FINAL

ORIGINAL

PHASE III ENVIRONMENTAL ASSESSMENT AND CONCEPTUAL ACTION PLAN

FORMER EAST LOT FOUNDRY SAND FILL AREA

AT

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VERSAR PROJECT NUMBER 1871-002

NOVEMBER 1993

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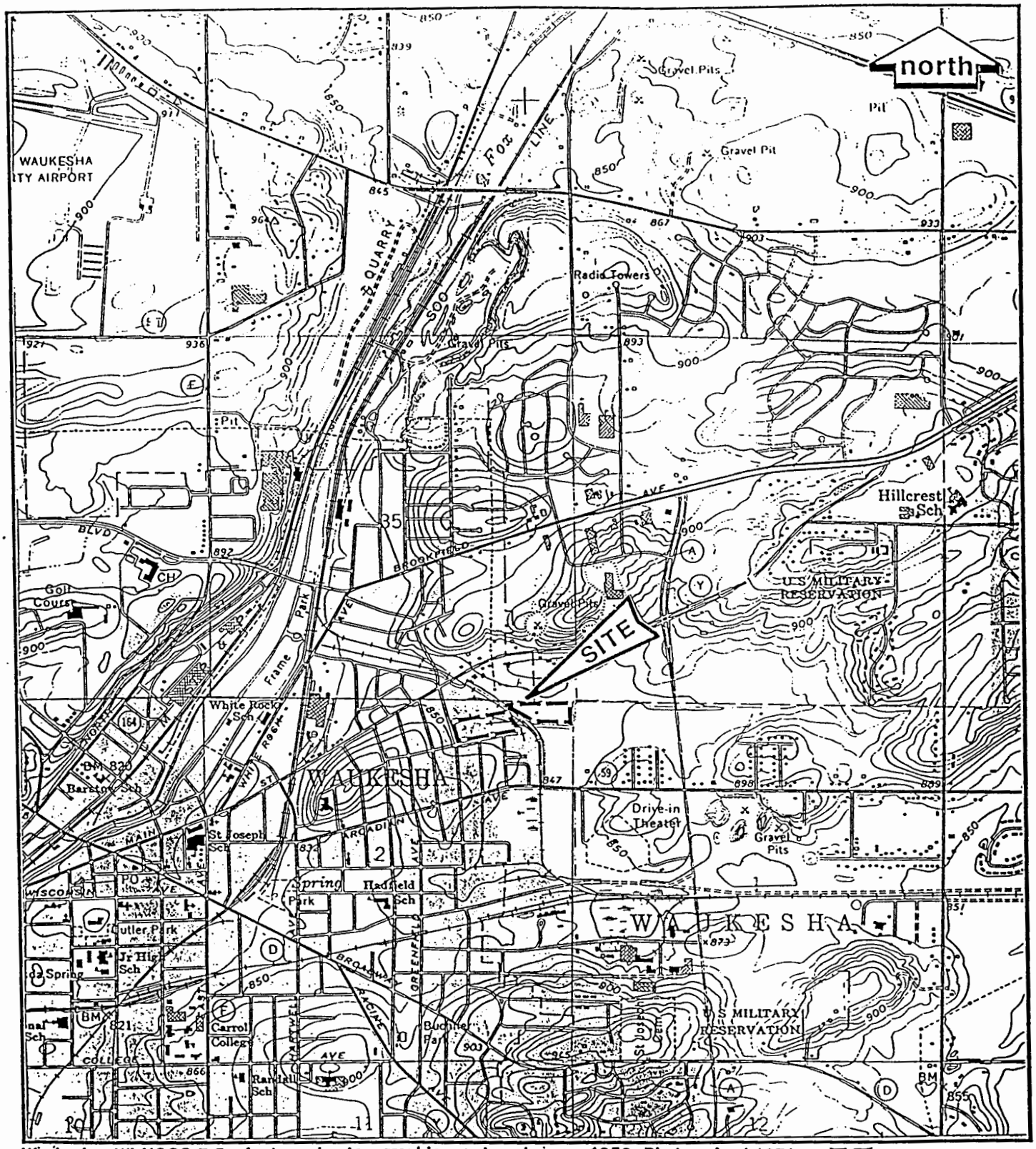
1.0 INTRODUCTION

Versar Inc. was retained by VME Americas, Inc. to perform environmental consulting and engineering services at the former VME Akerman facility, located at 1005 Perkins Avenue in Waukesha, Wisconsin. The facility is segregated into east and west parcels by an unnamed stream. The west parcel is associated with production buildings and associated yards and lots. The east parcel is an area developed consisting of gravel and asphalt covered lot surrounded by trees and brush. Versar previously performed Phase I, and II Environmental Assessments on both east and west lots. The Phase IIB and this Assessment was performed on a segregated area within the east parcel only. Refer to Figure 1 for site location.

1.1 Purpose

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

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



Waukesha, WI USGS 7.5-minute series topographic quadrangle map, 1959. Photorevised 1971. Photoinspected 1976. Versar INC.

Dashed line encloses site location. SCALE 1:24000

Quadrangle Location

1 1/2 0 1 Mi.

1000 0 1000 2000 3000 4000 5000 6000 7000 Ft.

1 .5 0 1 Km.

Figure 1.

Site Location Map.

Akerman Excavators, Waukesha, Wisconsin

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

1.2 Scope of Work

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

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

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

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

2.0 BACKGROUND

2.1 Phase I Assessment

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

2.2 Phase II and IIB Assessments

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

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

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

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

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

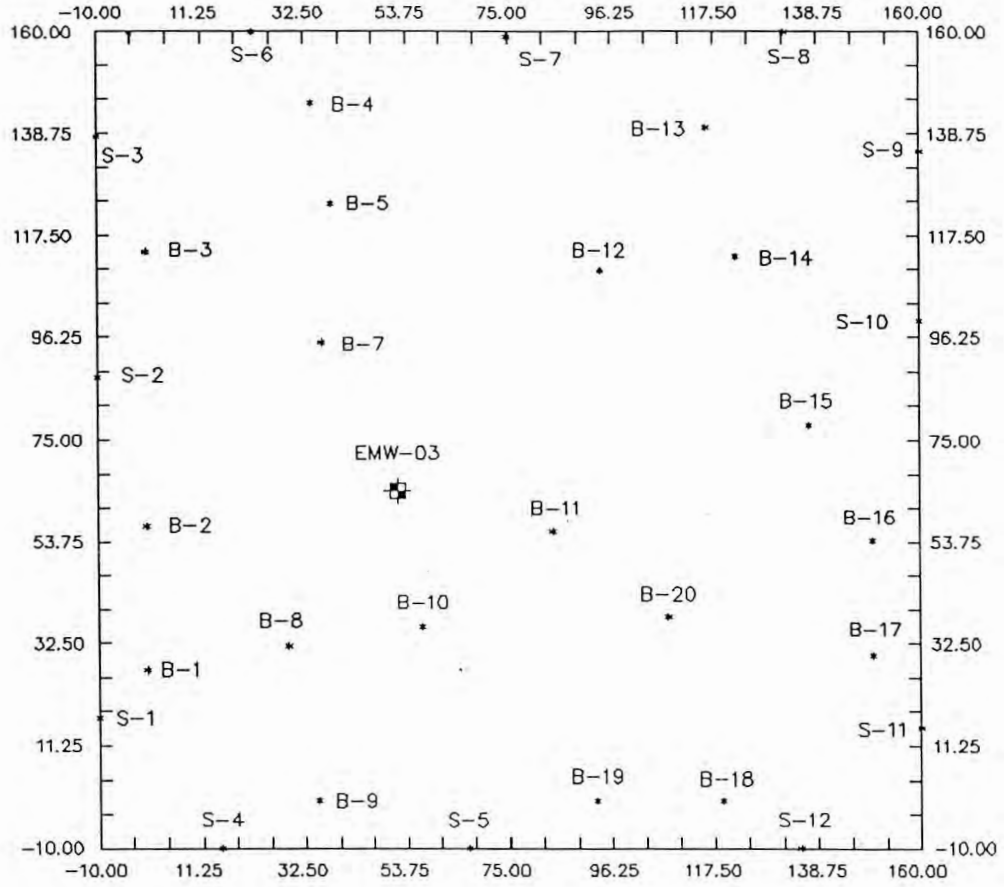
3.0 PHASE III DATA COLLECTION PROCEDURES

3.1 Soil Boring Locations and Sample Intervals

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

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

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



LEGEND

B-19 * — SAMPLE LOCATION WITH FIELD CONCENTRATION LEVEL

TITLE: FIGURE 3 SOIL BORING AND SURFACE GRAB SAMPLE LOCATIONS			
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DRAWN: JDJ	DATE: 10/19/93	VME AMERICAS, INC.	
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borings were selected to have Shelby Tubes pushed into the lower part of the peat and the underlying silty clay and the tubes are being held at Versar offices. Boring logs are in Appendix D4.

3.2 Surface Perimeter Sample Locations

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

3.3 Selecting Horizons for Field Screening

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

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

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

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

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

a) sample documentation including sample identification, location, depth, sampling personnel identification, time and date of collection, analyst identification, time and date of field analysis, raw data, calculations, final results, and observations as part of complete record keeping as pertains to the analyses in established notebooks;

b) calibration of field instrumentation (e.g. such as the photometer, pipette, and scale). According to the manufacturer's instructions (EnSys) optical density measurements of duplicate standards were taken. A valid test is indicated when the magnitude of the standards are within 0.20 optical density units of each other;

c) laboratory confirmation of select samples to validate screening capabilities within the three ranges of concentration.

Sample records are presented in Appendix D5.

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

3.4 Selecting Samples for Laboratory Analysis

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

Samples were selected to determine the following:

1) Confirmation of clean (less than 5 ppm concentration action level) perimeter (horizontal isolation);

2) Confirmation of clean base (vertical isolation);

3) Confirmation of general extent of area above 5 ppm;

4) Determination of highest concentrations; and

5) Potential determination of the PCB source placement method (i.e., surface discharge, load placement or horizontal lifts).

3.5 Isolated Sampling

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

TABLE 1

VME SOIL BORING AND SURFACE GRAB
PCB FIELD SCREENING RESULTS

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

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

4.0 SITE CONDITIONS AND RESULTS

4.1 Earth Materials Encountered

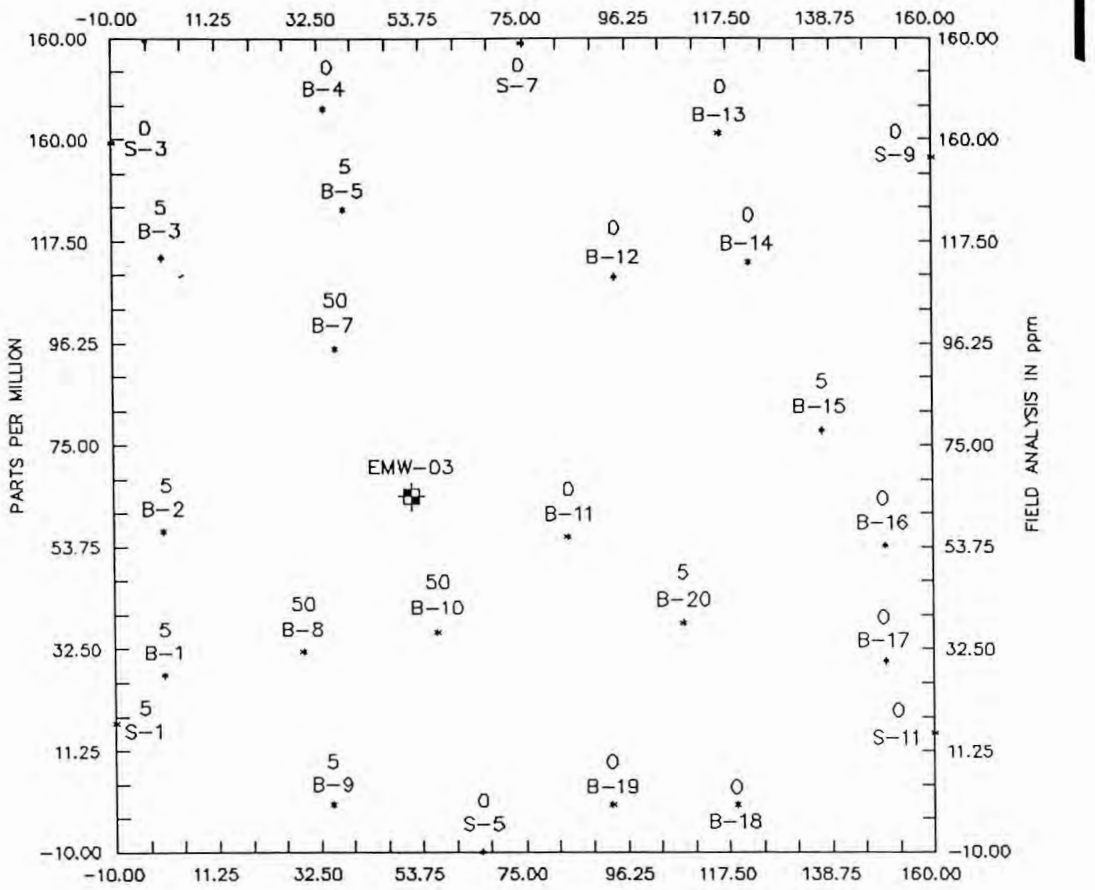
The fill that was drilled through started at surface grade and extended to a depth which ranged between 8 and 10 feet. The fill consisted of primarily dark gray foundry sand with minor amounts of cinder slag, wood, brick, concrete, and metal fragments, as well as, silt and gravel. The peat deposit was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

4.2 Contamination Defined with Field Screening Techniques

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

4.3 Additional Areas of Surface Disturbance

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



LEGEND

APPROXIMATE SCALE

0 50 100 FEET

0
B-19 – SAMPLE LOCATION WITH FIELD CONCENTRATION LEVEL

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FIGURE 4
COMPOSITE CONCENTRATIONS OF FIELD RESULTS

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DRAWN: JDJ	DATE: 10/19/93	VME AMERICAS, INC.
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4.4 Subsurface Flow

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

4.5 Laboratory Analytical Results

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

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

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

A composite was also selected at the deepest sample at locations B-1, B-3, B-14, B-15, and B-16 for the same purpose. This composite sample laboratory analysis result was 1.17 ppm.
Only one laboratory confirmation sample result was above the action level of 5 ppm, that being the surface sample at B-10. These results correlate well with the field results, indicating a surface release in the vicinity of Boring B-10. This confirms the Phase II and IIB test pit and surface composite sampling that also indicated concentrations of PCBs in this vicinity were isolated and higher at the surface.

