please run pH + Conductivity on one sample from every well.										



NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

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

05/27/1993

NET Job Number: 93.03857

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

Project Description: VME Americas, Inc.

Sample Number	Sample Description	Date Taken	Date Received
210863	WMW-01; Upgradient-UST; Grab	05/13/1993	05/14/1993
210864	WMW-02; Downgradient-UST; Grab	05/13/1993	05/14/1993
210865	WMW-03; Downgradient-UST; Grab	05/13/1993	05/14/1993
210866	WMW-03D; Downgradient-UST; 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. 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:

Ray Kalicki
Ray Kalicki
QA Coordinator





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
050 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 209-3100
Fax: (708) 209-5445

ANALYTICAL REPORT

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

05/27/1993

Sample No. : 210863

NET Job No.: 93.03057

Sample Description: WMW-01; Upgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 13:10
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Analysis	Reporting Limit	Analyte	Analytical Method
			Prep/Run				
Conductivity	76,900.	micro/cm	/137	05/19/1993	1.	nae	25108(4) 120.1(3)
pH	7.11	units	/522	05/13/1993	0.10	ljd	150.1(3) 9040(1)
TRPH	<1.0	mg/L	/3	05/20/1993	10.	mjs	9073 (1)
DRO-Diesel Range Organics	<0.1	mg/L	/6	05/20/1993		mjs	
Prep. 8310 PMAx AQUEOUS	extracted		83 /	05/18/1993		low	8310 (1)
PMA CMPNS + 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)
Benz(a)anthracene	<0.00013	mg/L	83 /178	05/21/1993	0.00013	prp	8310 (1)
Benz(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018	prp	8310 (1)
Benz(c)fluoranthene	<0.00017	mg/L	83 /178	05/21/1993	0.00017	prp	8310 (1)
Benz(a)pyrene	<0.00023	mg/L	83 /178	05/21/1993	0.00023	prp	8310 (1)
Benz(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)
Dibenz(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)
Kephtalene	<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	53	%	83 /178	05/21/1993	1-118	prp	8310 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
650 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

05/27/1993

Sample No. : 210863

NET Job No.: 93.03857

Sample Description: WMW-01; Upgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 13:10
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	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	1.0	mjs	8021 (1)
Bromomethane	<6.0	ug/L	/8	05/20/1993	1.0	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	<6.0	ug/L	/8	05/20/1993	1.0	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	1.0	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	1.0	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	1.0	mjs	8021 (1)
1,1-Dichloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichloroethene	<1.0	ug/L	/0	05/20/1993	1.0	mjs	8021 (1)
1,1-Dichloroethene	<2.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
cis-1,2-Dichloroethene	<1.0	ug/L	/0	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-Dichloropropene	<1.0	ug/L	/0	05/20/1993	1.0	mjs	8021 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
050 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

05/27/1993

Sample No. : 210863

NET Job No.: 93.03857

Sample Description: WMW-01; Upgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 13:10
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No. Prp/Run	Date of Analysis	Reporting Limit	Analyst	Analytical Method
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	1.0	mjc	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	mjc	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	mje	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	mjc	8021 (1)
Styrene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,1,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mje	8021 (1)
1,1,2,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Tetrachloroethane	<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	1.0	mjs	8021 (1)
1,2,3-Trichloropropene	<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	1.0	mjs	8021 (1)
Xylenes, total	<3.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
650 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 209-3100
Fax: (708) 209-5445

ANALYTICAL REPORT

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

05/27/1993
Sample No. : 210864
NET Job No.: 93.03857

Sample Description: WMW-02; Downgradient-UST; Grab
VME Americag, Inc.

Date Taken: 05/13/1993
Time Taken: 17:20
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Analysis	Reporting Limit	Analyst	Method
			Prep/Rui				
TRPH	<1.0	mg/L	/3	05/20/1993	10.		
ODO-Diesel Range Organics Prop. 8310 PAs AQUEOUS	<0.1 extracted	mg/L	/6 R3 /	05/20/1993 05/18/1993		/0 .	
PNA CKPDS - 8310 AQUEOUS		/					
Aceanaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018		
Aceanaphthylene	<0.010	mg/L	83 /178	05/21/1993	0.010		
Anthracene	<0.0066	mg/L	83 /178	05/21/1993	0.0066		
Benzo(a)anthracene	<0.00013	mg/L	83 /178	05/21/1993	0.00013		
Benzo(b)fluoranthene	<0.00018	mg/L	83 /178	05/21/1993	0.00018		
Benzo(k)fluoranthene	<0.00017	mg/L	83 /178	05/21/1993	0.00017	prp	8310 (1)
Benzo(a)pyrone	<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	arp	8310 (1)
Dibenz(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)
Indena(1,2,3-cd)pyrene	<0.00043	mg/L	83 /178	05/21/1993	0.00043	arp	8310 (1)
Naphthalene	<0.010	mg/L	83 /178	05/21/1993	0.010	prp	8310 (1)
Phenanthrene	<0.0066	mg/L	83 /178	05/21/1993	0.0066	prp	8310 (1)
Pyrene	<0.0027	mg/L	83 /178	05/21/1993	0.0027	prp	8310 (1)
Surr: 2-Fluorobiphenyl	38	%	83 /178	05/21/1993	1-118	njs	8310 (1)
VOLATILES - 8021 AQUEOUS		/					
Benzene	<1.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
Bromobenzene	<1.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
Bromoform	<1.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
Bromochloromethane	<1.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
Bromodichloromethane	<1.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
Bromoform	<2.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
Bromomethane	<4.0	ug/L	/8	05/20/1993	1.0	njs	8021 (1)
n-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	njs	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

05/27/1993

Sample No. : 210864

NET Job No.: 93.03857

Sample Description: WMW-02; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 17:20
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Prep/Run	Reporting Analysis	Analyst	Analytical Method
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	1.0	mjs	8021 (1)
Chloroform	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Chloromethane	<6.0	ug/L	/8	05/20/1993	1.0	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	1.0	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	1.0	mjs	8021 (1)
1,1-Dichloroethane	30.	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-Dichloroethane	<2.0	ug/L	/8	05/20/1993	1.0	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-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
2,2-Dichloropropene	<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	1.0	mjs	8021 (1)
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993
Sample No. : 210864
NET Job No.: 93.03857

Sample Description: WMW-02; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 17:20
IEPA Cert. No. 100221

Date Received: 05/14/1993
Time Received: 10:33
WDNR Cert. No. 999447130

Parameter	Results	Units	Batch No. Prep/Krn	Date of Analysis	Reporting Limit	Analyst	Analytical Method
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	<30.	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	<370.	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichlorofluoromethane	<4.0	ug/L	/8	05/20/1993	1.0	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	mje	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	1.0	mjs	8021 (1)
Xylenes, total	<3.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 288-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

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

05/27/1993

Sample No. : 210865

NET Job No.: 93.03857

Sample Description: WMW-03; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 14:40
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Analysis	Reporting Limit	Analyst	Analytical Method
			Prep/Run				
TRPH	<1.0	mg/L	/3	05/20/1993	10.	mjs	9073 (1)
DBO-Diesel Range Organics Prep. 8310 PHAs AQUEOUS	<0.1 extracted	mg/L	/6 83 /	05/20/1993 05/18/1993		mjs low	8310 (1)
PHA CHPOS - 8310 AQUEOUS							
Acenaphthene	<0.018	mg/L	83 /178	05/21/1993	0.018	prp	8310 (1)
Acenaphthylene	<0.010	mg/L	83 /170	05/21/1993	0.010	prp	8310 (1)
Anthracene	<0.0065	mg/L	83 /178	05/21/1993	0.0066	prp	8310 (1)
Benzo(a)anthracene	<0.00013	mg/L	83 /170	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	50	%	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)
Bromoform	<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)
Bromofluoromethane	<2.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Bromomethane	<4.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
n-Dutylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993

Sample No. : 210865

NET Job No.: 93.03857

Sample Description: WMW-03; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 14:40
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Prep/Run	Reporting Analysis	Analyst	Analytical Method
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)
Chloroethene	<4.0	ug/L	/8	05/20/1993	1.0	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	1.0	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	1.0	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	1.0	mjs	8021 (1)
1,1-Dichloroethane	11.0	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	1.0	mjs	8021 (1)
cis 1,2-Dichloroethylene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
trans-1,2-Dichloroethylene	8.30	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
2,2-Dichloropropene	<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	1.0	mjs	8021 (1)
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993

Sample No. : 210865

NET Job No.: 93.03857

Sample Description: WMW-03; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 14:40
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Prep/Run	Reporting Analysis	Analytical	Analytical Method
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.	mjc	8021 (1)
Methyl-t-butyl ether (MTBE)	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Kaphthalene	<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	mje	8021 (1)
1,1,1,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mje	8021 (1)
1,1,2,2-Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mje	8021 (1)
Tetrachloroethene	<1.0	ug/L	/8	05/20/1993	1.0	mje	8021 (1)
Toluene	<1.0	ug/L	/8	05/20/1993	1.0	mje	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	mjc	8021 (1)
1,1,1-Trichloroethane	42.	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	37.	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichlorofluoromethane	<4.0	ug/l	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,3-Trichloropropone	<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	mjc	8021 (1)
Vinyl Chloride	<3.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Xylenes, total	<30.0	ug/L	/8	05/20/1993	1.0	mjc	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

05/27/1993

Sample No. : 210866

NET Job No.: 93.03857

Sample Description: WMW-03D; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 14:40
IEPA Cert. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Prep/RUN	Date of Analysis	Reporting Limit	Analyst	Analytical Method
TRPH	<1.0	mg/L	/3	05/20/1993	10.	mjs	9073 (1)	
DRO Diesel Range Organics Prep. 8310 PMAe AQUEOUS	<0.1 extracted	mg/L	/6 83 /	05/20/1993 05/18/1993		mjs low	8310 (1)	
PNA CKPDS - 8310 AQUEOUS		/						
Acenaphthene	<0.018	ng/L	83 /178	05/21/1993	0.018	prp	8310 (1)	
Acenaphthylene	<0.010	ng/L	83 /178	05/21/1993	0.010	prp	8310 (1)	
Anthracene	<0.0066	ng/L	83 /178	05/21/1993	0.0066	prp	8310 (1)	
Benz(a)anthracene	<0.00013	ng/L	83 /178	05/21/1993	0.00013	prp	8310 (1)	
Benz(b)fluoranthene	<0.00018	ng/L	83 /178	05/21/1993	0.00018	prp	8310 (1)	
Benz(k)fluoranthene	<0.00017	ng/L	83 /178	05/21/1993	0.00017	prp	8310 (1)	
Benz(a)pyrene	<0.00023	ng/L	83 /178	05/21/1993	0.00023	prp	8310 (1)	
Benz(ghi)perylene	<0.00076	ng/L	83 /178	05/21/1993	0.00076	prp	8310 (1)	
Chrysene	<0.00015	ng/L	83 /178	05/21/1993	0.00015	prp	8310 (1)	
Dibenz(a,h)anthracene	<0.00030	ng/L	83 /178	05/21/1993	0.00030	prp	8310 (1)	
Fluoranthene	<0.0021	ng/L	83 /178	05/21/1993	0.0021	prp	8310 (1)	
Fluorene	<0.0021	ng/L	83 /178	05/21/1993	0.0021	prp	8310 (1)	
Indeno(1,2,3-cd)pyrene	<0.00043	ng/L	83 /178	05/21/1993	0.00043	prp	8310 (1)	
Kaphthalene	<0.010	ng/L	83 /178	05/21/1993	0.010	prp	8310 (1)	
Phenanthrene	<0.0064	ng/L	83 /178	05/21/1993	0.0064	prp	8310 (1)	
Pyrene	<0.0027	ng/L	83 /178	05/21/1993	0.0027	prp	8310 (1)	
Surr: 2-Fluorobiphenyl	28	%	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	1.0	mjs	8021 (1)	
Bromoform	<2.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)	
Bromomethane	<6.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)	
n-Butylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993

Sample No. : 210866

NET Job No.: 93.03857

Sample Description: WMW-03D; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 14:40
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
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	1.0	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	1.0	mjs	8021 (1)
2-Chinrotoluene	<1.0	ug/L	/0	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	1.0	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	1.0	mjs	8021 (1)
1,1-Dichloroethane	11.	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	10.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
cis-1,2-Dichloroethene	8.0	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-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
2,2-Dichloropropene	<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)
ole-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	1.0	mjs	8021 (1)
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993

Sample No. : 210866

NET Job No.: 93.03857

Sample Description: WMW-03D; Downgradient-UST; Grab
VME Americas, Inc.

Date Taken: 05/13/1993
Time Taken: 14:40
IEPA Cert. No. 100221

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

Parameter	Result	Units	Batch No.	Date of Analysis	Reporting Limit	Analyst	Analytical Method
			Prep/Run				
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.	mje	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	mje	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	mja	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	mje	8021 (1)
Tetrachloroethane	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Toluene	<1.0	ug/l	/8	05/20/1993	1.0	mja	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	mje	8021 (1)
1,1,1-Trichloroethane	49.	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	mje	8021 (1)
Trichloroethene	62.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Trichlorofluoromethane	<4.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,2,3-Trichloropropane	<1.0	ug/L	/8	05/20/1993	1.0	mje	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	mje	8021 (1)
Vinyl Chloride	<3.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Xylenes, total	<5.0	ug/L	/8	05/20/1993	1.0	mje	8021 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET BARTLETT

708 550 7555

Bartlett Division
650 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

05/27/1993

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 Cart. No. 100221

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

Parameter	Results	Units	Batch No.	Date of Analysis	Reporting Limit	Analyst	Analytical Method
TRPH	<1.0	mg/L	/3	05/20/1993	10.	mjc	9073 (1)
DRO-Diesel Range Organics	<0.1	mg/L	/6	05/20/1993		mjc	
Prep. 8310 PHAs AQUEOUS	extracted		83 /	05/18/1993		law	8310 (1)
PHAs CHDOS - 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)
Dibenz(a,h)anthracene	<0.00050	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-Fluorophenyl	48	z	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	1.0	mjs	8021 (1)
Bromoform	<2.0	ug/l	/8	05/20/1993	1.0	mjs	8021 (1)
Bromomethane	<4.0	ug/l	/8	05/20/1993	1.0	mjs	8021 (1)
n-Butylbenzene	<1.0	ug/l	/8	05/20/1993	1.0	mjs	8021 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
050 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 209-3100
Fax: (708) 209-3445

ANALYTICAL REPORT

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

05/27/1993

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.	Date of Prep/Rin	Reporting Limit	Analyzer	Analytical Method
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	1.0	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	1.0	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	1.0	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	<5.0	ug/L	/8	05/20/1993	1.0	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	1.0	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-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
1,3-Dichloropropene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
2,2-Dichloropropene	<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	1.0	mjs	8021 (1)
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993
Sample No. : 210871
NET Job No.: 93.03057

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	Result	Units	Batch No.	Date of Prep/Rin	Reporting Limit	Analyzer	Analytical Method
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-Tetrachloromethane	<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)
Tetrachloroethane	<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	1.0	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	1.0	mjs	8021 (1)
Xylenes, total	<5.0	ug/L	/8	05/20/1993	1.0	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

05/27/1993

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.	Date of Prop/Run	Date of Analysis	Reporting Limit	Analytical	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)
Bromo-chloromethane	<1.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
Bromo-dichloromethane	<1.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
Bromoform	<2.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
Bromomethane	<6.0	ug/L	/8	05/20/1993	1.0	-	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	<6.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
Chloroform	<1.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
Chloromethane	<6.0	ug/L	/8	05/20/1993	1.0	-	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-chloropropene	<2.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
1,2-Dibromoethane (EDB)	<1.0	ug/L	/8	05/20/1993	1.0	-	mjs	8021 (1)
Dibromochloromethane	<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	1.0	-	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	1.0	-	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)





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

05/27/1993

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
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-Dichloropropane	<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)
Methylchlorobutadiene	<2.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Isopropylbenzene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
n-Isopropyltoluene	<1.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Methylene Chloride	<10.	ug/L	/8	05/20/1993	1.0	mjs	8021 (1)
Methyl-t-butyl ether (MTBE)	<1.0	ug/L	/8	05/20/1993	10.	mjs	8021 (1)
Kaphthalene	<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	1.0	mjs	8021 (1)
1,2,3-Trifluoropropane	<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	1.0	mjs	8021 (1)
Xylenes, total	<3.0	ug/L	/8	05/20/1993	1.0	mjs	8021 (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. Joe McCue

05/27/1993

NET Job Number: 93.03857

Analyte	Run Batch Number	CCV True Conc.	Conc. Found	Units	Percent Recovery
Conductivity	137	1613.	1484	µmhos/cm	105.0
ACID CMPOS - 8270 AQUEOUS 2,4-Dichlorophenol	177	50.	51.21	ug/L	102.4

BASE/NEUTRALS - 8270 AQUEOUS

PNA CMPOS - 8310 AQUEOUS					
Aceanaphthalene	178	1000.	941.80	mg/Kg	94.2
Aceanaphthylene	178	1000.	1052.0	mg/Kg	105.2
Anthracene	178	1000.	997.59	mg/Kg	99.8
Benzo(a)anthracene	178	1000.	970.01	mg/Kg	97.9
Benzo(b)fluoranthene	178	1000.	972.31	mg/Kg	97.2
Benzo(k)fluoranthene	178	1000.	903.14	mg/Kg	98.3
Benzo(a)pyrene	178	1000.	1061.3	mg/Kg	106.1
Benzo(ghi)perylene	178	1000.	983.53	mg/Kg	98.4
Chrysene	178	1000.	993.10	mg/Kg	99.3
Dibenzo(a,h)anthracene	178	1000.	971.08	mg/Kg	97.1
Fluoranthene	178	1000.	970.48	mg/Kg	97.0
Fluorene	178	1000.	939.47	mg/Kg	93.9
Indeno(1,2,3-cd)pyrene	178	1000.	923.60	mg/Kg	92.4
Naphthalene	170	1000.	938.97	mg/Kg	93.9
Phenanthrene	178	1000.	973.67	mg/Kg	97.6
Pyrene	178	1000.	944.20	mg/Kg	97.4
Surrogate: 2-Fluorobiphenyl	178	1000.	940.56	%	94.1

CCV - Continuing Calibration Verification





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 280-3100
Fax: (708) 209-5445