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

TABLE 2

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

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

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

KEY

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

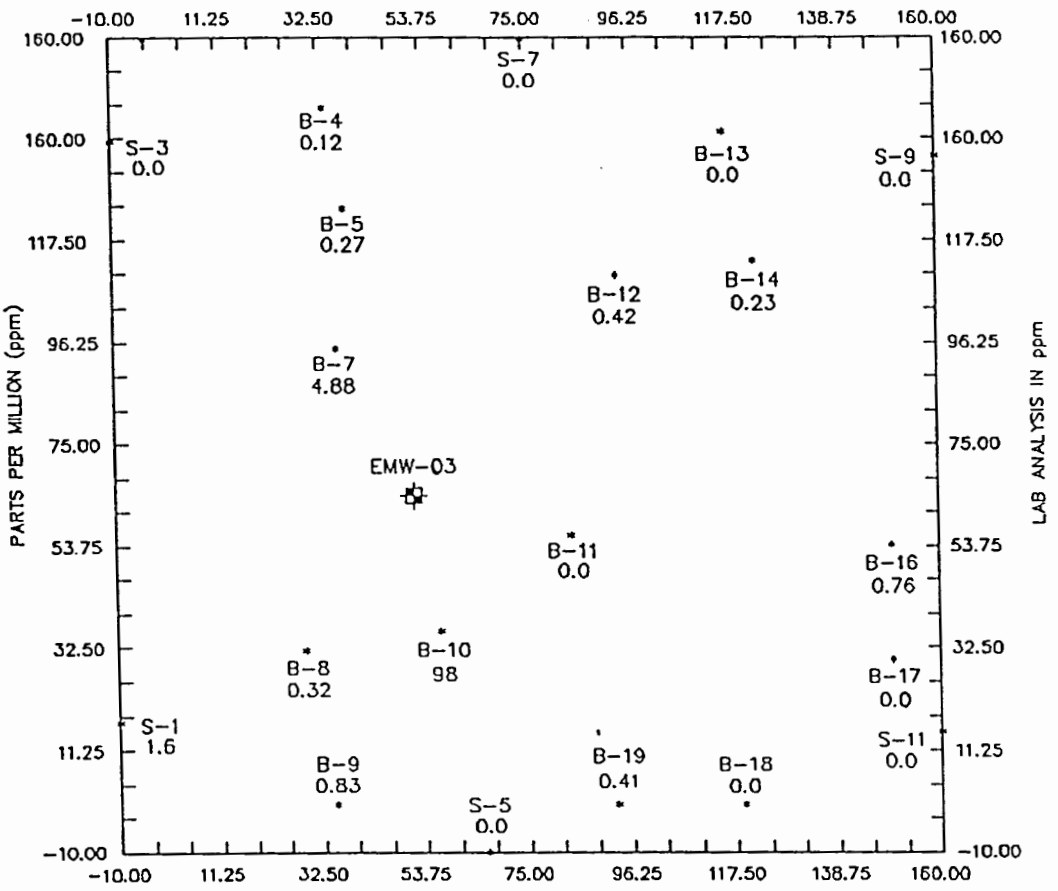
Field screening tests yield slightly higher results than the laboratory analysis, providing a conservative estimate as to the extent of contamination above the 5 pm action level. As a result, the composite drawing of laboratory results (Figure 5) may exhibit a larger extent of 5 ppm contamination than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

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

4.6 Isolated Sampling Results

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

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



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B-19
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– SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL

TITLE: FIGURE 5 ANALYTICAL LABORATORY RESULTS			
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DRAWN: JDJ	DATE: 10/19/93		
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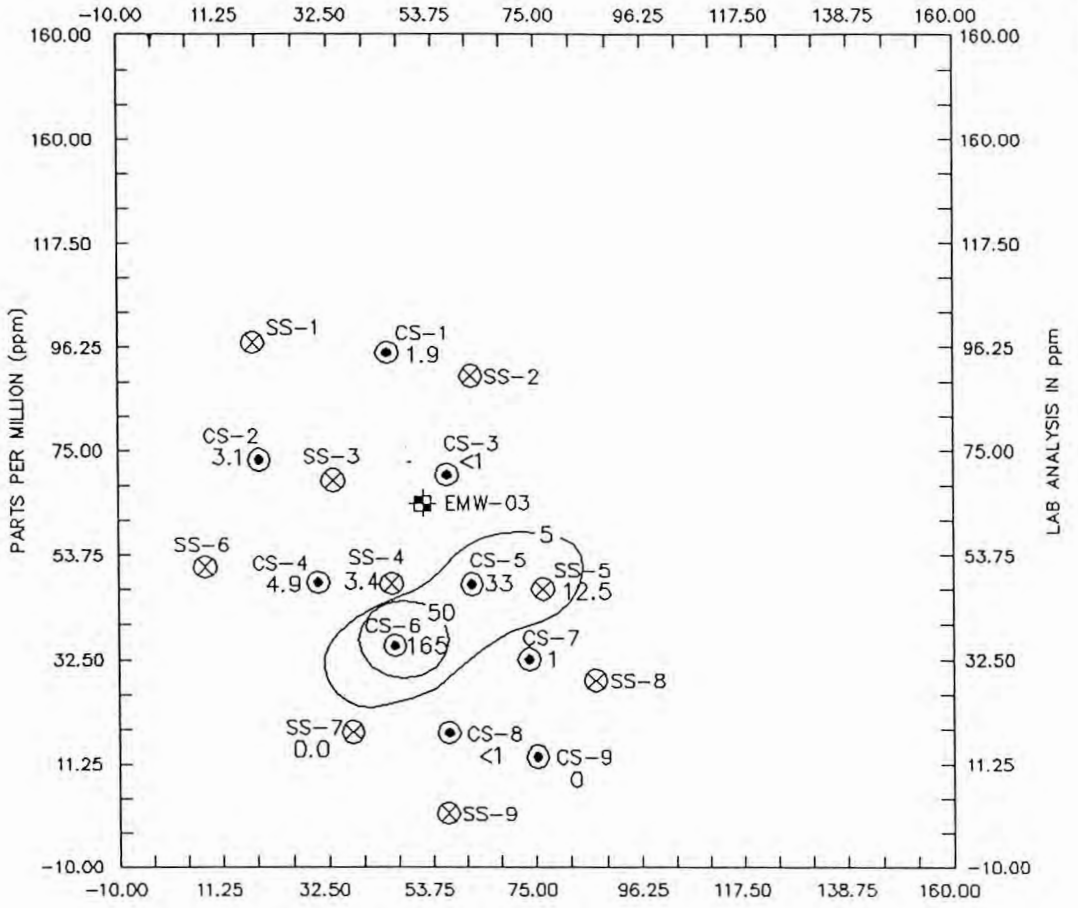

LEGEND

⊙ CS-2 – SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL

⊗ SS-1 – SURFACE SAMPLE ONLY

TITLE: FIGURE 6 ISOLATED SAMPLING ANALYTICAL LABORATORY RESULTS 0 – 6"			
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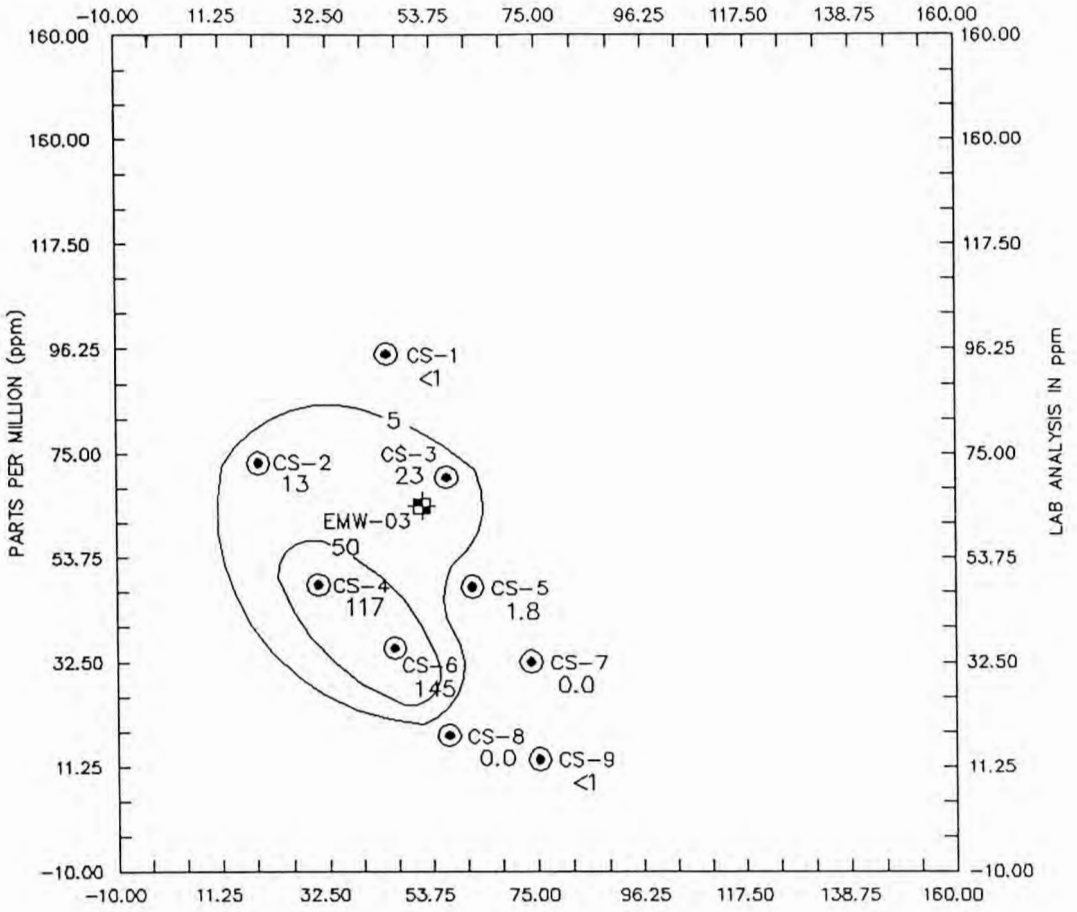

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⊙CS-2 – SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL

TITLE: FIGURE 7 ISOLATED SAMPLING ANALYTICAL LABORATORY RESULTS 12"–18"			
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CHECKED: DJD	SCALE: AS NOTED		
Versar INC. 1520 KENSINGTON ROAD OAK BROOK, IL. 60521		PROJECT NO. 1871.002 DRAWING NO. 18712A5	

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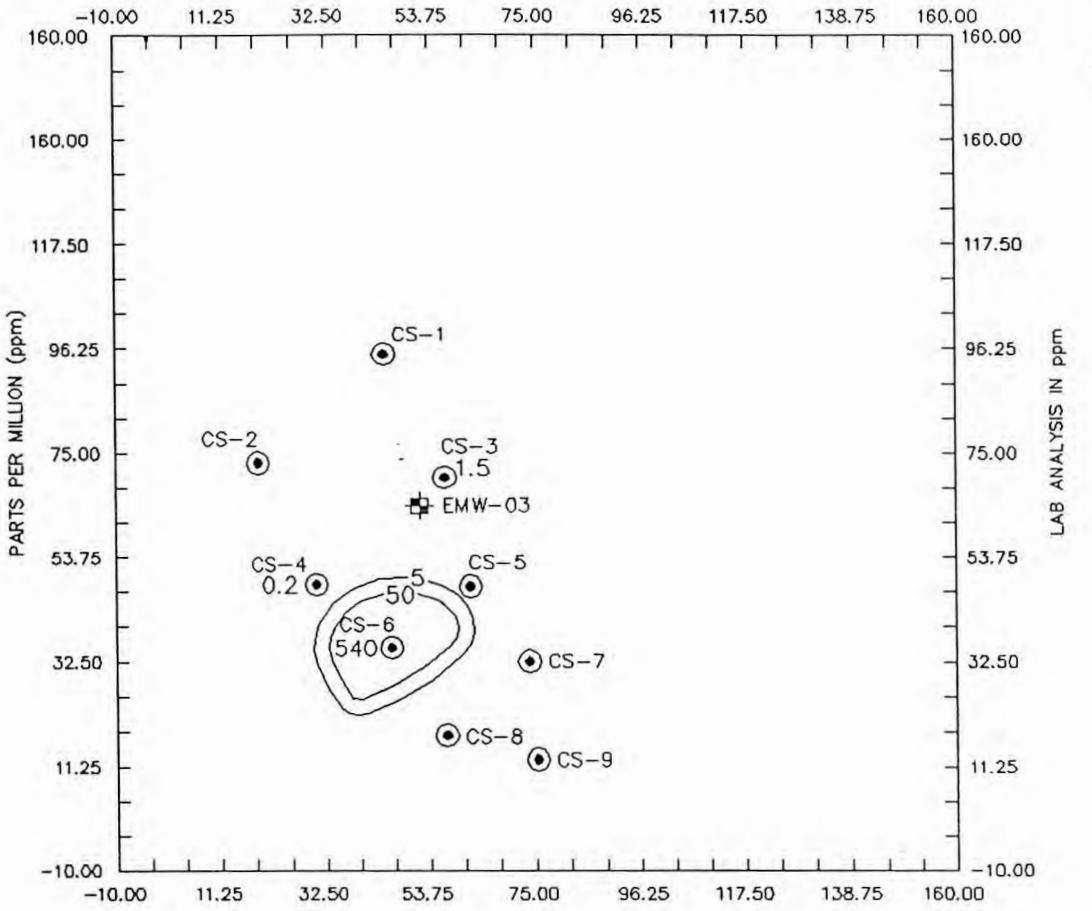

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⊙CS-2 – SAMPLE LOCATION WITH LAB CONCENTRATION LEVEL

TITLE:

FIGURE 8

ISOLATED SAMPLING ANALYTICAL LABORATORY RESULTS 24" – 30"

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5.0 CONCEPTUAL ACTION PLAN

5.1 Foundry Fill Area

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

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

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

5.2 PCB Contaminated Area

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

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

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

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

6.0 CONCLUSIONS AND RECOMMENDATIONS

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

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

- Laboratory analytical results indicate contaminants in the fill are not present in groundwater and surface water.

- Soil borings for monitoring wells and soil sampling, and test pit data indicate a clay layer of not less than 2.0 feet is beneath the entire fill area, limiting the potential flow into the underlying groundwater. The layer is performing as a natural clay liner for the fill area.

- Laboratory and field analysis of test pits, soil borings, and surface samples all indicate that the PCB contamination above the action limit of 5 ppm is isolated in the vicinity of B-10 and concentrated near the surface.

- PCBs are relatively immobile and it appears that the cause of the contamination may have been a surface release, and as a result, an immediate removal of the contaminated soil should be considered as the remedial action.

6.1 Recommendations

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

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

7.0 STATEMENT OF LIMITATIONS

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

- The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence of oil or hazardous materials and substances in the environment as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.

- Versar derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, conclusions, and recommendations expressed in the report.

- In preparing this report, Versar has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, Versar has not attempted to verify the accuracy or completeness of such information.

- The data reported and the findings, observations, conclusions, and recommendations expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.

- Because of the limitations stated above, the findings, observations, conclusions, and recommendations expressed by Versar in this report are limited to the information obtained and the surface and subsurface investigation undertaken and should not be considered an opinion concerning the compliance of any past or current owner or operator of the Site with any federal, state, or local law or regulation. No warranty or guarantee, whether express or implied is made with respect to the data reported or findings, observations, conclusions, and recommendations expressed in this report. Further, such data, findings, observations, conclusions, and recommendations are based solely upon Site conditions in existence at the time of investigation.

- This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.

8.0 REFERENCES

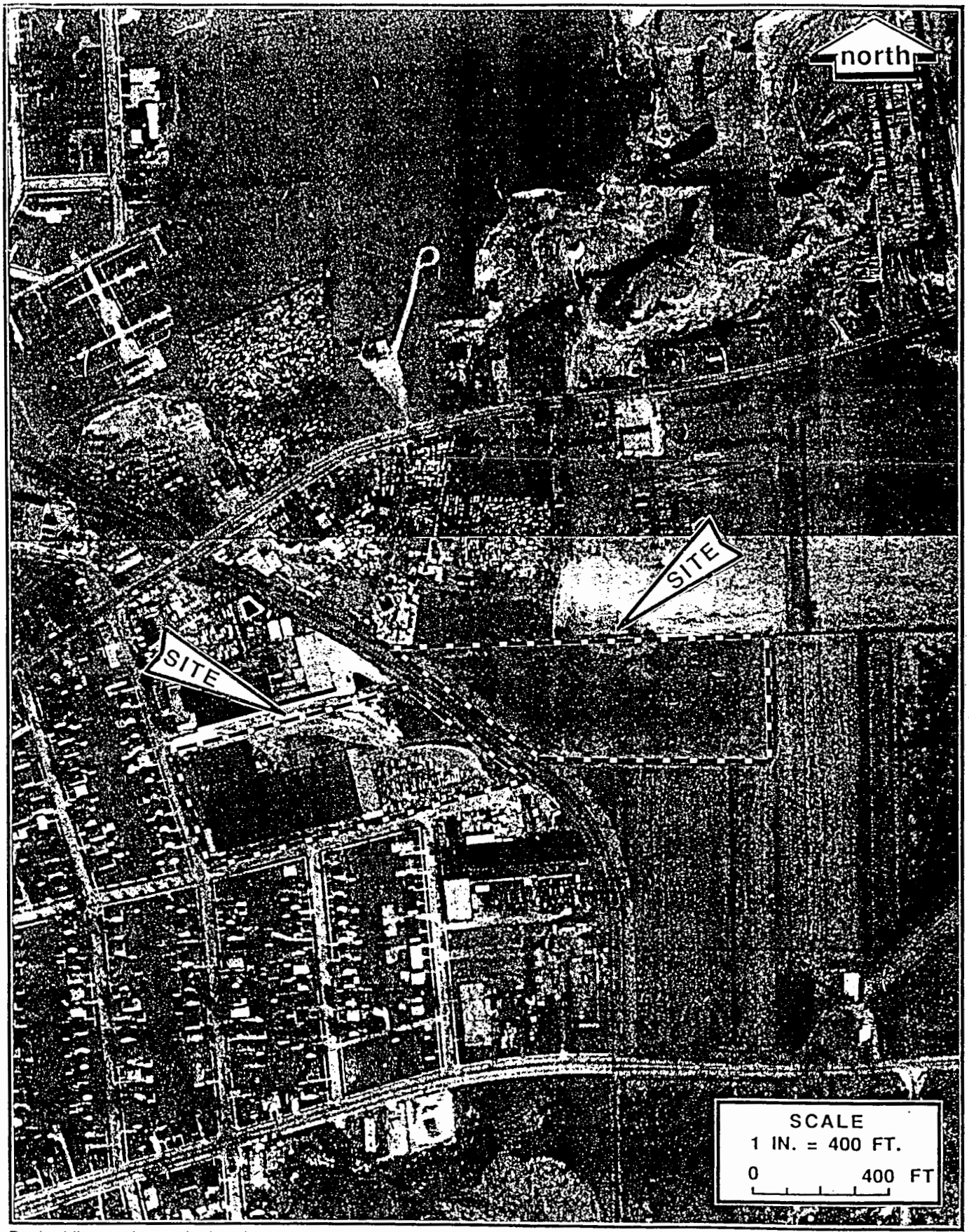
"Removal Program Representative Sampling Guidance", Volume 1: Soil, Interim Final U.S. EPA, November 1991.

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

APPENDICES

APPENDIX A
PHASE I

APPENDIX A1
HISTORICAL AERIAL PHOTOS, 1963, 1975, 1985

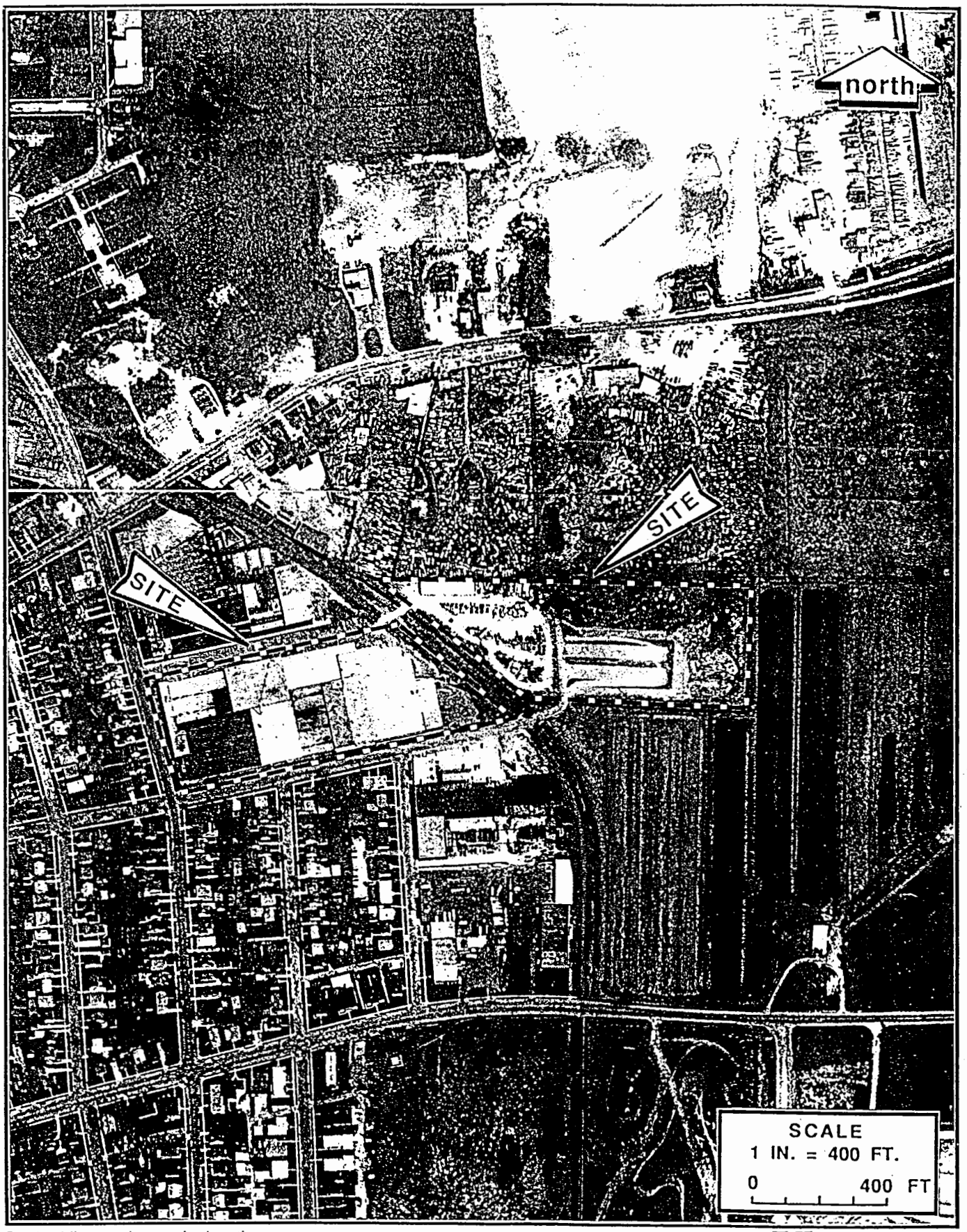


Dashed line encloses site location

Versar INC.

Historical Aerial Photo - 1963.

Akerman Excavators, Waukesha, Wisconsin

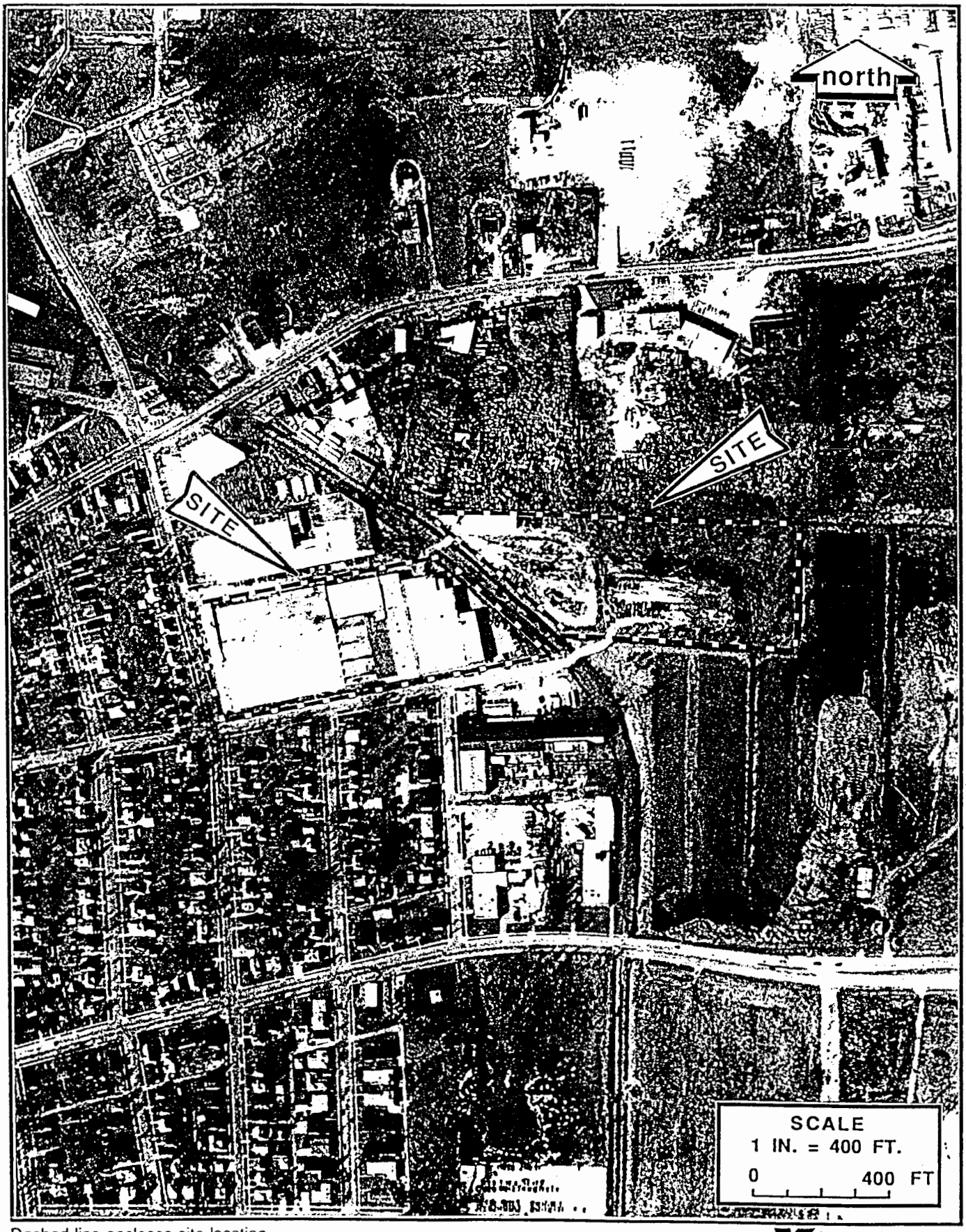


Dashed line encloses site location

Versar INC.

Historical Aerial Photo - 1975.

Akerman Excavators, Waukesha, Wisconsin



Dashed line encloses site location

Versar INC.

Historical Aerial Photo - 1985.

Akerman Excavators, Waukesha, Wisconsin

APPENDIX B
PHASE II

APPENDIX B1
SURFACE FILL ANALYTICAL RESULTS

Table 5
Surface Fill Analysis Results

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

ppm = parts per million
ppb = parts per billion

ENVIRONMENTAL LABORATORIES INC.

08/04/92 LABORATORY REPORT

E102 8475972 W31
CS/07/* / /

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

CHAIN OF CUSTODY

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

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

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT; SOIL SAMPLES WILL BE DISPOSED OF 6 WEEKS AFTER RECEIPT; WASTE SAMPLES (NON-WATER, NON-SOIL) WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED.
@ = ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE. # = ELEVATED DETECTION LIMIT DUE TO SAMPLE CONCENTRATION.
$ = ELEVATED DETECTION LIMIT DUE TO SAMPLE QUANTITY. + = ELEVATED DETECTION LIMIT DUE TO EXTRACT VOLUME.
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E102 8475972 W31
CS/07/* / /

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

CHAIN OF CUSTODY

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

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

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

CHAIN OF CUSTODY

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

TEST NAME	RESULT		UNITS	ANALYZED	METHOD	LIMIT
ALPHA-BHC	<2.0	@	PPB	08/04/92	SW846 8080	
BETA-BHC	<2.0	@	PPB	08/04/92	SW846 8080	
GAMMA-BHC (LINDANE)	<2.0	@	PPB	08/04/92	SW846 8080	
DELTA-BHC	<2.0	@	PPB	08/04/92	SW846 8080	
CHLORDANE	<2.0	@	PPB	08/04/92	SW846 8080	
4,4'-DDT	<2.0	@	PPB	08/04/92	SW846 8080	
4,4'-DDE	<2.0	@	PPB	08/04/92	SW846 8080	
4,4'-DDD	33		PPB	08/04/92	SW846 8080	
DIELDRIN	140		PPB	08/04/92	SW846 8080	
ENDOSULFAN I	17		PPB	08/04/92	SW846 8080	
ENDOSULFAN II	<2.0	@	PPB	08/04/92	SW846 8080	
ENDOSULFAN SULFATE	10		PPB	08/04/92	SW846 8080	
ENDRIN	<2.0	@	PPB	08/04/92	SW846 8080	
ENDRIN ALDEHYDE	27		PPB	08/04/92	SW846 8080	
HEPTACHLOR	<2.0	@	PPB	08/04/92	SW846 8080	
HEPTACHLOR EPOXIDE	330		PPB	08/04/92	SW846 8080	
TOXAPHENE	<2.0	@	PPB	08/04/92	SW846 8080	
PCB'S	42		PPM	08/04/92	SW846 8080	
	AROCLOR 1248					
BENZENE	<0.005	@	PPM	07/30/92	SW846 8021	
BROMOFORM	<0.015	@	PPM	07/30/92	SW846 8021	
CARBON TETRACHLORIDE	<0.005	@	PPM	07/30/92	SW846 8021	
CHLOROBENZENE	<0.005	@	PPM	07/30/92	SW846 8021	
CHLORODIBROMOMETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
CHLOROETHANE	<0.025	@	PPM	07/30/92	SW846 8021	
2-CHLOROETHYLVINYL ETHER	<0.025	@	PPM	07/30/92	SW846 8021	
CHLOROFORM	<0.005	@	PPM	07/30/92	SW846 8021	
DICHLOROBROMOMETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
1,1-DICHLOROETHANE	<0.005	@	PPM	07/30/92	SW846 8021	

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DATE COLLECTED 07/28/92 DATE RECEIVED 07/28/92
PRESERVED: YES TEMPERATURE: ON ICE
CONT. INTEGRITY: MEETS STANDARD SAMPLE INTEG: MEETS STANDARD