QUALITY CONTROL REPORT

BLANK ANALYSIS

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

05/27/1993

NET Job Number: 93.03857

Analyte	Prep Batch Number	Kin Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Conductivity		157	<1.0	umhos	1.	25108(4) 120.1(3)
PESTICIDES/PCB - 8080 AQUEOUS						8080 (1)
4,4'-DDD	107	133	<0.1	ug/L	0.1	8080 (1)
Dieldrin	107	133	<0.1	ug/L	0.1	8080 (1)
Endosulfan I	107	133	<0.05	ug/L	0.05	8080 (1)
Endosulfan sulfate	107	133	<0.1	ug/L	0.1	8080 (1)
Endrin aldehyde	107	133	<0.1	ug/L	0.1	8080 (1)
Heptachlor epoxide	107	133	<0.05	ug/L	0.05	8080 (1)
PCB-1248	107		<1.0	ug/L	1.0	8080 (1)
Surrogate: Dibutylchlorosilane	107		NA	x	20-150	8080 (1)
Surrogate: Tetrachloroxylene (TCX)	107		20	x		8080 (1)
Surrogate: Decachlorobiphenyl (OCB)	107		20	x		8080 (1)
PNA CMPOS - 8310 AQUEOUS						8310 (1)
Acenaphthene	83	178	<0.018	ng/L	0.018	8310 (1)
Acenaphthylene	83	178	<0.010	ng/L	0.010	8310 (1)
Anthracene	83	178	<0.0066	ng/L	0.0066	8310 (1)
Benz(a)anthracene	83	178	<0.00013	ng/L	0.00013	8310 (1)
Benz(b)fluoranthene	83	178	<0.00018	ng/L	0.00018	8310 (1)
Benz(k)fluoranthene	83	178	<0.00017	ng/L	0.00017	8310 (1)
Benz(a)pyrene	83	178	<0.00023	ng/L	0.00023	8310 (1)
Benz(ghi)perylene	83	178	<0.00076	ng/L	0.00076	8310 (1)
Chrysene	83	178	<0.00015	ng/L	0.00015	8310 (1)
Dibenzo(a,h)anthracene	83	178	<0.00030	ng/L	0.00030	8310 (1)
Fluoranthene	83	178	<0.0021	ng/L	0.0021	8310 (1)
Fluorene	83	178	<0.0021	ng/L	0.0021	8310 (1)
Indeno(1,2,3-cd)pyrene	83	178	<0.00043	ng/L	0.00043	8310 (1)
Phthalalene	83	178	<0.010	ng/L	0.010	8310 (1)
Phenanthrene	83	178	<0.0064	ng/L	0.0064	8310 (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.

Bartlett Division
650 W. Bartlett Rd.
Bartlett, IL 60103
Tel. (708) 209-3100
Fax. (708) 269-5445

QUALITY CONTROL REPORT

BLANK ANALYSIS

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

05/27/1993

NET Job Number: 93.03857

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Pyrene	83	178	<0.0027	mg/L	0.0027	0310 (1)
Surr: 2-Fluorobiphenyl	83	178	56	X	1-118	8310 (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.

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

QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

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

05/27/1993

NET Job Number: 93.03857

Analyte	Drop	Run	Matrix					MSD					
	Batch	Batch	Spike	Sample	Spike	Percent	MSD	Spike	Sample	Percent	MSD/KSD	RPO	
	Number	Number	Result	Result	Amount	Units	Recovery	Result	Amount	Units	Recovery		
PNA CMPOS - 8310 AQUEOUS													
Acenaphthene	83	178	0.58001	<0.018	1.0	ng/L	58.0	0.4933	1.0	ng/L	49.3	16.2	
Benzo(b)fluoranthene	83	178	0.90012	<0.0001	1.0	ng/L	90.0	0.9213	1.0	ng/L	92.1	2.3	
Fluorene	83	178	0.47817	<0.0021	1.0	ng/L	47.8	0.4234	1.0	ng/L	42.3	12.2	
Naphthalene	83	178	0.43599	<0.010	1.0	ng/L	43.6	0.5388	1.0	ng/L	53.9	21.1	
Phenanthrene	83	178	0.70063	<0.0066	1.0	ng/L	70.9	0.7609	1.0	ng/L	76.1	7.1	
PNA CMPOS - 8310 AQUEOUS													
Acenaphthene	83	63	0.008	<1.200	0.033	ng/Kg	24.20	0.010	0.033	ng/Kg	30.30	22.40	
Acenaphthylene	83	63	0.008	<0.660	0.033	ng/Kg	24.20	0.008	0.033	ng/Kg	24.20	0.00	
Anthracene	83	63	0.016	<0.660	0.033	ng/Kg	48.50	0.017	0.033	ng/Kg	51.50	6.00	
Benzo(a)anthracene	83	63	0.019	<0.0087	0.033	ng/Kg	57.60	0.020	0.033	ng/Kg	60.60	5.10	
Benzo(b)fluoranthene	83	63	0.017	<0.011	0.033	ng/Kg	51.50	0.017	0.033	ng/Kg	51.50	0.00	
Benzo(a)fluoranthene	83	63	0.018	<0.011	0.033	ng/Kg	54.50	0.018	0.033	ng/Kg	54.50	0.00	
Benzo(a)pyrene	83	63	0.021	<0.015	0.033	ng/Kg	63.60	0.022	0.033	ng/Kg	66.70	4.60	
Benzo(g,h)perylene	83	63	0.017	<0.051	0.033	ng/Kg	51.50	0.017	0.033	ng/Kg	51.50	0.00	
Chrysene	83	63	0.019	<0.100	0.033	ng/Kg	57.60	0.019	0.033	ng/Kg	57.60	0.00	
Dibenz(a,h)anthracene	83	63	0.015	<0.020	0.033	ng/Kg	45.50	0.017	0.033	ng/Kg	51.50	12.40	
Fluoranthene	83	63	0.018	<0.660	0.033	ng/Kg	54.50	0.015	0.033	ng/Kg	63.50	18.00	
Fluorene	83	63	0.009	<0.140	0.033	ng/Kg	27.30	0.010	0.033	ng/Kg	30.30	10.40	
Indeno(1,2,3-cd)pyrene	83	63	0.016	<0.029	0.033	ng/Kg	48.50	0.016	0.033	ng/Kg	48.50	0.00	
Naphthalene	83	63	0.001	<0.660	0.033	ng/Kg	3.00	0.005	0.033	ng/Kg	15.20	134.00	
Phenanthrene	83	63	0.017	<0.660	0.033	ng/Kg	51.50	0.016	0.033	ng/Kg	48.50	6.00	
Pyrene	83	63	0.019	<0.180	0.033	ng/Kg	57.60	0.016	0.033	ng/Kg	48.50	17.20	

NOTE: Matrix Spike Samples may not be samples from this job.

Advisory Control Limits for MS/MSD₁₀

For Inorganic Parameters and CC Volatiles, the spike recovery should be 75 - 125% if the spike added value was greater than or equal to one fourth of the sample result value. If not, the control limits are not established. The RPD for the MS/MSD pair should be less than 20.

MS = Matrix Spike

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference





NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

QUALITY CONTROL REPORT

DUPLICATES

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

05/27/1993

NET Job Number: 93.03857

Analytic	Prep	Run	Original Analyte	Duplicate Analyte	Units	RPD
	Batch Number	Batch Number				
Conductivity		137	24,900.	25,400.	units/	2.0
pH		522	7.61	7.65	units	0.50
pH		522	8.22	8.26	units	0.20
pH		522	7.51	7.50	units	0.10

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.





NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET BARTLETT

708 550 7385,2

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 280-5445

QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

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

05/27/1993

NET Job Number: 93.03857

Analyte	Prep Batch Number	Run Batch Number	LCS True Concentration	LCS % Recovery
PESTICIDES/PCB - 8080 AQUEOUS				
4,4'-DDD	107	133	50.0	86.0
Dieldrin	107	133	50.0	84.0
Endosulfan I	107	133	25.0	68.0
Endosulfan sulfate	107	133	50.	66.0
Surr: Dibutylchloroendate	107	133	50	100.0
PESTICIDES/PCB - 8080 AQUEOUS				
4,4'-DDD	107	133	50.0	102.0
Dieldrin	107	133	50.0	84.0
Endosulfan I	107	133	25.0	80.0
Endosulfan sulfate	107	133	50.	74.0
Surr: Dibutylchloroendate	107	133	50	100.0
PAH CPODS - 8310 AQUEOUS				
Acenaphthene	83	178	1.0	60.7
Acenaphthylene	83	178	1.0	91.6
Anthracene	83	178	1.0	77.3
Benz(a)anthracene	83	178	1.0	94.5
Benz(b)fluoranthene	83	178	1.0	98.0
Benz(k)fluoranthene	83	178	1.0	96.1
Benz(a)pyrene	83	178	1.0	110.6
Benz(ghi)perylene	83	178	1.000	81.6
Chrysene	83	178	1.0	98.3
Dibenz(a,h)anthracene	83	178	1.0	70.4
Fluoranthene	83	178	1.0	83.2
Fluorene	83	178	1.00	60.7
Indeno(1,2,3-cd)pyrene	83	178	1.0	93.4
Kepithulene	83	178	1.0	53.1
Phenanthrene	83	178	1.00	67.6
Pyrene	83	178	1.0	99.3
Surr: 2-Fluorobiphenyl	83	178	100	35.0

LCS = Laboratory Control Standard

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



Facility/Project Name	VME	License/Permit/Monitoring Number	Boring Number
Boring Drilled By (Firm name and name of crew chief)	Versar Inc / Michael McLean, Geologist Loring Engineering / Don Loring, Driller	Date Drilling Started <u>101 13 1993</u> M M D D Y Y	Date Drilling Completed <u>101 13 1993</u> M M D D Y Y

DNR Facility Well No.	W.L. Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 7 inches
-----------------------	----------------------	------------------	--------------------------------------	-------------------------------	-------------------------------

Boring Location State Plane	<u>375,808</u> N. <u>2,479,437</u> E S/C/N	Lat <u>0° 0' 0"</u>	Local Grid Location (If applicable) □ N □ E
NE 1/4 of NE 1/4 of Section	<u>2</u> , T <u>6</u> , N. R. <u>19</u> E	Long <u>0° 0' 0"</u>	Feet □ S Feet □ W

County	DNR County Code	Civil Town/City/ or Village
Waukesha	<u>618</u>	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	Soil Properties					
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200
			1	8" Concrete w/ sand & gravel base									
			2										
			3										
SS-1	.8	2	4	Silt dark brown sand, trace and clay									
	1.5	2	4										
			5	possible buried black clayey topsoil									
			6										
			7										
			8										
SS-2	3	4	9	Silt (ml) Gray, loose, trace sand, wet									
			5										
			10										
			11										
			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.

Sample Number and Type	Length Alt. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	Soil Properties					
					U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content
SS-6	1.2 1.1 1.2	✓ 6	33 34 35 36 37 38	grades to trace clay, wet	wc					
SS-7	1.4 1.5	3 3	39 40 41 42 43	grades to little clay, wet	wc					
SS-8	1.0 1.5	14 7 23	44 44 45 46 47 48 49 50 51 52	grades to trace clay, fractured Limestone bedrock chips @ 44.2'; wet Bedrock EOB @ 48' possibly on Bedrock surface, also Reheated Annular space grouted as augers were pulled	wc					
										P 200
										RQD/ Comments

Facility/Project Name <u>VME</u>	License/Permit/Monitoring Number	Boring Number <u>HPB-2</u>	
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael Melton, Geologist</u> <u>Aug Engineering / Marking Miller</u>	Date Drilling Started <u>10/13/93</u> M M D D Y Y	Date Drilling Completed <u>10/13/93</u> M M DD Y Y	Drilling Method <u>HSA</u>
DNR Facility Well No. <u>W10</u> Unique Well No. <u>10</u>	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane <u>375,808</u> N. <u>2,479,437</u> E S/C/N	Lat <u>0° 0'</u>	Local Grid Location (If applicable) □ N	Surface Elevation Feet MSL
NE 1/4 of NE 1/4 of Section <u>2</u> , T <u>6</u> N, R <u>19E</u>	E/W Long <u>0° 0'</u>	Long <u>0° 0'</u>	Local Grid Location (If applicable) □ E
County <u>Waukesha</u>	DNR County Code <u>6-8</u>	Civil Town/City/ or Village <u>Waukesha</u>	

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	Soil Properties					
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200
				<u>Asphalt pavement / gravel base</u>									
				<u>1</u>									
				<u>2</u>									
				<u>3</u>									
SS-1	.7	5		<u>Fill, Brown fine to coarse grained sand, gravel, w/ clay, moist</u>									
	1.5	7	d										
				<u>4</u>									
				<u>5</u>									
				<u>6</u>									
				<u>7</u>									
				<u>8</u>					SP				
SS-2	1.5	4		<u>Sand (SP) brown, medium size,</u>									
	1.5	6	9	<u>Trace clay, wet</u>									
				<u>10</u>									
				<u>11</u>									
				<u>12</u>									

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.

Page 1 of 1

Facility/Project Name <u>VME</u>			License/Permit/Monitoring Number	Boring Number <u>HP B-3</u>
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael McLean, Geologist</u> <u>Wabek Engineering / Don Kling, Driller</u>			Date Drilling Started <u>6/01/93</u> <u>MM DD YY</u>	Date Drilling Completed <u>10/11/93</u> <u>MM DD YY</u>
DNR Facility Well No.	WR Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane <u>375,808 N, 2,479,437 E</u> S/C/N <u>Lat 0° 0' 0"</u> Long <u>0° 0' 0"</u>			Borehole Diameter <u>7 inches</u>	
County <u>Waukesha</u>			Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	

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				P 200	RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
			5											
			10											
			15	<i>Collected Hydrogeech Sample</i>										
			20											
			25											
			30											
			35											
			40	<i>Collected Hydrogeech Sample</i>										
			45	<i>End of Boring @ 42'</i>										
			50	<i>Granted Annular space as overburden settled</i>										
			55											

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.

Rev. 5-92

Page _____ of _____

Number
4P2-4

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
		Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael Melton, Geologist Wong Engineering / Drilling, Miller	
DNR Facility Well No.	WTR Unique Well No.	Common Well Name	Date Drilling Started MM DD YY
			Date Drilling Completed MM DD YY
		Final Static Water Level Feet MSL	Surface Elevation Feet MSL
		Drilling Method HSA	
Boring Location State Plane		Local Grid Location (If applicable)	
375,808 N. 2,479,437 E S/C/N		Lat 0 ° 0'	□ N □ E
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E		Long 0 ° 0'	□ 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	U S C S	Graphic Log	Well Diagram	Soil Properties					P 200	RQD/Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
			5'											
			10'											
			15'											
			20'											
			25'											
			30'											
			35'											
			40'											
			45'											
			50'											
			55'											

Collected Hydrogeouch Sample

Collected Hydrogeouch Sample

End of Boring @ 43.6'

Grouted Annular Space
as Augers were removed

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.

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

Page 1 of 1

Facility/Project Name	VME	License/Permit/Monitoring Number	Boring Number
			14P B-6

Boring Drilled By (Firm name and name of crew chief)		Date Drilling Started	Date Drilling Completed	Drilling Method
Versar Inc / Michael McLean, Geologist Loring Engineering / Drilling, Driller		101 15 19 3 M M D D Y Y	101 15 19 3 M M D D Y Y	HSA
DNR Facility Well No.	WR Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation

DNR Facility Well No.	WR Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	7 inches

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

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

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	P/D/FID	Soil Properties					P 200	RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index			
			5												
			10												
			15	Collected Hydrogeouch sample											
			20	End of Boring @ 15.6'											
			25	Created annular space as Augers were removed											
			30												
			35												
			40												
			45												
			50												
			55												

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.

- Solid Waste
- Haz. Waste
- Emergency Response
- Underground Tanks
- Wastewater
- Water Resources
- Superfund
- Other _____

Page 1 of 1

Facility/Project Name <u>VME</u>		License/Permit/Monitoring Number _____		Boring Number <u>HP B-7</u>
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael Melton, Geologist</u> <u>Long Engineering / Drilling, Driller</u>		Date Drilling Started <u>10/15/93</u> M M D D Y Y	Date Drilling Completed <u>10/15/93</u> M M D D Y Y	Drilling Method <u>HSA</u>
DNR Facility Well No.	WTR Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Boring Location State Plane <u>375,808 N, 2,479,437</u> E S/C/N		Lat <u>0 ° 0'</u>	Borehole Diameter 7 inches	
County <u>Waukesha</u>		DNR County Code <u>6-8</u>	Local Grid Location (If applicable) □ N □ E Feet □ S Feet □ W	

Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties				P 200	RQD/Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit		
			5										
			10	Collected Hydrograph sample @ 15.6'									
			15	End of Boring @ 15.6'									
			20	Created holes as augers were removed									
			25										
			30										
			35										
			40										
			45										
			50										
			55										

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

Signature

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 HP B-8	
Boring Drilled By (Firm name and name of crew chief) Versar Inc / Michael McHorn, Geologist Wing Engineering / Drilling, Driller	Date Drilling Started 101 5193 MM DD YY	Date Drilling Completed 101 5193 MM DD YY	Drilling Method HSA
DNR Facility Well No. / WI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
County Waukesha	DNR County Code 6-8	Borehole Diameter 7 inches	
Boring Location State Plane 375,808 N, 2,479,437 E S/C/N	Lat 0° 0' 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 Lat 0° 0' 0" Feet □ S Feet □ W	

Sample Number and Type	Length Alt & Recovered (m)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	P/D/FID	Soil Properties				P 200	RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index		
			5											
			10											
			15	collected hydrostatic sample @ 15.5'										
			20	2 - End of Boring @ 15.5'										
			25	Grouded granular space as cutters were pulled										
			30											
			35											
			40											
			45											
			50											
			55											

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

Signature

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.

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

Page 1 of 1

Facility/Project Name <u>VME</u>	License/Permit/Monitoring Number	Boring Number <u>HP B-9</u>		
Boring Drilled By (Firm name and name of crew chief) <u>Versar Inc / Michael Metton, Geologist</u> <u>Wong Engineering / Drilling, Diller</u>	Date Drilling Started <u>10/15/93</u> MM DD YY	Date Drilling Completed <u>10/16/93</u> MM DD YY	Drilling Method <u>HSA</u>	
DNK Facility Well No. WI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	
Boring Location State Plane <u>375,808</u> N. <u>2,479,437</u> E S/C/N <u>NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E</u> Long		Lat <u>0° 0'</u>	Local Grid Location (If applicable) □ N □ E Feet □ S Feet □ W	
County <u>Waukesha</u>	DNR County Code <u>6-8</u>	Civil Town/City/ or Village <u>Waukesha</u>		

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	P/D/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			5											
			10											
			15	→ Collected Hydro punch sample										
			20											
			25											
			30	→ Collected Hydro punch Sample										
			35	→ End of Boring @ 34.5'										
			40	Created Annular Space as augers were pulled										
			45											
			50											
			55											
			60											