TEST NAME	RESULT		UNITS	ANALYZED	METHOD	LIMIT
1,2-DICHLOROETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
1,1-DICHLOROETHYLENE	<0.005	@	PPM	07/30/92	SW846 8021	
1,2-DICHLOROPROPANE	<0.005	@	PPM	07/30/92	SW846 8021	
CIS-1,3-DICHLOROPROPENE	<0.015	@	PPM	07/30/92	SW846 8021	
ETHYLBENZENE	<0.005	@	PPM	07/30/92	SW846 8021	
BROMOMETHANE	<0.025	@	PPM	07/30/92	SW846 8021	
CHLOROMETHANE	<0.025	@	PPM	07/30/92	SW846 8021	
METHYLENE CHLORIDE	0.025		PPM	07/30/92	SW846 8021	
1,1,2,2-TETRACHLOROETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
TETRACHLOROETHYLENE	<0.005	@	PPM	07/30/92	SW846 8021	
TOLUENE	<0.005	@	PPM	07/30/92	SW846 8021	
TRANS-1,2-DICHLOROETHENE	<0.005	@	PPM	07/30/92	SW846 8021	
1,1,1-TRICHLOROETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
1,1,2-TRICHLOROETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
TRICHLOROETHYLENE	<0.005	@	PPM	07/30/92	SW846 8021	
TRICHLOROFLUOROMETHANE	<0.005	@	PPM	07/30/92	SW846 8021	
VINYL CHLORIDE	<0.015	@	PPM	07/30/92	SW846 8021	
TRANS-1,3-DICHLOROPROPENE	<0.025	@	PPM	07/30/92	SW846 8021	
GC PESTICIDE EXTRACTION	COMPLETE			07/31/92	SW846 3540	
GC BASE NEUTRAL EXTRACTION	COMPLETE			07/31/92	SW846 3540	
GC ACID EXTRACTION	COMPLETE			07/31/92	SW846 3540	

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APPENDIX B2
CHAIN-OF-CUSTODY FORMS

[101]

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE
	VME (PROJECT MANAGER: MIKE RACE)	8475972 7-28-92 912210	Y / N

SAMPLERS: (Signature) _____ (Printed) JANICE SMITH-BAGHERI

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	GC ACIDS, GC BN, GC VOC, GC PEST/PCBS	PCBS	TPH					REMARKS MATRIX	REMARKS PRES
SOIL-SURF	7/28/92		X		DUMP	3	X				E04004			SOIL	NONE
ELEV-2	7/28/92			X	ELEV-2	1		X			E04005			OIL	NONE
STREAM-UP	7/28/92			X	STREAM	4			X		E04002			WATER	HCL
STREAM-DOWN	7/28/92			X	STREAM	4			X		E04003			WATER	HCL

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	7/28/92 1250				
(Printed) JANICE SMITH-BAGHERI		(Printed) 1250	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
	7/28/92 1520			HAND DELIVERED TO LAB. IMMEDIATELY PLACED ON ICE AFTER SAMPLE COLLECTED. QA/QC PACKAGE "B" REQUIRED. (RSL)
(Printed) Stacy Mathis		(Printed)		

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

APPENDIX C
PHASE IIB

APPENDIX C1
SUMMARY OF LABORATORY RESULTS

TABLE 2
Results of Laboratory Analysis

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

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

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

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

APPENDIX C2
TEST PIT LOGS

Depth (feet)	TP-1
0 to ¾:	Top soil over gravel fill.
¾ to 6½:	Foundry fill consisting of black (N2/0) foundry sand, casting molds of founry sand, some slag, minor amounts of lumber, wire, plastic.
6½ to 7½:	Brown silty clay.
7½ to 9:	Gray (N6/0) silty clay.

TP-2

0 to ¾:	Gravel fill over sand base.
¾ to 6½:	Foundry fill consisting of black (N2/0) foundry sand, casting molds of founry sand, some slag, minor amounts of lumber, wire, plastic.
6½ to 10:	Brown silty clay.
10 to 11:	Gray (N6/0) silty clay.

TP-3

0 to 4½:	Fill consisting of subrounded gravel.
4½ to 9½:	Foundry fill consisting of black (N2/0) foundry sand, casting molds of founry sand, minor amounts of lumber and wire.
9½ to 13:	Brown silty clay.
13 to 14:	Gray (N6/0) silty clay.

TP-4

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

TP-5

0 to 1:	White gravel fill.
1 to 6½:	Foundary fill consisting of black (N2/0) foundery sand, little wire and lumber scraps, trace yellow (5Y7/8) foundery sand castings, trace oil filters, moist grading downward to wet.
6½ to 8½:	Very dark gray (5Y3/1) organic clay, moist.
8½ to 9:	Light gray (N7/0) silt, moist.

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

TP-7

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

APPENDIX C3
ANALYTICAL RESULTS

QUALITY
ANALYTICAL
LABS, INC.

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

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

ATTN: Janice R. Smith-Bagheri

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

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

VME
PROJECT #1871.1

Completed report.

Results follow:

Sample ID: TP-1-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

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

Method: GC/ECD

PCBs:	0.5 mg/Kg	4.5 mg/Kg

Sample ID: TP-2-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.5
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	BDL
Zinc	0.1	0.3
TCLP Phenol:	0.12	0.33
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	49. mg/Kg
Closed Cup Flashpoint:		>200^{0}F
pH: (10% solution)		7.5

Method: GC/ECD

PCBs:	0.5 mg/Kg	2.5 mg/Kg

Sample ID: TP-3-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.6
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	0.2
Zinc	0.1	0.4
TCLP Phenol:	0.12	0.20
Chlorine:	0.015%	0.016%
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200^{0}F
pH: (10% solution)		7.3

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL

Sample ID: TP-4-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

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

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL

Sample ID: TP-5-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.5
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	0.2
Zinc	0.1	0.4
TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200^{0}F
pH: (10% solution)		8.1

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL

Sample ID: TP-6-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.3
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	0.4
Zinc	0.1	0.2
TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	4.8 mg/Kg
Closed Cup Flashpoint:		>200^{0}F
pH: (10% solution)		7.6

Method: GC/ECD

PCBs:	0.5 mg/Kg	BDL

Sample ID: TP-7-1

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

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

TCLP ACID EXTRACTABLES
Method: SW-846 8270

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

TCLP BASE/NEUTRALS
Method: SW-846 8270

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

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

TCLP METALS
Method: Standard Method

Parameter	MDL (mg/L)	Analysis (mg/L)
Arsenic	0.2	BDL
Cadmium	0.1	BDL
Chromium	0.1	BDL
Lead	0.1	BDL
Selenium	0.2	BDL
Silver	0.1	BDL
Barium	0.1	0.4
Mercury	0.05	BDL
Copper	0.1	BDL
Nickel	0.1	BDL
Zinc	0.1	0.1
TCLP Phenol:	0.12	BDL
Chlorine:	0.015%	BDL
Cyanide:	5.0 mg/Kg	BDL
Reactive Sulfide:	1.3 mg/Kg	BDL
Closed Cup Flashpoint:		>200^{0}F
pH: (10% solution)		8.5

Method: GC/ECD

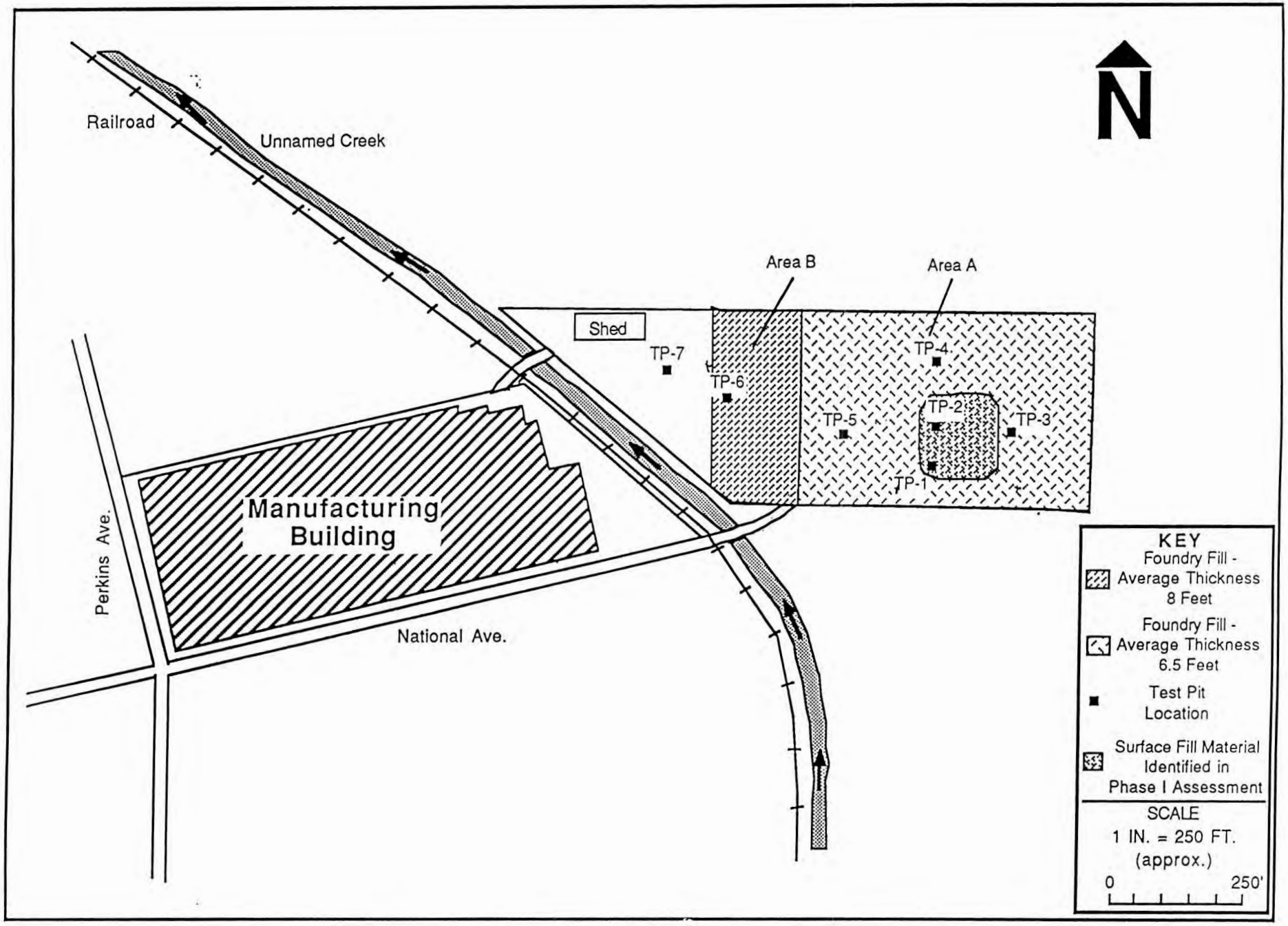
PCBs:	0.5 mg/Kg	BDL

MDL = Method Detection Limit
BDL = Below Detection Limit

Respectfully submitted,

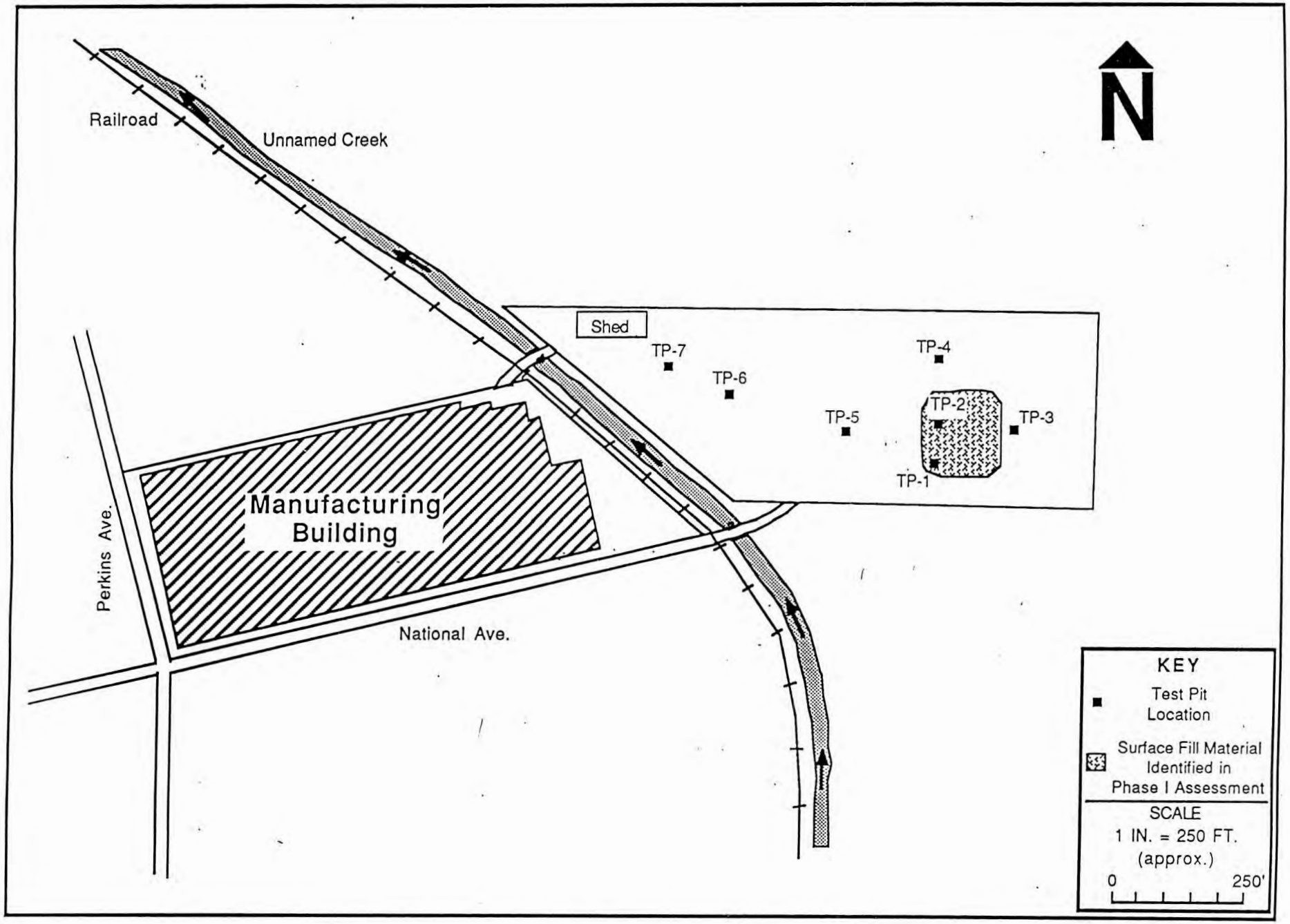
Nicholas Cuzzone
Lab Manager
Quality Analytical Labs, Inc.