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

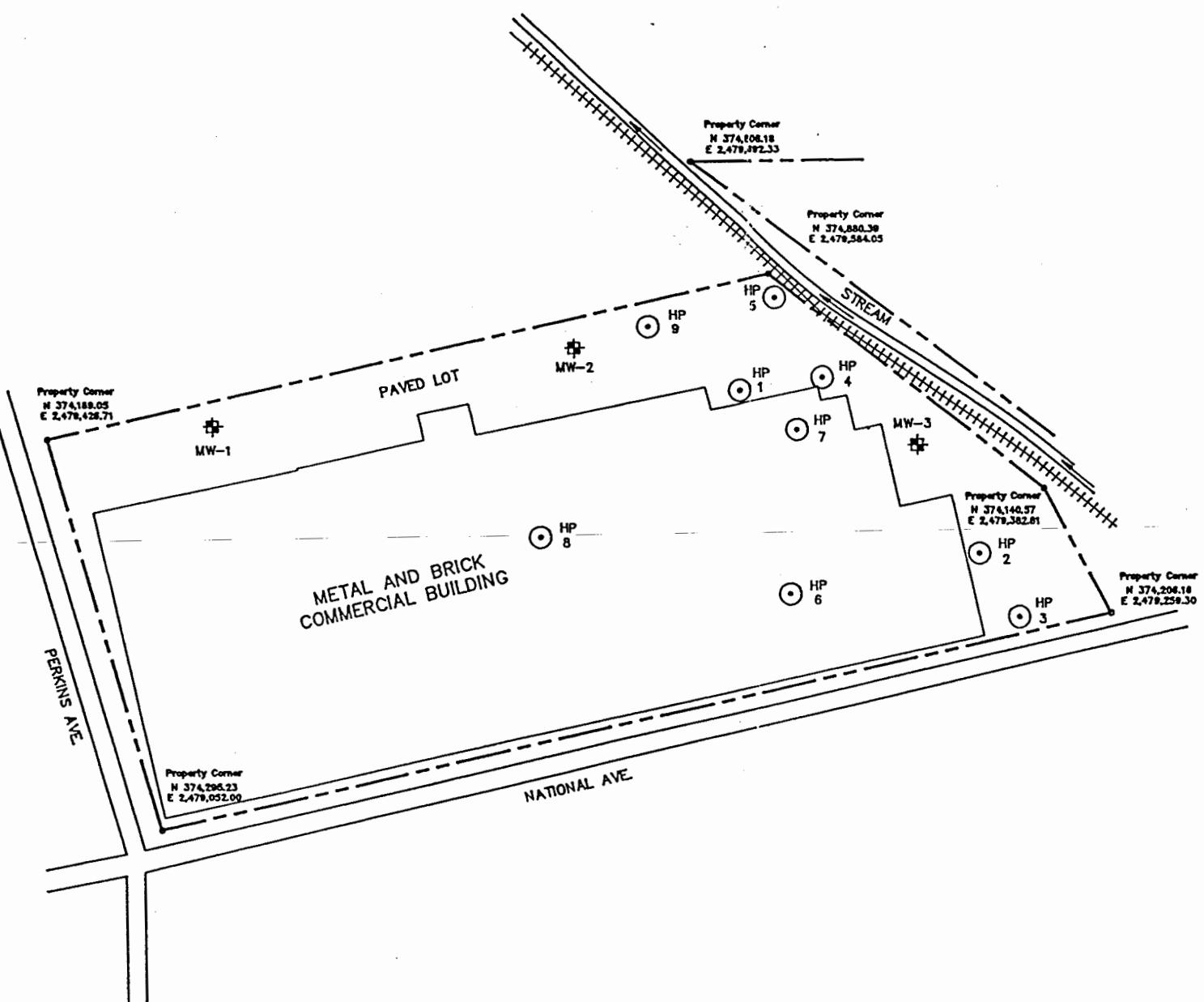
Signature

Michael Metton

Firm

Versar Inc

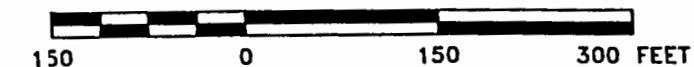
This form is authorized by Chapters 144,147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



LEGEND

- HP (circle with dot) SAMPLE LOCATION
- MW-3 (cross) MONITOR WELL LOCATION
- ||||| RAILROAD TRACKS
- - - PROPERTY BOUNDARY

APPROXIMATE SCALE



TITLE:		FIGURE 1	
		PERKINS SITE - SITE LAYOUT	
DRAWN:	JDJ	DATE:	12-3-93
APPROVED:	DJD	SCALE:	AS NOTED
Versar Inc.			FOR: VME AMERICAS, INC. WAUKESHA, WI.
1520 KENSINGTON ROAD OAK BROOK, IL 60521			PROJECT NO. 1871.002
			DRAWING NO. 18712-B5

ATTACHMENT G
LABORATORY ANALYTICAL RESULTS
OF THE SIXTH TANK CONTENTS

NOV-29-1993 11:53

E & K

414 452 7254

P.002/006

14527254

P.02

PRECISION ANALYTICAL LABORATORY205 WEST GALENA
MILWAUKEE, WI 53212
(414) 272-522211/29/93
10:18 RE

Analytical Report

Attn: Janice Van Haveren
Client: Superior Environmental
P.O. Box 1249
Sheboygan, WI 53082-1249

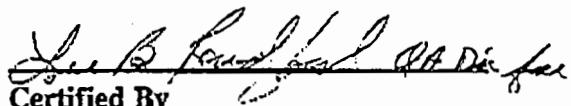
WORK ID: VME 20257

Date Received: 11/10/93
Date Reported: 11/22/93

PAL ORDER #: 9311190

SAMPLE DESCRIPTION	LAB ID	DATE COLLECTED
12068 UST LIQUID	01A	10/22/93
12069 UST SLUDGE	02A	10/22/93

Laboratory ID Number (Wisconsin DNR): 241369260


Certified By
Jeff Bushner

PRECISION ANALYTICAL LABORATORY
Report Comments

11/29/93

CLIENT: Superior Environmental

PAL Order #: 9311190

All analysis as per approved method found in one or more of
the following:

Standard Methods for Evaluation of Water and Wastewater,
17th Edition

Methods for Chemical Analysis for Water and Wastes, Revised
March 1983, EPA 600/4-79-020

Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods, 3rd Edition 1986 EPA SW846

Analysis performed or certified by Precision Analytical Laboratory

Per client request, samples 9311190-01 and -02 were analyzed past
hold-time from containers with head space for volatile analysis.

OC Elevated detection limit due to sample concentration.

PRECISION ANALYTICAL LABORATORY

Page 1
11/29/93

CLIENT: Superior Environmental

Test	Result	Limit	Units	Analyzed	Extracted	BY	Method
Sample ID: 12068 UST LIQUID				Lab ID: 9311190-01A		Collected: 10/22/93	
8021 - Water						8021	
Benzene	BQL	2000	OC ug/l	11/18/93		JAH	
Bromobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
Bromochloromethane	BQL	2000	OC ug/l	11/18/93		JAH	
Bromodichloromethane	BQL	2000	OC ug/l	11/18/93		JAH	
Bromoform	BQL	2000	OC ug/l	11/18/93		JAH	
Bromomethane	BQL	2000	OC ug/l	11/18/93		JAH	
n-Butylbenzene	12000	2000	OC ug/l	11/18/93		JAH	
sec-Butylbenzene	22000	2000	OC ug/l	11/18/93		JAH	
tert-Butylbenzene	BQL	2000	OC ug/l	11/18/93		JAH	
Carbon tetrachloride	BQL	2000	OC ug/l	11/18/93		JAH	
Chlorobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
Chloroethane	BQL	2000	OC ug/l	11/18/93		JAH	
Chloroform	BQL	2000	OC ug/l	11/18/93		JAH	
Chloromethane	BQL	2000	OC ug/l	11/18/93		JAH	
2-Chlorotoluene	BQL	2000	OC ug/l	11/18/93		JAH	
4-Chlorotoluene	BQL	2000	OC ug/l	11/18/93		JAH	
1,2-Dibromo-3-chloropropane	BQL	10000	OC ug/l	11/18/93		JAH	
Dibromochloromethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,2-Dibromoethane	BQL	2000	OC ug/l	11/18/93		JAH	
Dibromomethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,2-Dichlorobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
1,3-Dichlorobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
1,4-Dichlorobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
Dichlorodifluoromethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,1-Dichloroethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,2-Dichloroethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,1-Dichloroethene	BQL	2000	OC ug/l	11/18/93		JAH	
cis-1,2-Dichloroethene	BQL	2000	OC ug/l	11/18/93		JAH	
trans-1,2-Dichloroethene	BQL	2000	OC ug/l	11/18/93		JAH	
1,2-Dichloropropane	BQL	2000	OC ug/l	11/18/93		JAH	
1,3-Dichloropropane	BQL	2000	OC ug/l	11/18/93		JAH	
2,2-Dichloropropane	BQL	2000	OC ug/l	11/18/93		JAH	
1,1-Dichloropropene	BQL	2000	OC ug/l	11/18/93		JAH	
cis-1,3-Dichloropropene	BQL	2000	OC ug/l	11/18/93		JAH	
trans-1,3-Dichloropropene	BQL	2000	OC ug/l	11/18/93		JAH	
Ethylbenzene	14000	2000	OC ug/l	11/18/93		JAH	
Hexachlorobutadiene	BQL	2000	OC ug/l	11/18/93		JAH	
Isopropylbenzene	3800	2000	OC ug/l	11/18/93		JAH	
p-Isopropyltoluene	16000	2000	OC ug/l	11/18/93		JAH	
Methylene Chloride	BQL	2000	OC ug/l	11/18/93		JAH	
M-t-butyl-ether	BQL	2000	OC ug/l	11/18/93		JAH	
Naphthalene	BQL	2000	OC ug/l	11/18/93		JAH	
n-Propylbenzene	8500	2000	OC ug/l	11/18/93		JAH	
Styrene	BQL	2000	OC ug/l	11/18/93		JAH	
1,1,1,2-Tetrachloroethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,1,2,2-Tetrachloroethane	BQL	2000	OC ug/l	11/18/93		JAH	

BQL - Below Quantification Limit

NP - Not Present

PRECISION ANALYTICAL LABORATORY

Page 2
11/29/93

CLIENT: Superior Environmental

Test	Result	Limit	Units	Analyzed	Extracted	BY	Method
8021 - Water							8021
Tetrachloroethene	BQL	2400	OC ug/l	11/18/93		JAH	
Toluene	20000	2000	OC ug/l	11/18/93		JAH	
1,2,3-Trichlorobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
1,2,4-Trichlorobenzene	BQL	2000	OC ug/l	11/18/93		JAH	
1,1,1-Trichloroethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,1,2-Trichloroethane	BQL	2000	OC ug/l	11/18/93		JAH	
Trichloroethene	BQL	2000	OC ug/l	11/18/93		JAH	
Trichlorofluoromethane	BQL	2000	OC ug/l	11/18/93		JAH	
1,2,3-Trichloropropane	BQL	2000	OC ug/l	11/18/93		JAH	
1,2,4-Trimethylbenzene	45000	2000	OC ug/l	11/18/93		JAH	
1,3,5-Trimethylbenzene	20000	2000	OC ug/l	11/18/93		JAH	
Vinyl Chloride	BQL	2000	OC ug/l	11/18/93		JAH	
o-Xylene	17000	2000	OC ug/l	11/18/93		JAH	
m/p-Xylene	100000	4000	OC ug/l	11/18/93		JAH	

Sample ID: 12069 UST SLUDGE

Lab ID: 9311190-02A

Collected: 10/22/93

Test	Result	Limit	Units	Analyzed	Extracted	BY	Method
8021 - Water							8021
Benzene	BQL	120	OC mg/kg	11/19/93		JAH	
Bromobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
Bromoform	BQL	120	OC mg/kg	11/19/93		JAH	
Bromochloromethane	BQL	120	OC mg/kg	11/19/93		JAH	
Bromodichloromethane	BQL	120	OC mg/kg	11/19/93		JAH	
Bromoform	BQL	120	OC mg/kg	11/19/93		JAH	
Bromomethane	BQL	120	OC mg/kg	11/19/93		JAH	
n-Butylbenzene	330	120	OC mg/kg	11/19/93		JAH	
sec-Butylbenzene	220	120	OC mg/kg	11/19/93		JAH	
tert-Butylbenzene	240	120	OC mg/kg	11/19/93		JAH	
Carbon tetrachloride	BQL	120	OC mg/kg	11/19/93		JAH	
Chlorobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
Chloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
Chloroform	BQL	120	OC mg/kg	11/19/93		JAH	
Chloromethane	BQL	120	OC mg/kg	11/19/93		JAH	
2-Chlorotoluene	BQL	120	OC mg/kg	11/19/93		JAH	
4-Chlorotoluene	BQL	120	OC mg/kg	11/19/93		JAH	
1,2-Dibromo-3-chloropropane	BQL	620	OC mg/kg	11/19/93		JAH	
Dibromochloromethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,2-Dibromoethane	BQL	120	OC mg/kg	11/19/93		JAH	
Dibromomethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,2-Dichlorobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
1,3-Dichlorobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
1,4-Dichlorobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
Dichlorodifluoromethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,1-Dichloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,2-Dichloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,1-Dichloroethene	BQL	120	OC mg/kg	11/19/93		JAH	
cis-1,2-Dichloroethene	BQL	120	OC mg/kg	11/19/93		JAH	
trans-1,2-Dichloroethene	BQL	120	OC mg/kg	11/19/93		JAH	
1,2-Dichloropropene	BQL	120	OC mg/kg	11/19/93		JAH	

BQL - Below Quantification Limit

NP - Not Present

PRECISION ANALYTICAL LABORATORY

Page 3
11/29/93

CLIENT: Superior Environmental

Test	Result	Limit	Units	Analyzed	Extracted	BY	Method
8021 - Water						8021	
1,3-Dichloropropane	BQL	120	OC mg/kg	11/19/93		JAH	
2,2-Dichloropropane	BQL	120	OC mg/kg	11/19/93		JAH	
1,1-Dichloropropene	BQL	120	OC mg/kg	11/19/93		JAH	
cis-1,3-Dichloropropene	BQL	120	OC mg/kg	11/19/93		JAH	
trans-1,3-Dichloropropene	BQL	120	OC mg/kg	11/19/93		JAH	
Ethylbenzene	2600	120	OC mg/kg	11/19/93		JAH	
Hexachlorobutadiene	BQL	120	OC mg/kg	11/19/93		JAH	
Isopropylbenzene	220	120	OC mg/kg	11/19/93		JAH	
p-Isopropyltoluene	BQL	120	OC mg/kg	11/19/93		JAH	
Methylene Chloride	BQL	120	OC mg/kg	11/19/93		JAH	
M-t-butyl-ether	BQL	120	OC mg/kg	11/19/93		JAH	
Naphthalene	BQL	120	OC mg/kg	11/19/93		JAH	
n-Propylbenzene	290	120	OC mg/kg	11/19/93		JAH	
Styrene	BQL	120	OC mg/kg	11/19/93		JAH	
1,1,1,2-Tetrachloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,1,2,2-Tetrachloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
Tetrachloroethene	BQL	150	OC mg/kg	11/19/93		JAH	
Toluene	1700	120	OC mg/kg	11/19/93		JAH	
1,2,3-Trichlorobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
1,2,4-Trichlorobenzene	BQL	120	OC mg/kg	11/19/93		JAH	
1,1,1-Trichloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,1,2-Trichloroethane	BQL	120	OC mg/kg	11/19/93		JAH	
Trichloroethene	BQL	120	OC mg/kg	11/19/93		JAH	
Trichlorofluoromethane	BQL	120	OC mg/kg	11/19/93		JAH	
1,2,3-Trichloropropane	BQL	120	OC mg/kg	11/19/93		JAH	
1,2,4-Trimethylbenzene	470	120	OC mg/kg	11/19/93		JAH	
1,3,5-Trimethylbenzene	BQL	120	OC mg/kg	11/19/93		JAH	
Vinyl Chloride	BQL	120	OC mg/kg	11/19/93		JAH	
o-Xylene	1100	120	OC mg/kg	11/19/93		JAH	
m/p-Xylene	7800	250	OC mg/kg	11/19/93		JAH	

BQL - Below Quantification Limit

NP - Not Present

**ATTACHMENT H
HYDROPUCH GROUNDWATER
SAMPLE ANALYTICAL RESULTS
AND CHAIN OF CUSTODY**



NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
860 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 209-5445

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

11/02/1993

NET Job Number: 93.09367

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

Project Description: Akerman Site; Waukesha WI

Sample Number	Sample Description	Date Taken	Date Received
235062	Trip Blank		10/20/1993
235063	HP1-17'; Grab	10/13/1993	10/20/1993
235064	HP1-48'; Grab	10/13/1993	10/20/1993
235065	HP2-18'; Grab	10/13/1993	10/20/1993
235066	HP2-42'; Grab	10/13/1993	10/20/1993
235067	HP3-14'; Grab	10/14/1993	10/20/1993
235068	HP3-42'; Grab	10/14/1993	10/20/1993
235069	HP4-13'; Grab	10/14/1993	10/20/1993
235070	HP4-44'; Grab	10/14/1993	10/20/1993
235071	HP5-13.5'; Grab	10/14/1993	10/20/1993
235072	HP5-43.6'; Grab	10/14/1993	10/20/1993
235073	HP6-15.6'; Grab	10/15/1993	10/20/1993
235074	HP7-15.6'; Grab	10/15/1993	10/20/1993
235075	HP8-15.5'; Grab	10/15/1993	10/20/1993
235076	HP9-15.5'; Grab	10/15/1993	10/20/1993
235077	HP9-34'; Grab	10/15/1993	10/20/1993

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





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

11/02/1993

Sample No. : 235062

NET Job No.: 93.09367

Sample Description: Trip Blank
Akerman Site; Waukesha WI

Date Taken:
Time Taken:
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/RUN	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mje	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235063

NET Job No.: 93.09367

Sample Description: HP1-17'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/13/1993
Time Taken: 10:40
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Result	Unit	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	6.7	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	2.9	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	82	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethylene	63	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	

VOCs run past holding time.





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

11/02/1993

Sample No. : 235064

NET Job No.: 93.09367

Sample Description: HP1-48'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/13/1993
Time Taken: 12:55
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	

VOCs run past holding time.





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

11/02/1993

Sample No. : 235065

NET Job No.: 93.09367

Sample Description: HP2-18'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/13/1993
Time Taken: 15:30
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method POI	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	2.7	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	1.5	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	8.3	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	

VOCS run past holding time.





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

11/02/1993

Sample No. : 235066

NET Job No.: 93.09367

Sample Description: HP2-42'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/13/1993
Time Taken: 16:45
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/l	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	

VOCs run past holding time.