APPENDIX C4
PHASE IIB FIGURES



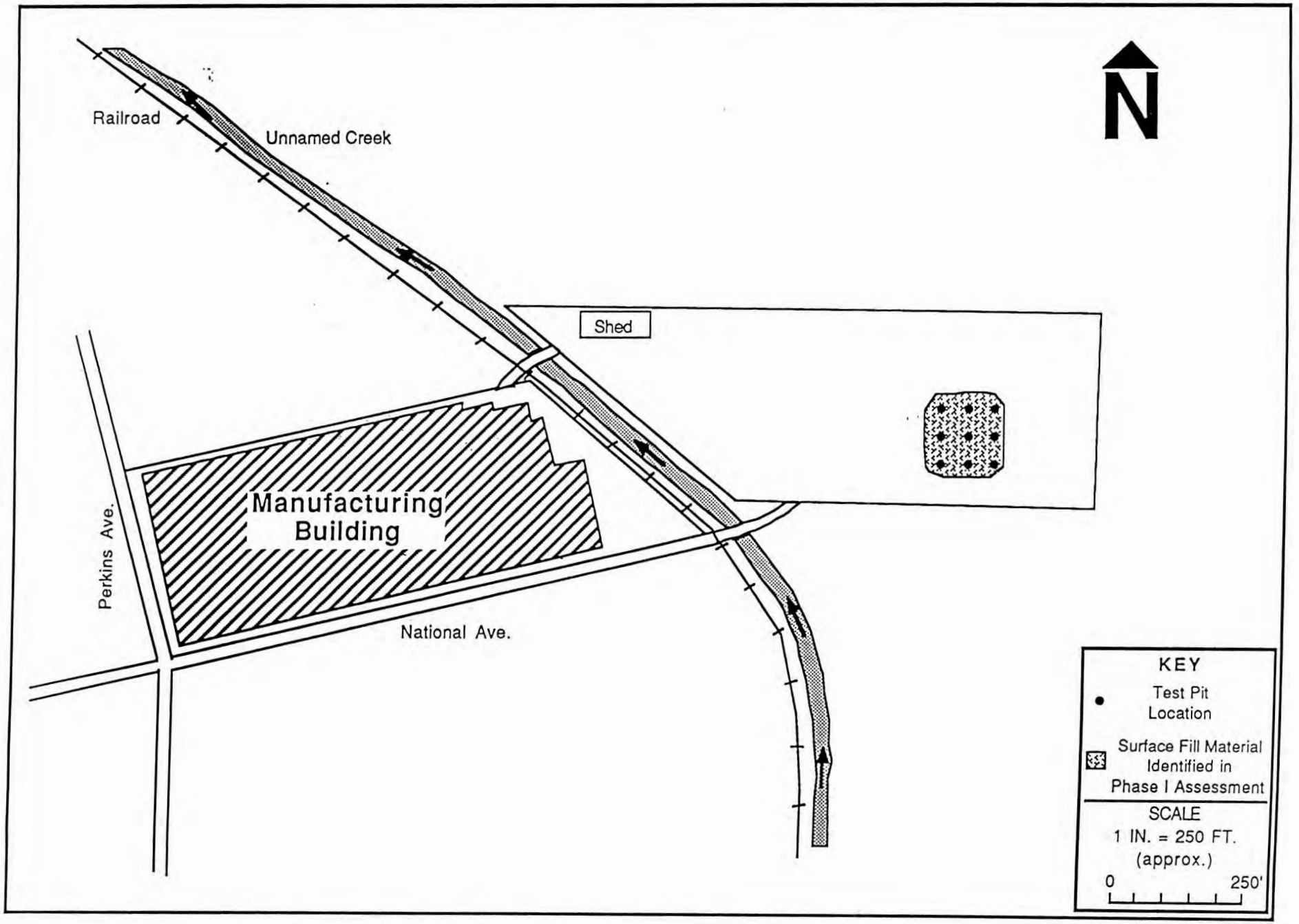
Foundry Fill Areas

VME/Akerman Excavators, Waukesha, Wisconsin



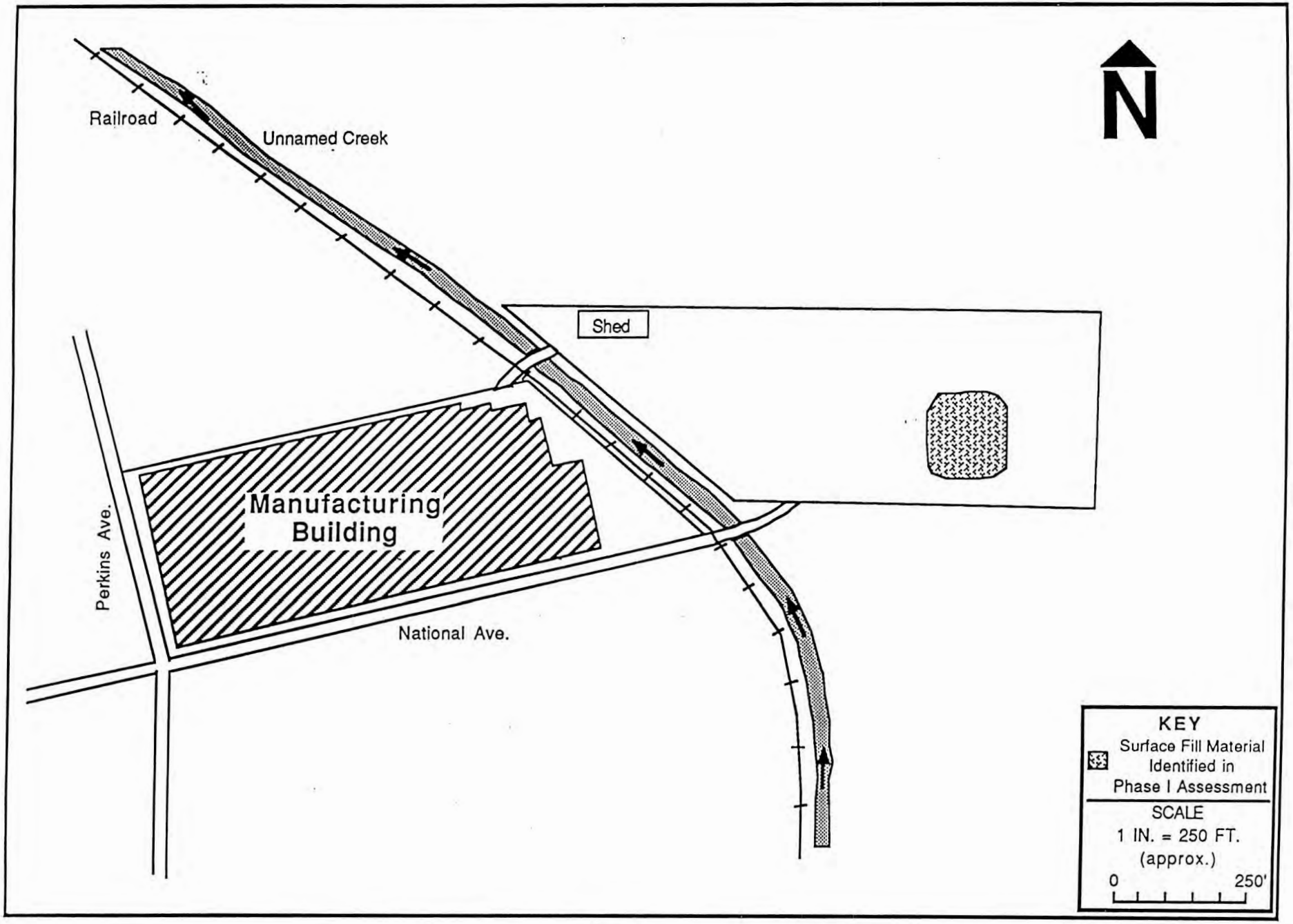
Test Pit Locations

VME/Akerman Excavators, Waukesha, Wisconsin



Proposed Test Pit Locations

VME/Akerman Excavators, Waukesha, Wisconsin



Property Features Map

VME/Akerman Excavators, Waukesha, Wisconsin

APPENDIX C5
CHAIN-OF-CUSTODY FORMS

Versar INC.

CHAIN OF CUSTODY RECORD

1203 1

PROJECT NO.	PROJECT NAME
1871.1	VME

SAMPLERS: (Signature) Janice R. Smith-Bagheri (Printed) JANICE R. SMITH-BAGHERI

PARAMETERS: NO. OF CONTAINERS; SEE ATTACHED

INDUSTRIAL HYGIENE SAMPLE: Y / N

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	SEE ATTACHED	REMARKS / MATRIX
TP-1-1	9/8/92	845		X	TP-1	2	X	Soil
TP-2-1	9/8/92	1000		X	TP-2	2	X	Soil
TP-3-1	9/8/92	1150		X	TP-3	2	X	Soil
TP-4-1	9/8/92	1445		X	TP-4	2	X	Soil
TP-5-1	9/9/92	900		X	TP-5	2	X	Soil
TP-6-1	9/9/92	1045		X	TP-6	2	X	Soil
TP-7-1	9/9/92	1245		X	TP-7	2	X	Soil

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed) JANICE SMITH-BAGHERI	9/14/92	(Printed) JEFF FATA 9/14/92 12:35	(Printed)		(Printed)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
(Printed) JEFF FATA	9/14/92 2:50	(Printed)	9/14/92 2:50	IMMEDIATELY PLACED ON ICE IN COOLER.	

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

APPENDIX D
PHASE III

APPENDIX D1
SOIL BORING AND WELL LOGS

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name: Akerman / VME	License/Permit/Monitoring Number:	Boring Number: SBEMW-01	
Boring Drilled By (Firm name and name of crew chief): Alan Esko ~ Versar, Inc.; Dan Kling ~ Wang Engineering	Date Drilling Started: 05/11/93	Date Drilling Completed: 05/11/93	Drilling Method: 4¼ HSA
DNR Facility Well No.:	WI Unique Well No.:	Common Well Name: EMW-01	Final Static Water Level: 837.89 Feet MSL
Surface Elevation: 843.70 Feet MSL	Borehole Diameter: 8.25 inches		

Boring Location
State Plane 375,229.83 N, 2,479,556.22 E (S)/C/N | Lat ° ' " | Long ° ' "
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 (E)/W

Local Grid Location (If applicable): ☐ N ____ Feet ☐ S ☐ E ____ Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Gravel Fill										
			2	Cinder Block/Debris Fill										
SS 1	2' 6"	5/4/3/3/3	4	Organic Peat, some clay, brown/black, soft, wet	PT		Riser: Conc. / Pellets / Chips	1.6						
			6											
			8	Grades to: Silty clay, grey, to sand, saturated, Vry. Soft.										
SS 2	2' 12"	9/2/3/4	10		CL			1.6	<.25					
			12											
SS 3	18" 14"	5/7/4	14	Grades to Sand, fn-cs., little gravel, saturated, med. dense	SW		Screen: 10-20	1.4						
			16											
			18	Grades to predominantly fine grained, brown, loose										
SS 4	18" 15	1/2/2	20		SP			2.4						
			21	EOB @ 20.5' bgs.										

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

Signature | Firm

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

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: Akerman/VME

Facility License, Permit or Monitoring Number: _____

Type of Well: Water Table Observation Well ☒ 11 Piezometer ☐ 12

Distance Well Is From Waste/Source Boundary: 100 ft.

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.

Grid Origin Location: Lat. _____ Long. _____ or

St. Plane 375,229.83 ft. N 2,479,556.27 ft. E.

Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 2 T. 6 N. R. 19 ☒ E. ☐ W.

Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known

Well Name: EMW-01

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

Date Well Installed: 05/11/93 (m m d d y y)

Well Installed By: (Person's Name and Firm)
Dan Kling
Wang Engineering, Inc.

A. Protective pipe, top elevation 846.19 ft. MSL

B. Well casing, top elevation 845.99 ft. MSL

C. Land surface elevation 843.70 ft. MSL

D. Surface seal, bottom _____ ft. MSL or 3.0 ft.

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

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 Hollow Stem Auger ☒ 41 Other ☐ _____

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 5.0 ft.

F. Fine sand, top _____ ft. MSL or N/A ft.

G. Filter pack, top _____ ft. MSL or 8.0 ft.

H. Screen joint, top _____ ft. MSL or 10.1 ft.

I. Well bottom _____ ft. MSL or 20.1 ft.

J. Filter pack, bottom _____ ft. MSL or 22.8 ft.

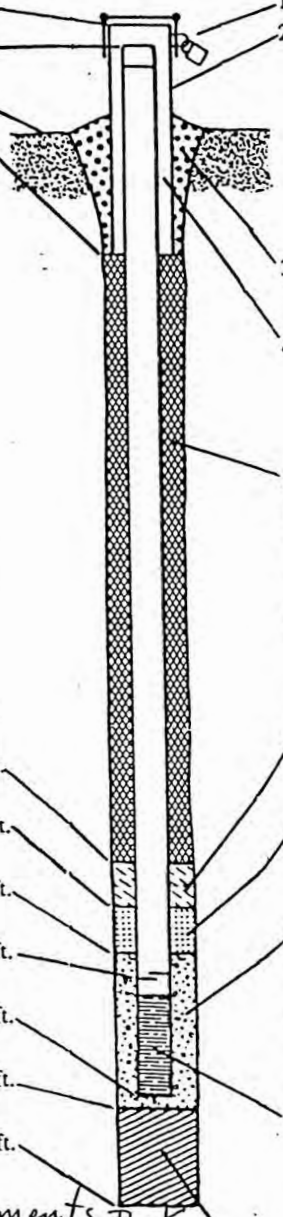
K. Borehole, bottom _____ ft. MSL or 22.8 ft.

L. Borehole, diameter 8.25 in.

M. O.D. well casing 2.25 in.

N. I.D. well casing 2.00 in.

Measurements D-K made from T-O-C.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 4.5 ft.
c. Material: Steel ☒ 04 Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐ _____

4. Material between well casing and protective pipe: Bentonite ☒ 30 Annular space seal ☐ _____ Other ☐ _____

5. Annular space seal: a. Granular Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 3 Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐ _____

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name and mesh size
a. Industrial Sand, Canada; 10-20
b. Volume added 15 ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ _____

10. Screen material: SS 304
a. Screen type: Factory cut ☐ 11 Continuous slot ☒ 01 Other ☐ _____
b. Manufacturer No. Illinois Pump
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☐ 14 Other ☒ native

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.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT
Form 4400-113B Rev. 4-90

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

Facility/Project Name	County Name	Well Name
Akerman / VME	Waukegan	EMW-01
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
_____	68		

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

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 20.1 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 2.0 gal.

7. Volume of water removed from well 13.0 gal.

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

9. Source of water added _____

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

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 8.40 ft.	8.10 ft.
Date	b. 05/13/93 (m m d d y y)	05/13/93 (m m d d y y)
Time	c. 15:30 ☐ a.m. ☐ p.m.	16:00 ☐ a.m. ☐ p.m.
12. Sediment in well bottom	1.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Dark Gray	Clear ☒ 20 Turbid ☐ 25 (Describe) Slightly Turbid

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

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

16. Additional comments on development: Good Recharge

Well developed by: Person's Name and Firm

Name: Dan Kling (Driller)

Firm: Wang Engineering

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

Signature: _____

Print Initials: AGE

Firm: Versar, Inc

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

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

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

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Alan Esko ~ Versar, Inc. Dan Kling ~ Wang Engineering	05/12/93	05/12/93	4¼ HSA

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

Boring Location
State Plane 375,537.42 N, 2,479,359.24 E S/C/N | Lat ° ' " | Long ° ' "
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Gravel Fill										
			2	Wood, Concrete, and Debris Fill	Fill		Cement / Bent. Chips							
1SS	18" / 5"	2/2/3	4	Foundry Sand Fill, black, saturated, petroleum odor and sheen,			Bent. Pellets	8						
			6											
			8											
2SS	2' / 12"	0/1/1/2	10	Grades to Peat, brown, wet, vry. soft	PT		Cave In	2						
			12	Driller observes change in resistance,			PVC							
3SS	18" / 12"	7/11/10	14	Grades to Sandy Gravel, well graded, saturated, brown	GW			1						
			16											
			18											
			20											
			22	Grades to Silt, grey, saturated	ML		15 SS 304 Screen / Filter Pack	2						
			24	EOB @ 24' bgs										

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

Signature | Firm

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State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: Akerman / VME

Facility License, Permit or Monitoring Number: _____

Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12

Distance Well Is From Waste/Source Boundary: 10 ft.

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.

Grid Origin Location: Lat. _____ Long. _____ or

St. Plane 375,537.42 ft. N. 2,479,359.24 ft. E.

Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 2, T. 6 N, R. 19 ☒ E. ☐ W.

Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known

Well Name: EMW-02

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

Date Well Installed: 05/12/93 (m m d d y y)

Well Installed By: (Person's Name and Firm)
Dan Kling
Wang Engineering, Inc

A. Protective pipe, top elevation 847.67 ft. MSL

B. Well casing, top elevation 847.41 ft. MSL

C. Land surface elevation 845.75 ft. MSL

D. Surface seal, bottom _____ ft. MSL or 2.7 ft.

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

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ _____

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 6.7 ft.

F. Fine sand, top _____ ft. MSL or N/A ft.

G. Filter pack, top _____ ft. MSL or 12.7 ft.

H. Screen joint, top _____ ft. MSL or 15.1 ft.

I. Well bottom _____ ft. MSL or 25.1 ft.

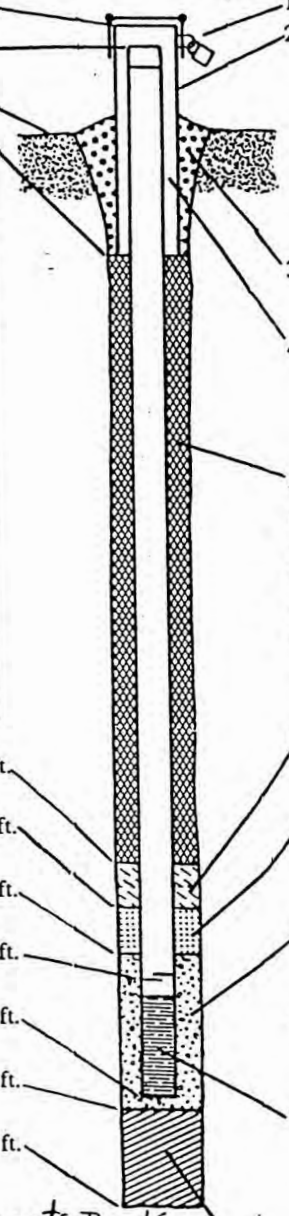
J. Filter pack, bottom _____ ft. MSL or 26.0 ft.

K. Borehole, bottom _____ ft. MSL or 25.7 ft.

L. Borehole, diameter 8.25 in. Measurements D-K made from T-O-C.

M. O.D. well casing 2.25 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 5.0 ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; Other ☐ _____

4. Material between well casing and protective pipe: Bentonite ☒ 30; Annular space seal ☐ _____; Other ☐ _____

5. Annular space seal: a. Granular Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐ _____

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name and mesh size
a. Industrial Sand: Canada; 10-20
b. Volume added 5 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ _____

10. Screen material: SS 304
a. Screen type: Factory cut ☐ 11; Continuous slot ☒ 01; Other ☐ _____
b. Manufacturer No. Illinois Pump
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☐ 14; Other ☒ native

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

Signature _____ Firm _____

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State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 4-90

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

Facility/Project Name	County Name	Well Name
Akerman / VME	Waukesha	EMW-02
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
_____	68	_____	_____

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

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other _____	☐

3. Time spent developing well 65 min.

4. Depth of well (from top of well casisng) 25.1 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 3.0 gal.

7. Volume of water removed from well 60.0 gal.

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

9. Source of water added _____

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

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 7.90 ft.	7.90 ft.
Date	b. 05/13/93 (m m d d y y)	05/13/93 (m m d d y y)
Time	c. 08:40 ☐ a.m. ☐ p.m.	09:45 ☐ a.m. ☐ p.m.
12. Sediment in well bottom	6.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	dark gray, highly turbid	moderately turbid, light gray

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

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

16. Additional comments on development: Good Recharge

Well developed by: Person's Name and Firm

Name: Dan Kling

Firm: Wang Engineering

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

Signature: _____

Print Initials: AKE

Firm: Versar, Inc.

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

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Akerman / VME		SBEMW-03

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Alan Esko ~ Versar, Inc Dan Kline ~ Wang Eng.	05/12/93	05/10/93	4¼ HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		EMW-03	841.90 Feet MSL	848.39 Feet MSL	8.25 inches

Boring Location
State Plane 375,808.05 N, 2,479,437.11 E S/C/N | Lat ° ' " | Long ° ' "
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W
Local Grid Location (If applicable) ☐ N ☐ E Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Debris Fill, with sand difficult drilling possible concrete			Bentonite Chips							
1 SS	18" 14"	2/2/5	4	Foundry Sand Fill, black, observable odor + sheen, loose, saturated.	SP		PVC Riser pellets							
2 SS	18" 12"	1/2/2	8	Peat, brown, wet, soft contact change to Organic Clay, mottled black/grey, soft	PT OH			1	.5					
3 SS	18" 6"	5/5/7	12	Grades to Sand, fn-cs, brown, saturated med. dense.	SW			ND						
4 SS	18" 9"	7/11/20	16	Grades to Sandy Gravel, well graded, saturated, dense	GW		SS 304 Screen Filter Pack	ND						
			20	EOB @ 23' bgs										
			24											

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

Signature | Firm

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ate of Wisconsin
partment of Natural Resources

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

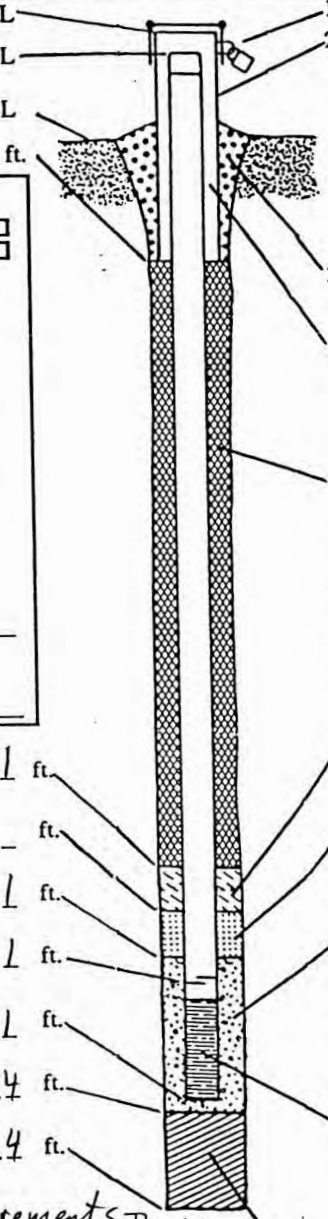
MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: Akerman / VME
cility License, Permit or Monitoring Number: _____

Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.
Grid Origin Location: Lat. _____ Long. _____ or
St. Plane 375,808.05 ft. N 2,479,437.11 ft. E.
Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 2, T. 6 N, R. 19 ☒E. ☐W.

Well Name: EMW-03
Wis. Unique Well Number / DNR Well Number: _____ / _____
Date Well Installed: 05/12/93 (m m d d y y)
Well Installed By: (Person's Name and Firm) Dan Kling, Wang Engineering Inc.

Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12
Distance Well Is From Waste/Source Boundary: 50 ft.
Well A Point of Enforcement Std. Application? ☐ Yes ☐ No
Location of Well Relative to Waste/Source: u ☒ Upgradient; s ☐ Sidegradient; d ☐ Downgradient; n ☐ Not Known



A. Protective pipe, top elevation 851.23 ft. MSL
Well casing, top elevation 850.75 ft. MSL
C. Land surface elevation 848.39 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 3.4 ft.
E. Bentonite seal, top _____ ft. MSL or 11.1 ft.
Fine sand, top _____ ft. MSL or N/A ft.
G. Filter pack, top _____ ft. MSL or 13.1 ft.
H. Screen joint, top _____ ft. MSL or 15.1 ft.
I. Well bottom _____ ft. MSL or 25.1 ft.
J. Filter pack, bottom _____ ft. MSL or 25.4 ft.
K. Borehole, bottom _____ ft. MSL or 25.4 ft.
L. Borehole, diameter 8.25 in. Measurements D-K made from T-O-C
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.

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

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 5.0 ft.
c. Material: Steel ☒ 04; Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; Other ☐ ____
4. Material between well casing and protective pipe: Bentonite ☒ 30; Annular space seal ☐ ____; Other ☐ ____
5. Annular space seal: a. Granular Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 4 Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐ ____
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size
a. Industrial Sand: Canada 10-20
b. Volume added 5 ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ ____
10. Screen material: SS 304
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
b. Manufacturer No. Illinois Pump
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): native — None ☐ 14; Other ☒ ____

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

Signature | Firm

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

ate of Wisconsin
epartment of Natural Resources

MONITORING WELL DEVELOPMENT
Form 4400-113B Rev. 4-90

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

acility/Project Name	County Name	Well Name
Akerman / VME	Waukesha	EMW-03
acility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
_____	68		

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

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 20 min.

4. Depth of well (from top of well casisng) 25.1 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 2.7 gal.

7. Volume of water removed from well 153.0 gal.

8. Volume of water added (if any) 8.0 gal.

9. Source of water added _____

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

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 8.85 ft.	8.85 ft.
Date	b. 05/13/93 (m m d d y y)	05/13/93 (m m d d y y)
Time	c. 10:00 ☒ a.m. ☐ p.m.	10:30 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	1.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) dark gray	Clear ☒ 20 Turbid ☐ 25 (Describe) clear,
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Additional comments on development:
Excellent Recharge

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

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

APPENDIX D2
WATER SAMPLE ANALYTICAL RESULTS

NATIONAL ENVIRONMENTAL TESTING, INC.

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

CASE NARRATIVE

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

06/04/1993

NET Job Number: 93.03857

Project Description: VME Americas, Inc.

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

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

The following comments should be noted for the indicated fraction;

Volatile Organic Analysis

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

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

Semi-Volatile Organic Analysis

No exceptions to the normal protocol.

NATIONAL ENVIRONMENTAL TESTING, INC.

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Pesticide Analysis

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

Conventionals (Wet Chemistry) Analysis

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

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

Approved by:

Neal Cleghorn
Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

06/02/1993

Sample No. : 210867

NET Job No.: 93.03857

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

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210867

NET Job No.: 93.03857

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

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210868

NET Job No.: 93.03857

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

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

06/02/1993

Sample No. : 210868

NET Job No.: 93.03857

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

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210869

NET Job No.: 93.03857

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

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210869

NET Job No.: 93.03857

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

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

06/02/1993

Sample No. : 210870

NET Job No.: 93.03857

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

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

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

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

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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210870

NET Job No.: 93.03857

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

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

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

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

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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210871

NET Job No.: 93.03857

Sample Description: Equipment Blank
VME Americas, Inc.

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

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

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

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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210871

NET Job No.: 93.03857

Sample Description: Equipment Blank
VME Americas, Inc.

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210871

NET Job No.: 93.03857

Sample Description: Equipment Blank
VME Americas, Inc.

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

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

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

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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210872

NET Job No.: 93.03857

Sample Description: Trip Blank
VME Americas, Inc.

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

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

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

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ANALYTICAL REPORT

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

06/02/1993

Sample No. : 210872

NET Job No.: 93.03857

Sample Description: Trip Blank
VME Americas, Inc.

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

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

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

APPENDIX D3
CHAIN-OF-CUSTODY FORMS

St[redacted] Visc[redacted]
Department of Natural Resources

[redacted] WELL INFORMATION FORM
Chapter 144, Wis. Stats.
Form 4400-89

Rev. 1-90

Facility Name: Akerman/VME
Facility ID Number:
Date: 5/13/93
Completed By (Name and Firm): Alan Esko Versar, Inc

Well Name	DNR Well ID Number	Well Location	N	S	E	W	Date Established	Well Casing Diam.	Well Casing Type	Elevations Top of Well Casing	Elevations Ground Surface	Reference MSL (√)	Reference Site Datum (√)	Screen Length	Well Depth	Type of Well (√) PIEZ.	OW	PW	LYS	Other	Aban-doned	Enf. Stds Apply	Gradient U, S, D or N
EMW-01		375,229.83 2,479,556.28	√		√		5/11/93	2"	SS 304	845.99	843.70	√		10'	20.1'		√				no		D
EMW-02		375,537.42 2,479,359.24	√		√		5/12/93	2"	SS 304	847.41	845.75	√		10'	25.2'		√				no		D
EMW-03		375,808.05 2,479,437.11	√		√		5/12/93	2"	SS 304	850.75	848.39	√		10'	25.1'		√				no		U

Location Coordinates Are:

☐ Local Grid System (preferred)
☒ State Plane Coordinate
☐ Northern
☐ Central

Remarks:

PSS Use:

File Maint. Completed:

Other:

APPENDIX D4
SOIL SAMPLE BORING LOGS

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Page 1 of 1

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

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

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

Boring Location
State Plane 375,808 N, 2,479,437 E S/C/N
Lat ° ' "
NE 1/4 of NE 1/4 of Section 2, T 6 N, R 19 E/W
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
____ Feet ☐ S ____ Feet ☐ W

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

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

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

Signature	Firm
Michael McHale	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.

State of Wisconsin
epartment of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

acility/Project Name	License/Permit/Monitoring Number	Boring Number
VME	_ _ _ _ _ _ _ _	B-2

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

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

Local Grid Location (If applicable)
☐ N ☐ E
_____ Feet ☐ S _____ Feet ☐ W

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

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

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

Signature	Firm
Michael Melton	Versar Inc

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State of Wisconsin
epartment of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

acility/Project Name	License/Permit/Monitoring Number	Boring Number
VME	_ _ _ _ _ _ _	B-3

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

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

oring Location
tate 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 o ' "
Long o ' "
Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

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

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

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

Signature	Firm
Michael Mellon	Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-4

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

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			____ Feet MSL	____ Feet MSL	7 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
____ Feet ☐ S ____ Feet ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Misc fill silty sand w/ fragments of cinders, concrete, wood & metal,				0.0						
1	20	4/8/0	2	dark gray, loose to med dense, moist w/ gravel				0.0						
		10/14	3											
2	16	5/4	4	grades wet @ 3.8'				0.0						
		2/2	5											
3	4		6					0.0						
			7	grades saturated @ 7'										
4	21	9/1	8					0.0						
		1/2	9	Peat (Pt) dark brown, firm, moist	pt									
			10	Silty clay (cl) med gray, firm to stiff, moist to wet, trace f. sand, moderate to high plasticity	cl									
5	ST 22		11											
			12					0.0						

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

Signature	Firm
Michael Mellon	Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-95

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

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	7 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Mise fill silty sand w/ fragments of concrete, cinder, and wood, dark				0.0						
1	19	9/5	2	gray, loose to med dense, moist, w/ gravel				0.0						
		3/2	3											
2	24	4/3	4	grades wet @ 4'				0.0						
	7	2/3	5											
3	22		6	grades saturated @ 5.5'				0.0						
			7											
4	18	4/2	8					0.0						
		1/2	9	Peat (Pt) dark brown, firm, moist, w/ silt/clay	Pt									
			10											
			11											
			12											

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

Signature: Michael Metler Firm: Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 5-92

Page 1 of 1

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

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

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	7 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

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

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

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

Signature Michael McHan Firm Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

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

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Mellon, Geologist Long Engineering / Dorkling, Driller	08/24/93	08/24/93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			____ Feet MSL	____ Feet MSL	2 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
____ Feet ☐ S ____ Feet ☐ W

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

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

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

Signature: Michael Mellon Firm: Versar Inc

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State of Wisconsin
partment of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

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

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

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

ring Location
ate 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Numb and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Mise fill silty sand w/ fragments of concrete, and cynders, dark grey,				1.0						
1	21	5/8	2	loose to med dense, moist				0.0						
		7/25	3											
2	6	14/7	4					0.0						
		4/1	5											
3	12	2/2	6	grades wet @ approx 5.5' grades saturated @ approx 6'				0.0						
		1/2	7											
4	12	1/2	8					0.0						
		1/1	9	peat (Pt) dark brown, firm, moist	Pt									
			10											
			11											
			12											

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

Signature: Michael McHart Firm: Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Page 1 of 1

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

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Mellon, Geologist Long Engineering / Barkling, Driller	08/24/93	08/24/93	HSA

DNR Facility Well No.	Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Mise fill silty sand w/ fragments of concrete, cinders, wood, and brick,				0.0						
1	23	3/5	2	dark gray, moist, loose to med dense				0.0						
		21/6	3											
2	14	4/4	4					0.0						
		3/2	5											
3	15	4/2	6	grades wet @ 5.5'				0.0						
		2/2	7	grades saturated @ 7'										
4	20	2/3	8					0.0						
		4/1	9	peat (Pt) dark brown, fibrous, moist, some silt/clay	Pt									
			10											
			11											
			12											

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

Signature	Firm
Michael Mellon	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.