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

11/02/1993

Sample No. : 235067

NET Job No.: 93.09367

Sample Description: HP3-14'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/14/1993
Time Taken: 09:25
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	2.3	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	1.2	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	7.8	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235068

NET Job No.: 93.09367

Sample Description: HP3-42'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/14/1993
Time Taken: 10:35
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235069

NET Job No.: 93.09367

Sample Description: HP4-13'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/14/1993
Time Taken: 12:15
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	8.6	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis 1,2-Dichloroethene	2.9	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	29	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 280-3100
Fax: (708) 209-5445

ANALYTICAL REPORT

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

11/02/1993

Sample No. : 235070

NET Job No.: 93.09367

Sample Description: HP4-44'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/14/1993
Time Taken: 13:45
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/RUN	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethylene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 209-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

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

11/02/1993

Sample No. : 235071

NET Job No.: 93.09367

Sample Description: HP5-13.5'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/14/1993
Time Taken: 16:05
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Recd: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethylene	<1.0	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235072

NET Job No.: 93.09367

Sample Description: HP5-43.6'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/14/1993
Time Taken: 16:45
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	3.6	ug/L	10/29/1993	1.0	mje	10	8021 (1)	
Trichloroethylene	<1.0	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235073

NET Job No.: 93.09367

Sample Description: HP6-15.6'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/15/1993
Time Taken: 09:30
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PAL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjc	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mje	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjc	10	8021 (1)	
Trichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235074

NET Job No.: 93.09367

Sample Description: HP7-15.6'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/15/1993
Time Taken: 11:15
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PDI	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	7.6	ug/L	10/29/1993	1.0	mje	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjc	10	8021 (1)	
cis-1,2-Dichloroethene	5.5	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mje	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	10	ug/L	10/29/1993	1.0	mjc	10	8021 (1)	
1,1,1-Trichloroethene	16	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235075

NET Job No.: 93.09367

Sample Description: HP8-15.5'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/15/1993
Time Taken: 14:00
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/20/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	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

11/02/1993

Sample No. : 235076

NET Job No.: 93.09367

Sample Description: HP9-15.5'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/15/1993
Time Taken: 15:00
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Received: 17:45
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method DOL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	5.8	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mje	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mje	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	53	ug/L	10/29/1993	1.0	mje	10	8021 (1)	
Trichloroethene	73	ug/L	10/29/1993	1.0	mjs	10	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
VERSA CORP.
1520 Kensington Road
Suite 115
Oakbrook, IL 60521

11/02/1993

Sample No. : 235077

NET Job No.: 93.09367

Sample Description: HP9-34'; Grab
Akerman Site; Waukesha WI

Date Taken: 10/15/1993
Time Taken: 15:40
IEPA Cert. No. 100221

Date Received: 10/20/1993
Time Recd: 17:45
WDNR Cert. No. 999447130

Parameter	Result	Units	Date of Analysis	Method PQL	Analyst	Batch No.	Analytical Prep/Run	Method
VOLATILES - 8021 AQUEOUS								
1,1-Dichloroethane	4.4	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
1,1-Dichloroethene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
cis-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
trans-1,2-Dichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Hexachlorobutadiene	<2.0	ug/L	10/29/1993	2.0	mjs	10	8021 (1)	
1,1,1-Trichloroethane	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (1)	
Trichloroethene	<1.0	ug/L	10/29/1993	1.0	mjs	10	8021 (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/US9, Rev. 1988.

708 990 7585 : t21/21

Versar, Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME					PARAMETERS	INDUSTRIAL HYGIENE SAMPLE	
	Afternoon Site, Waukesha, WI							<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
SAMPLERS: (Signature)	(Printed)							
Dawn S. Petersen	Dawn S. Petersen							
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	No. OF CONTAINERS	REMARKS	
					TB	1 X		
10-13-93	1040		DSR	X	HPI - 17'	2 X		
	1155			X	HPI - 48'	2 X		
	1530			X	HP2 - 18'	2 X		
	1645			X	HP2 - 42'	2 X		
10-14-93	0925			X	HP3 - 14'	2 X		
	1035			X	HP3 - 42'	2 X		
	1215			X	HP4 - 13'	2 X		
	1345			X	HP4 - 44'	1 X		
	1605			X	HP5 - 13.5'	2 X		
	1645			X	HP5 - 43.6'	2 X		
Relinquished by: (Signature)		Date / Time	Received by: (Signature)		Relinquished by: (Signature)		Date / Time	Received by: (Signature)
Dawn S. Petersen		10-15-93 / 1645	Don Kline		Don Kline		10-17-93 / 1325	Dawn S. Petersen
(Printed)		(Printed)	(Printed)		(Printed)		(Printed)	(Printed)
Relinquished by: (Signature)		Date / Time	Received for Laboratory by: (Signature)		Date / Time	Remarks		
Dawn S. Petersen		10-15-93 / 1520	Jack Auer		10-19 / 1520	The only analysis for compounds shown on attached table.		
(Printed)		(Printed)	(Printed)		(Printed)			

Distribution: Original plus One Accompania Shipment (white and yellow); Copy to Coordinator Field Files (pink).
 Dawn S. Petersen 10/17/93 1745

SENT BY: NET MIDWEST

NET BARTLETT-

:11- 2-93 : 7:07PM :

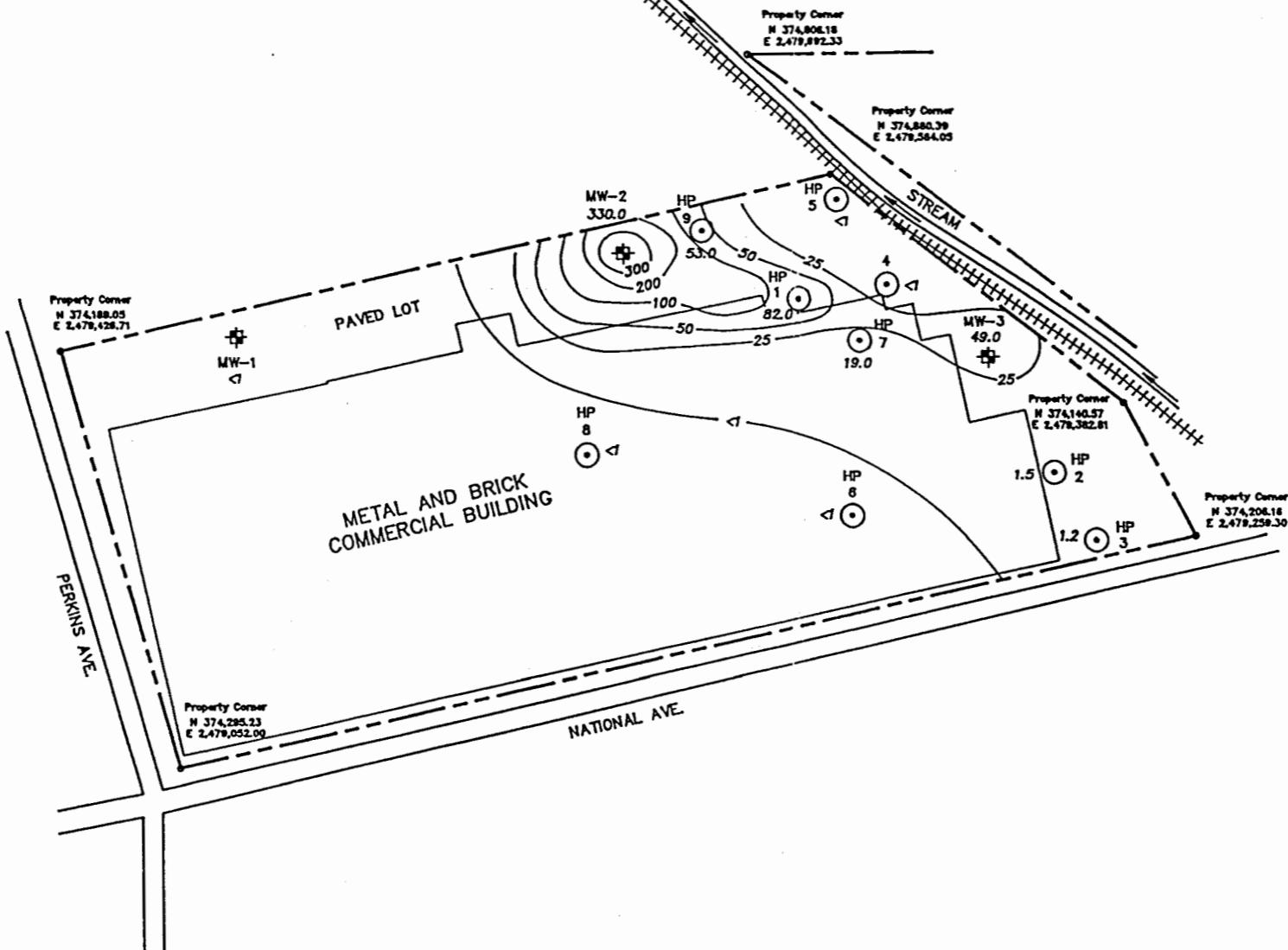
NET BARTLETT-
:11- 9-93 : 7:06PM :