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME	_ _ _ _ _ _ _ _	B-10

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (M M D D Y Y)	Date Drilling Completed (M M D D Y Y)	Drilling Method
Versar Inc / Michael Melton, Geologist Long Engineering / Burkling, Driller	08 12 4 19 93	08 12 4 19 93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _	_ _ _ _ _ _ _ _		_____ Feet MSL	_____ Feet MSL	2 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

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

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

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

Signature	Firm
Michael Melton	Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME	_ _ _ _ _ _ _	B-11

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

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

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Mgc fill silty sand w/ fragments of cinders, slag, concrete, wood & gravel, dark gray, loose to med dense, moist				0.0						
1	17		2					0.0						
			3											
2	14	6/5	4					0.0						
		5/4	5	grades wet @ 5'										
3	8	3/4	6	grades saturated @ approx 6'				0.0						
		13/0	7											
4	14	3/5	8					0.0						
		5/9	9											
5	14		10					0.0						
			11	Peat (Pt) dark brown, firm, moist, trace silty clay.	Pt									
			12											

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

Signature	Firm
Michael Mellon	Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-12

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Mellon, Geologist Long Engineering / Barkling, Driller	08 12 93	08 12 93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

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

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

Signature	Firm
Michael Mellon	Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-13

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

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			____ Feet MSL	____ Feet MSL	7 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 ° ' "
Long ° ' "
Local Grid Location (If applicable) ☐ N ☐ E ____ Feet ☐ S ____ Feet ☐ W

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

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

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

Signature: Michael Melton Firm: Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-14

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Mellon, Geologist Long Engineering / Darkling, Driller	08/24/93	08/24/93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Misc fill silty Sand w/ fragments of concrete, cinders, and wood, dark				0.0						
1	22		2	gray, loose to med dense, moist				0.0						
			3											
2	19	1/2	4					0.0						
		3/4	5	grades wet @ 4.5'										
3	20	1/0	6					0.0						
		1/1	7	grades saturated at 6.2'										
4	24	2/3	8					0.0						
		2/2	9											
5	20		10					0.0						
			11	Peat (pt) dark brown, firm, moist	pt									
			12											

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

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State of Wisconsin
epartment of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

acility/Project Name	License/Permit/Monitoring Number	Boring Number
VME	_ _ _ _ _ _ _ _	B-15

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

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	7 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Misc fill silty sand w/ fragments of concrete, cinders, wood and				0.0						
1	20	4/6	2	gravel, dark gray, loose to med dense, moist				0.0						
		6/0	3											
2	20		4					0.0						
			5											
3	21	3/4	6					0.0						
		5/2	7	grades wet @ 7'										
4	22	1/1	8					0.0						
		1/2	9	grades saturated @ 9'										
5	24		10					0.0						
			11											
6	21			Peat (Pt) dark brown, firm, moist, w/ silt/clay	Pt									
			12	silty clay (cl) med gray, firm, moist, trace root fragments, trace fine sand				0.0						

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

Signature: Michael Metten Firm: Versar Inc

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State of Wisconsin
epartment of Natural Resources

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

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 5-92

Page 1 of 1

acility/Project Name	License/Permit/Monitoring Number	Boring Number
VME	_ _ _ _ _ _ _ _	B-16

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

UNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	7 inches

oring Location
tate 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
_____ Feet ☐ S _____ Feet ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Misc fill silty sand w/ fragments of concrete, wood, cinders & metal, dark gray, loose to med dense, moist				0.0						
1	18		2					0.0						
			3											
2	21		4					0.0						
			5	grades wet @ 4.7'										
3	17		6	8" silty sand fill zone, mod to dk brownish gray, firm, moist				0.0						
			7	grades saturated @ 7'				0.0						
4	22		8					0.0						
			9	Peat (Pt) dark brown, firm, moist	Pt									
			10											
			11											
			12											

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

Signature	Firm
Michael Metten	Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-17

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Metler, Geologist Long Engineering / Dan Ewing, Driller	08/24/93	08/24/93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	7 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 ° ' "
Long ° ' "
Local Grid Location (If applicable) ☐ N ☐ E Feet ☐ S Feet ☐ W

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

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Misc fill silty sand w/ cinders wood fragments, med grayish brown,				0.0						
1	17		2	loose to med dense, moist, w/ gravel, trace clay				0.0						
			3	grades med gray @ 1.7'										
2	20	5/5	4					0.0						
		2/3	5	grades wet @ 5'										
3	12	4/6	6					0.0						
		50/3"	7											
			8					0.0						
4	21		9											
			10	Peat (Pt) dark brown, firm, moist	Pt			0.0						
5	5T		11	Silty clay (CL) med gray, firm, moist, trace fine sand, trace root fragments, varved	CL									
			12											

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

Signature: Michael Metler Firm: Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Facility/Project Name	License/Permit/Monitoring Number	Boring Number
VME		B-18

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Metten, Geologist Long Engineering / Dorkling, Driller	08/25/93	08/25/93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			____ Feet MSL	____ Feet MSL	2 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 ° ' "
Long ° ' "
Local Grid Location (If applicable) ☐ N ☐ E ____ Feet ☐ S ____ Feet ☐ W

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

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

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

Signature: Michael Metten Firm: Versar Inc

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State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 5-92

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

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (M M D D Y Y)	Date Drilling Completed (M M D D Y Y)	Drilling Method
Versar Inc / Michael Mettler, Geologist Boring Engineering / Burkling, Driller	08 12 93	08 12 93	HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	7 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 ° ' "
Long ° ' "

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Misc fill silty sand & fragments of cinders, slag, wood, mud				0.0						
1	22	3/7	2	Grayish brown, loose to med dense, moist, w/ gravel, trace clay				0.0						
		4/5	3	grades dark grey @ 2'										
2	20	2/4	4					0.0						
		4/3	5											
3	18	3/6	6	grades wet @ 6'				0.0						
		6/0	7											
4	16	2/2	8	grades saturated @ 7.2'				0.0						
		1/1	9	Peat (Pt) dark brown, very moist, w/ silt/clay	Pt									
			10											
			11											
			12											

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

Signature: Michael Mettler 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.

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 5-92

Page 1 of 1

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

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM DD YY)	Date Drilling Completed (MM DD YY)	Drilling Method
Versar Inc / Michael Metler, Geologist Long Engineering / Dorkling, Driller	08 12 93	08 12 93	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)
					7

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 ° ' "
Long ° ' "
Local Grid Location (If applicable): ☐ N ☐ E ____ Feet ☐ S ____ Feet ☐ W

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

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

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

Signature: Michael Metler 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.

APPENDIX D5
FIELD SCREENING LOG BOOK

PCB SOILS FIELD SCREENING LOG

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

Equipment Calibrations
scale 10 g = 10 g
pipette 40 mL = 40 mL
Photometer 0.70 − 0.90 = 0.81

000062

PCB SOILS FIELD SCREENING LOG

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

000003

PCB SOILS FIELD SCREENING LOG

8/26/93 DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
19:31	BC	STANDARD	NA	1	−0.06	NA	8020	NA	S1-TO the left
20:30		B-5-6 8-23, 16:15	10 g	2	+0.68 +1.28	<5 <50			+0.74 | <5 +1.03 | <50
20:30		B-5-8 8-23, 14:19		2	+1.38 +1.51	<5 <50			
20:30		B-12-2 8-24 11:45		2	+0.31 +1.11	<5 <50			+0.77 | <5 +1.38 | <50
20:30		B-12-6 8-24 11:52		2	+1.00 +1.28	<5 <50			Ran a dupe with same extraction on B-12-6. (Time, 21:30)
23:30		B-14-5 8-24, 14:30		3	+0.61 +1.05	<5 <50	8021		
23:30		B-14-4 8-24, 14:37		3	+0.48 +1.12	<5 <50			
22:30		B-1-2 8-23 12:45		3	−0.12 +0.84	>5 <50			
23:30		B-1-8' 8-23, 12:55		3	+0.06 +0.88	<5 <50			Sample Very Wet
24:00		B-2-4 8-23, 13:17		4	−0.48 +0.95	>5 <50	8019		

Equipment Calibrations

Scale 10 g = 10 g

Pipete 40 mL = 40 mL

Photometer 0.70 − 0.90 = 0.82

C00004

PCB SOILS FIELD SCREENING LOG

8/26/93 DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
24:00	AC	B-2-8 8-23, 13-?	10 g	4	-0.70 / +0.91	> 5 / < 50	8018		
24:00		B-3-2 8-23, 14:11		4	+0.39 / +1.14	< 5 / < 50			
24:00		B-3-6' 8-23, 14:25		4	-0.78 / +0.48	> 5 / < 50			
1:00		B-3-9 8-23, 14:30		5	+1.02 / +1.15	< 5 / < 50	8018		
1:00		B-4-5 8-23, 14:40		5	+0.85 / +0.89	< 5 / < 50			
1:00		B-4-8 8-23, 13:04		5	+0.96 / +1.19	< 5 / < 50			
1:00		B-9-8 8-24, 9-?		5	-0.58 / +0.39	> 5 / < 50			
1:30		B-10-10 8-24, 14-17		6	+0.34 / +1.33	< 5 / < 50	8016		
1:30		B-14-10 , 14:44		6	+0.68 / +1.16	< 5 / < 50			
1:30		B-15-12 8-24,		6	+0.86 / +1.25	< 5 / < 50			

C00005

PCB SOILS FIELD SCREENING LOG

DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
1:30	BL	B-16-2 8-24, 13:55	10 g	6	+0.38 +0.72	< 5 < 50	8016		
2:30		B-16-6 8-24, 16:01		7	+0.79 +1.33	< 5 < 50	8017		
2:30		B-17-6 8-24, 16:40		7	+1.23 +1.24	< 5 < 50			
2:30		B-17-9 8-24, 16:45		7	+0.51 +0.03	< 5 < 50			
2:30		B-18-5 8-25, 8:33		7	+1.06 +0.80	< 5 < 50			
3:00		B-18-8 8-25, 8:46		8	+0.80 +1.03	< 5 < 50	8014		
3:00		B-19-4 8-25, 8:04		8	+0.83 +1.17	< 5 < 50			
3:00		S-1 8-23, 17:05		8	-0.65 +0.149	> 5 < 50			
3:00		S-3 8-23, 15:16		8	+1.14 +1.14	< 5 < 50			
4:00		S-5 8-24, 9:12		9	+0.61 +0.93	< 5 < 50	8015		

PCB SOILS FIELD SCREENING LOG

DATE & TIME	ANALYST INITIALS	SAMPLE ID & TIME OF COLLECTION	SAMPLE WEIGHT (g)	ANALYT. BATCH #	OPTICAL DENSITY	[PCB] (</> 5 ppm)	ENSYS LOT #	LAB CONFIRM (Y OR N)	COMMENTS
4:06	BC	S-7 8-23, 17:25	10 g	9	+0.35 +1.03	< 5 < 50	8015		
4:00	↓	S-9 8-24 10:24	↓	9	+0.58 +0.93	< 5 < 50	↓		
4:00	↓	S-11 8-24, 17:20	↓	9	+0.85 +0.95	< 5 < 50	↓		

000007

APPENDIX D6
LABORATORY ANALYTICAL RESULTS

NATIONAL ENVIRONMENTAL TESTING, INC.

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

CASE NARRATIVE

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

09/29/1993

NET Job Number: 93.07730

Project Description: 1871002; VME

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

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

The following comments should be noted for the indicated fraction;

PCB Analysis

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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CASE NARRATIVE

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

09/29/1993

NET Job Number: 93.07730

Project Description: 1871002; VME

PCB Analysis (continued)

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

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

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

All Quality Control Indicators are within control limits.

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

Approved by:

Ray Kalicki
Coordinator
Quality Assurance

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

09/28/1993

CORRECTED REPORT

NET Job Number: 93.07730

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

Project Description: 1871002; VME

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

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

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

Approved by:

Neal E. Cleghorn
Operations Manager

OCEAN GROUP

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

CORRECTED REPORT

09/28/1993

Sample No. : 227056

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

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

CORRECTED REPORT

09/28/1993

Sample No. : 227057

NET Job No.: 93.07730

Sample Description: B18-S thru 8; Comp 1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Analytical Method
Solids, Total	92.8	%	09/02/1993	0.1	ars	2540 (4)
Prep, PCB - NONAQUEOUS	extracted		09/01/1993		era	3540 (1)
PCB'S - 8080 NONAQUEOUS						
PCB-1016	<0.10	ug/g	09/10/1993	0.10	seh	8080 (1)
PCB-1221	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1232	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1242	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1248	<0.08	ug/g	09/04/1993	0.08	seh	8080 (1)
PCB-1254	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1260	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
PCB-1268	<0.10	ug/g	09/04/1993	0.10	seh	8080 (1)
Surr: Dibutylchlorendate	na	%	09/03/1993		seh	8080 (1)
Surr: Tetrachloroxylene (TCX)	119	%	09/03/1993	31-128	seh	8080 (1)
Surr: Decachlorobiphenyl (DCB)	82	%	09/03/1993	29-128	seh	8080 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

CORRECTED REPORT

09/28/1993

Sample No. : 227058

NET Job No.: 93.07730

Sample Description: B9-8
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

D10 : Parameter analysis performed at a 10x dilution.

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
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ANALYTICAL REPORT

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

CORRECTED REPORT

09/28/1993

Sample No. : 227059

NET Job No.: 93.07730

Sample Description: B5-2
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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ANALYTICAL REPORT

Mr. Doug Dahlberg
VERSAR CORP.
1520 Kensington Road
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CORRECTED REPORT

09/28/1993

Sample No. : 227060

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

D10 : Parameter analysis performed at a 10x dilution.

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227061

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227062

NET Job No.: 93.07730

Sample Description: B17-9
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

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CORRECTED REPORT

09/28/1993

Sample No. : 227063

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227064

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

D10 : Parameter analysis performed at a 10x dilution.

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CORRECTED REPORT

09/28/1993

Sample No. : 227065

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227066

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227067

NET Job No.: 93.07730

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

Date Taken: 08/23/1993
Time Taken:

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT 09/28/1993

Sample No. : 227068

NET Job No.: 93.07730

Sample Description: S1
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

D10 : Parameter analysis performed at a 10x dilution.