SENT BY NET MIDWEST

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

to Coordinator Field File (pink).
Date of Reference 10-19-93 1745

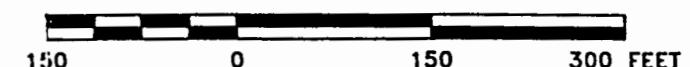
ATTACHMENT I
ISOCONCENTRATION CONTOUR
DRAWING OF 1,1,1-TCA



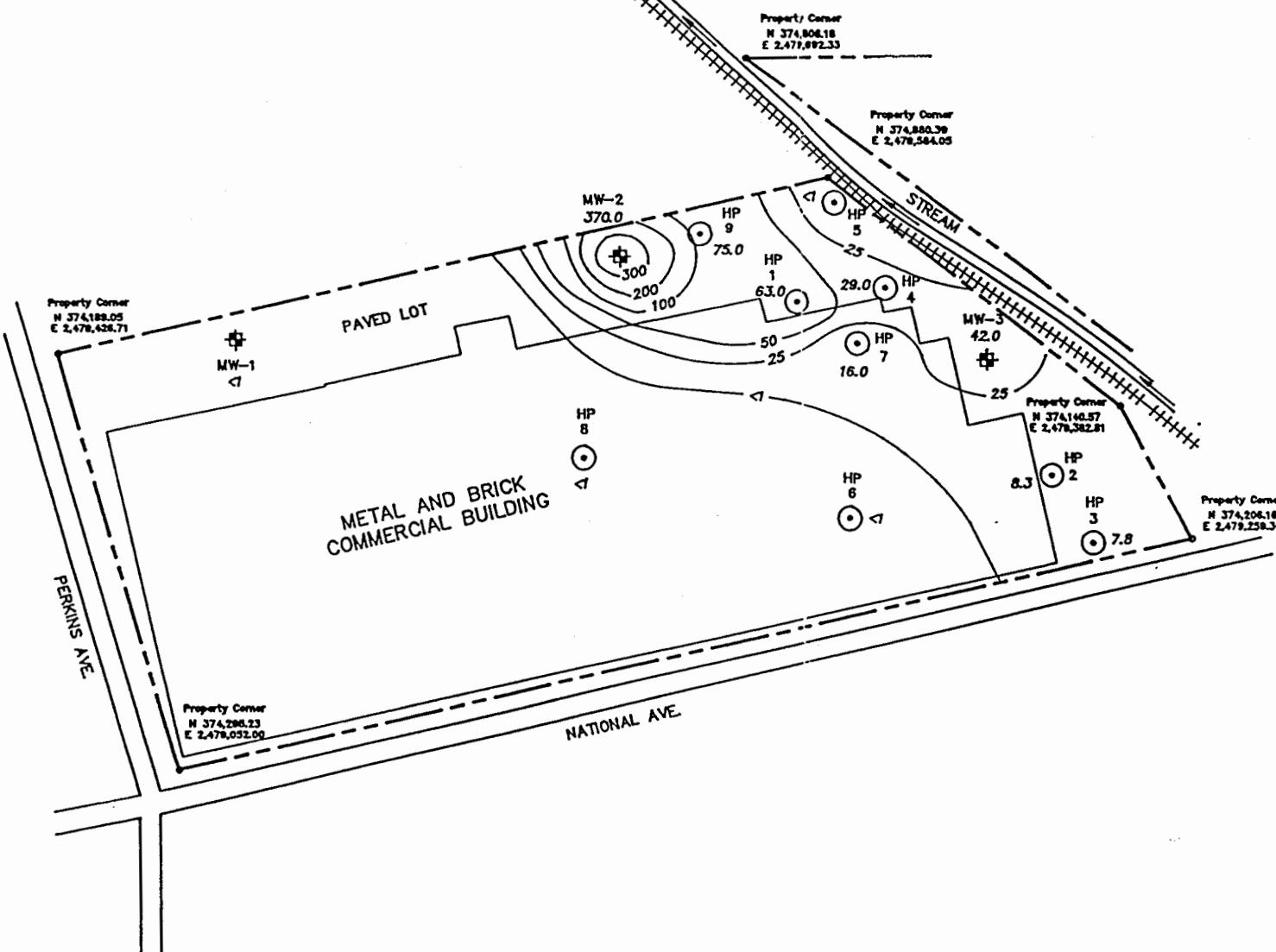
LEGEND

- HP (circle) SAMPLE LOCATION
- MW-3 (cross) MONITOR WELL LOCATION
- ||||| RAILROAD TRACKS
- PROPERTY BOUNDARY

APPROXIMATE SCALE



TITLE:		FIGURE 2	
1,1,1, TCA ISO-CONCENTRATION CONTOURS			
DRAWN:	JDJ	DATE:	12-3-93
APPROVED:	JDJ	SCALE:	AS NOTED
VME AMERICAS, INC.		FOR:	
WAUKESHA, WI.			
Versair, Inc.			
1520 KENSINGTON ROAD		PROJECT NO. 1871.002	
OAK BROOK, IL 60521		DRAWING NO. 18712-B3	



LEGEND

- HP (circle) SAMPLE LOCATION
- MW-3 (cross) MONITOR WELL LOCATION
- ||||| RAILROAD TRACKS
- Property Boundary

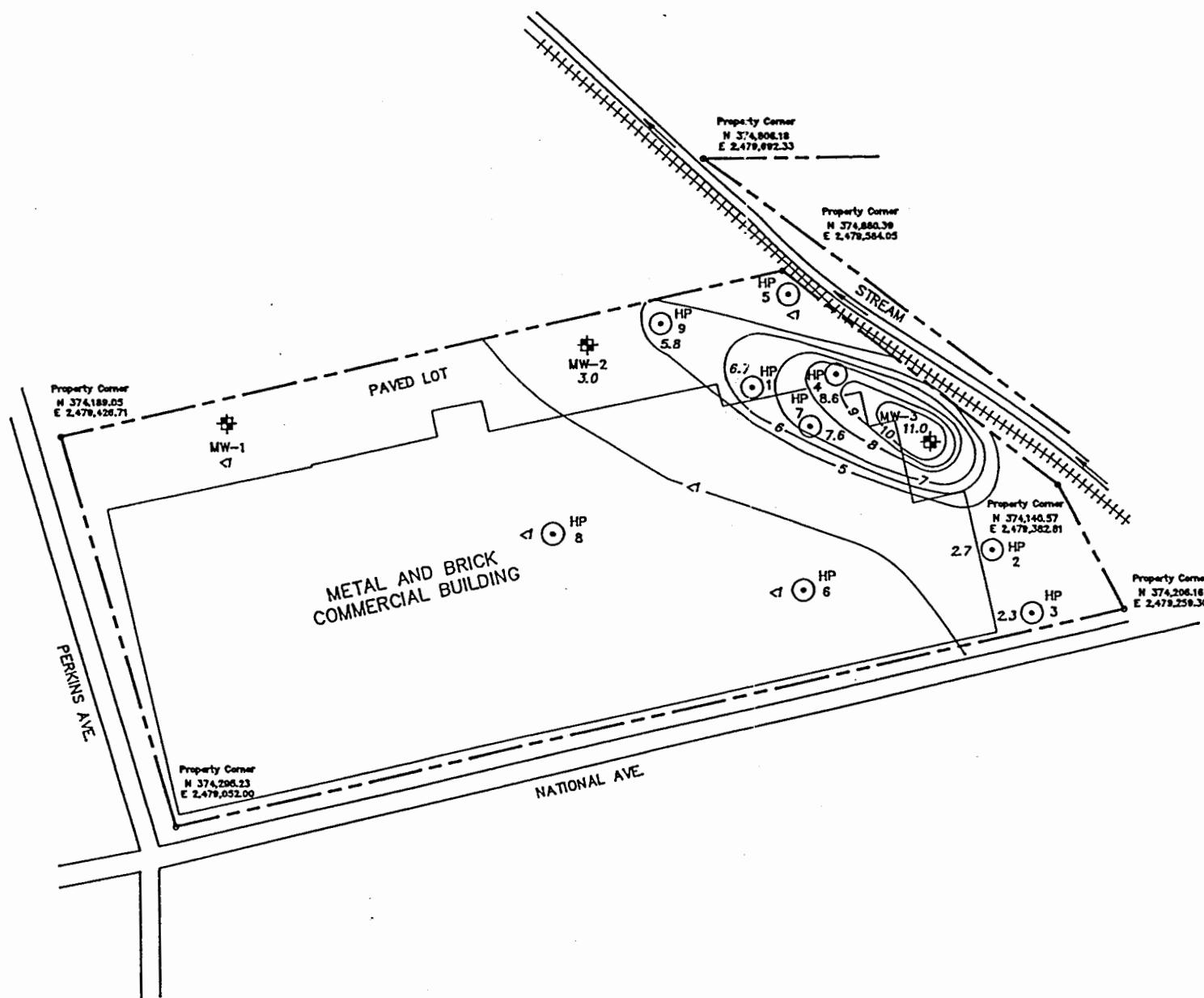
APPROXIMATE SCALE



TITLE: FIGURE 3		
TCE ISO-CONCENTRATION CONTOURS		
DRAWN: JDJ	DATE: 12-3-93	FOR:
APPROVED: JDJ	SCALE: AS NOTED	VME AMERICAS, INC.
Versar, Inc.		WAUKESHA, WI.
1520 KENSINGTON ROAD		PROJECT NO. 1871.002
OAK BROOK, IL. 60521		DRAWING NO. 18712-B2

CAD FILE \ACAD\1871002\18712B2.DWG

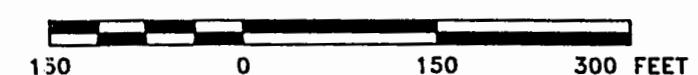
ATTACHMENT K
ISO CONCENTRATION CONTOUR
DRAWING OF 1,1-DCA



LEGEND

- HP SAMPLE LOCATION
- MW-1 MONITOR WELL LOCATION
- ||||| RAILROAD TRACKS
- - - - - PROPERTY BOUNDARY

APPROXIMATE SCALE



TITLE:		FIGURE 4	
1,1 - DCA ISO-CONCENTRATION CONTOURS			
DRAWN:	JDJ	DATE:	12-3-93
APPROVED:	DJD	SCALE:	AS NOTED
Versar Inc.		FOR:	
1520 KENSINGTON ROAD		VME AMERICAS, INC.	
OAK BROOK, IL 60521		WAUKESHA, WI	
PROJECT NO.		1871.002	
DRAWING NO.		18712-B4	

CAD FILE \ACAD\1871002\18712B4.DWG