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227069

NET Job No.: 93.07730

Sample Description: B10-S
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227070

NET Job No.: 93.07730

Sample Description: B10-4
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

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ANALYTICAL REPORT

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CORRECTED REPORT

09/28/1993

Sample No. : 227071

NET Job No.: 93.07730

Sample Description: B7-6
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

CORRECTED REPORT

09/28/1993

Sample No. : 227072

NET Job No.: 93.07730

Sample Description: B8-8
1871002; VME

Date Taken: 08/23/1993
Time Taken:

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

CONTINUING CALIBRATION VERIFICATION

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

09/10/1993

NET Job Number: 93.07730

Analyte	Run Batch Number	CCV True Conc.	Conc. Found	Units	Percent Recovery	
PCB'S - 8080 NONAQUEOUS						
PCB-1242	170	500	521	ug/L	104.2	
PCB-1260	178	500	524	ug/L	104.8	
Surr: Tetrachloroxylene (TCX)	170	~~50~~	~~100~~	~~%~~	~~200.0~~	
Surr: Decachlorobiphenyl (DCB)	178	~~50~~	~~100~~	~~%~~	~~200.0~~	Rec 9.10.93
PCB'S - 8080 NONAQUEOUS						
PCB-1242	178	500	521	ug/L	104.2	
PCB-1260	178	500	524	ug/L	104.8	
Surr: Tetrachloroxylene (TCX)	178	~~50~~	~~100~~	~~%~~	~~200.0~~	
Surr: Decachlorobiphenyl (DCB)	178	~~50~~	~~100~~	~~%~~	~~200.0~~	Rec 9-10-93

CCV - Continuing Calibration Verification

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
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QUALITY CONTROL REPORT

BLANK ANALYSIS

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

09/10/1993

NET Job Number: 93.07730

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

Advisory Control Limits for Blanks:

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

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

09/10/1993

NET Job Number: 93.07730

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

LCS - Laboratory Control Standard

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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Bartlett, IL 60103
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QUALITY CONTROL REPORT

DUPLICATES

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

09/10/1993

NET Job Number: 93.07730

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

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

RPD - Relative Percent Difference

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

NET Midwest, Bartlett Division

KEY TO ABBREVIATIONS and METHOD REFERENCES

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

Method References

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

APPENDIX D7
CHAIN-OF-CUSTODY FORMS

1 OF 5

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME
187002	VME

SAMPLERS: (Signature) [signature] (Printed) Douglas J. Paulsens

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PARAMETERS: PCB	REMARKS
B19@S	8-27			/			/	
B19@2				/				
B19@4				/				COMPOSITE TO CONFIRM CLEAN
B19@6				/				
X B19@8				/				
B4@S				/			/	
B4@2				/				COMPOSITE TO CONFIRM CLEAN
B4@4				/				
B4@6				/				
X B4@8				/				
B5@6				/			/	COMPOSITE CONFIRM CLEAN
B5@8				/				

INDUSTRIAL HYGIENE SAMPLE: Y / N

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed)		(Printed)	(Printed)		(Printed)
Relinquished by: (Signature) [signature]	Date / Time 8-27-93 1140	Received for Laboratory by: (Signature) [signature]	Date / Time 8/27/93 1340	Remarks	
(Printed) Douglas J. Paulsens		(Printed) NEAL E. CLEGHORN			

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

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE Y / N
1871002	VME		

SAMPLERS: *(Signature)* [signature] (Printed) Douglas J. Dahlberg

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PCB								REMARKS
B17@5	8-23-93			✓			✓								
B17@2				✓											COMPOSITE TO
B17@4				✓											CONFIRM CLEAN
B17@6				✓											
×B17@9				✓	? No Sample										
B18@5				✓			✓								
B18@2				✓											COMPOSITE TO CONFIRM
B18@4				✓											CLEAN
B18@6				✓											
×B18@8				✓											
B9@8				✓			✓								CONFIRM ABOVE 5 <50
B5@2				✓			✓								CONFIRM >5 <50

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
(Printed)		(Printed)	(Printed)		(Printed)

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
[signature]	8-27-93 1410	[signature]	8/27/93 1340	
(Printed) Douglas J. Dahlberg		(Printed) NEAL E. CLEGHORN		

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

3 of 5

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME
187/002	VME

SAMPLERS: (Signature) [signature] (Printed) Dominick J. Damiano

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE Y/N	REMARKS
B15@12	8-27-93			/		1			
B3@9				/		1			
B1@8				/		1			INDIVIDUAL BASE
B16@10				/	Duplicate	1			CONFIRM CLEAN
B14@10				/		1			
B14@1				/		1			
B14@2				/					
B14@4				/					COMPOSITE TO 1 SAMPLE
B14@6				/					CONFIRM CLEAN
B14@8				/					
B14@10				/	NO SAMPLE				
B17@9	↓			/		1			INDIVIDUAL CONFIRM CLEAN

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed)		(Printed)	(Printed)		(Printed)
Relinquished by: (Signature) [signature]	Date / Time 8-27-93 / 1400	Received for Laboratory by: (Signature) [signature]	Date / Time 8/27/93 / 1340	Remarks	
(Printed) Dominick Damiano		(Printed) NEAL E. CLECHORN			

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Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE Y / N
1871 002	VME		

SAMPLERS: (Signature) [signature] (Printed) Dominic J. Damasus

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PCB	REMARKS
B12 @ 5	8-24 to 25			✓			✓	
B12 @ 2	↓			✓				
B12 @ 4				✓				composite to
B12 @ 6				✓				confirm clean
B12 @ 8				✓				
B16 @ 5				✓			✓	
B16 @ 2				✓				
B16 @ 4				✓				composite to
B16 @ 6				✓				confirm clean
B16 @ 8				✓				
B16 @ 10	↓			✓	? Dupl.			
[illegible]				✓				

Dupl.

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed)		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
[signature]	8-27-93 1140	[signature]	8/27/93 1340	
(Printed) Douglas Arrigoni		(Printed) NEAL E. CLEGHORN		

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

5 of 5

Versar Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME
1871002	VME

SAMPLERS: (Signature) Douglas J. Dahlgren (Printed) Douglas J. Dahlgren

PARAMETERS: NO. OF CONTAINERS; PCB

INDUSTRIAL HYGIENE SAMPLE: Y / N

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PCB	REMARKS
S1	8-21-25			✓			✓	CONFIRM >5 <50
B10@5				✓			✓	CONFIRM >50
B10@4				✓			✓	CONFIRM >50
B7@6				✓			✓	CONFIRM >50
B8@8				✓			✓	CONFIRM >50

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed)		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
Douglas J. Dahlgren	8-27-93 1140	Neal E. Cleghorn	8/27/93 1340	
(Printed) Douglas J. Dahlgren		(Printed) NEAL E. CLEGHORN		

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

APPENDIX D8
ISOLATED SAMPLING LABORATORY ANALYTICAL RESULTS

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/10/1993

NET Job Number: 93.09708

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

Project Description: 1871.002; VME Americas

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

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

Approved By:

Neal E. Cleghorn
Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236889

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

11/10/1993

Sample No. : 236890

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	81.2	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	9.?	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1248	3.1	ug/g	11/06/1993	8080 (1)
PCB-1254	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/06/1993	8080 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236891

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236892

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236893

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	89.0	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.8	ug/g	11/06/1993	8080 (1)
PCB-1248	3.2	ug/g	11/06/1993	8080 (1)
PCB-1254	1.7	ug/g	11/06/1993	8080 (1)
PCB-1260	<1.0	ug/g	11/06/1993	8080 (1)
PCB-1268	<1.0	ug/g	11/06/1993	8080 (1)

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236894

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236895

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results		Units	Date of Analysis	Analytical Method
Solids, Total	90.1		%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS					
PCB-1016	<10		ug/g	11/06/1993	8080 (1)
PCB-1221	<8		ug/g	11/06/1993	8080 (1)
PCB-1232	<8		ug/g	11/06/1993	8080 (1)
PCB-1242	<8		ug/g	11/06/1993	8080 (1)
PCB-1248	28		ug/g	11/06/1993	8080 (1)
PCB-1254	5	J	ug/g	11/06/1993	8080 (1)
PCB-1260	<10		ug/g	11/06/1993	8080 (1)
PCB-1268	<10		ug/g	11/06/1993	8080 (1)

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

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236896

NET Job No.: 93.09708

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

Date Taken: 10/28/1993
Time Taken: 12:21
Date Sample Picked Up: 10/29/1993
IEPA Cert. No. 100221

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1248	1.3	ug/g	11/06/1993	8080 (1)
PCB-1254	0.5	ug/g	11/06/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/06/1993	8080 (1)

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236897

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236898

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236899

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	94.3	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.80	ug/g	11/06/1993	8080 (1)
PCB-1254	0.20	ug/g	11/06/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/06/1993	8080 (1)

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236900

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236901

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	93.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.17	ug/g	11/06/1993	8080 (1)
PCB-1254	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/06/1993	8080 (1)

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236902

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	85.7	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1248	0.09	ug/g	11/06/1993	8080 (1)
PCB-1254	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/06/1993	8080 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236903

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	92.0	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/07/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1248	<0.08	ug/g	11/07/1993	8080 (1)
PCB-1254	<0.10	ug/g	11/07/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/07/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/07/1993	8080 (1)

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236904

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236905

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	90.9	%	11/05/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/06/1993	8080 (1)
PCB-1248	1.6	ug/g	11/06/1993	8080 (1)
PCB-1254	0.32	ug/g	11/06/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/06/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/06/1993	8080 (1)

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ANALYTICAL REPORT

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

11/10/1993

Sample No. : 236906

NET Job No.: 93.09708

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

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

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

WDNR Cert. No. 999447130

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

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ANALYTICAL REPORT

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

11/19/1993

NET Job Number: 93.10073

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

Project Description: VME; 1871-002

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

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

Approved By:

Darla J. Kalicki

Darla J. Kalicki
Project Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
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ANALYTICAL REPORT

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

11/19/1993

Sample No. : 238474

NET Job No.: 93.10073

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

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

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

WDNR Cert. No. 999447130

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

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

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ANALYTICAL REPORT

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

11/19/1993

Sample No. : 238475

NET Job No.: 93.10073

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

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

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

WDNR Cert. No. 999447130

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/19/1993

Sample No. : 238476

NET Job No.: 93.10073

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

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

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

WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Analytical Method
Solids, Total	91.1	%	11/17/1993	2540 (4)
PCB'S - 8080 NONAQUEOUS				
PCB-1016	<0.10	ug/g	11/18/1993	8080 (1)
PCB-1221	<0.08	ug/g	11/18/1993	8080 (1)
PCB-1232	<0.08	ug/g	11/18/1993	8080 (1)
PCB-1242	<0.08	ug/g	11/18/1993	8080 (1)
PCB-1248	<0.08	ug/g	11/18/1993	8080 (1)
PCB-1254	<0.10	ug/g	11/18/1993	8080 (1)
PCB-1260	<0.10	ug/g	11/18/1993	8080 (1)
PCB-1268	<0.10	ug/g	11/18/1993	8080 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/19/1993

Sample No. : 238477

NET Job No.: 93.10073

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

Date Taken: 10/28/1993
Time Taken: 11:45
Date Sample Picked Up: 11/10/1993
IEPA Cert. No. 100221

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

WDNR Cert. No. 999447130

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

11/19/1993

Sample No. : 238478

NET Job No.: 93.10073

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

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

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

WDNR Cert. No. 999447130

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

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

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

11/19/1993

Sample No. : 238479

NET Job No.: 93.10073

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

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

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

WDNR Cert. No. 999447130

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

NET Midwest, Bartlett Division

KEY TO ABBREVIATIONS and METHOD REFERENCES

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

Method References

(1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.

(2) ASTM "American Society for Testing Materials

(3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.

(4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.

(5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.

(6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.

Versar Laboratories INC.

CHAIN OF CUSTODY RECORD

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PROJECT NO. 1871.002

PROJECT NAME VME Americas

INDUSTRIAL HYGIENE SAMPLE Y / N

SAMPLERS: *(Signature)* Michael Melton, John D. Johnson — (Printed) Michael Melton, Jerrie D. Johnson

PARAMETERS

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PCBs	Hold						REMARKS
SS-1	10/28	10:22		✓	Surface Sample 1	1		✓						
SS-2		10:24			2			✓						
SS-3		10:27			3			✓						
* SS-4		10:29			4			✓						
* SS-5		10:44			5			✓						
SS-6		10:40			6			✓						
* SS-7		10:55			7			✓						
SS-8		10:46			8			✓						
SS-9		10:50			9			✓						
CS-1 0-6"		11:02			Core Sample 1		✓							
CS-1 12-18"		11:06			1		✓							
CS-1 24-36"		11:12			1			✓						

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
			Y Kapusta	10/29 11³⁰	Anthony Langfeld
(Printed)		(Printed)	(Printed) Y. KAPUSTA		(Printed) ANTHONY LANGFELD

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
Anthony Langfeld	10/29/93 13⁰⁰	Denise Wilkening	10/29/93 1300	
(Printed) A. LANGFELD	10/29/93 13⁰⁰	(Printed) Denise Wilkening		

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APPENDIX D9
CHAIN-OF-CUSTODY FORMS

[redacted]

Versar Laboratories INC.

CHAIN OF CUSTODY RECORD

pg 283

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE Y / N
1871.002	VME Americas	

SAMPLERS: *(Signature)* Michael Melton, James D. Jeane

(Printed) Michael Melton, James D. Jeane

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PCBs	Hold						REMARKS
CS-2 0-6"	10-28	11:17		✓	Core Sample 2	1	✓							
CS-2 12-18"	↓	11:25		↓	↓	↓	✓							
CS-2 24-36"	↓	11:26		↓	↓	↓		✓						
CS-3 0-6"	↓	11:38		↓	Core Sample 3	↓	✓							
CS-3 12-18"	↓	11:41		↓	↓	↓	✓							
☆ CS-3 24-36"	↓	11:45		↓	↓	↓		✓						
CS-4 0-6"	↓	11:58		↓	Core Sample 4	↓	✓							
CS-4 12-18"	↓	12:04		↓	↓	↓	✓							
☆ CS-4 24-36"	↓	12:08		↓	↓	↓		✓						
CS-5 0-6"	↓	12:20		↓	Core Sample 5	↓	✓							
CS-5 12-18"	↓	12:21		↓	↓	↓	✓							
CS-5 24-36"	↓	12:23		↓	↓	↓		✓						

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
			Y. Kapusta	10/29 11:30	Anthony S. Langfeld
(Printed)		(Printed)	(Printed) Y. KAPUSTA		(Printed) A. LANGFELD

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
Anthony S. Langfeld	10/29/93 1300	Denise Wilkening	10/29/93 1300	
(Printed) A. LANGFELD	10/29/93 1300	(Printed) Denise Wilkening		

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Versar Laboratories INC.

CHAIN OF CUSTODY RECORD

pg 1 of 3

PROJECT NO.	PROJECT NAME
1871-002	VME Americas

SAMPLERS: (Signature) Michael Mottar (Printed) Michael Mottar

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PARAMETERS: MCBs	PARAMETERS: Weld	REMARKS
CS-6 0-6"	10/28	12:30		✓	Core Sample 6	1	✓		
CS-6 12-18"		12:35					✓		
CS-6 24-36"		12:39						✓	
CS-7 0-6"		14:00			Core Sample 7		✓		
CS-7 12-18"		14:05					✓		
CS-7 24-36"		14:10						✓	
CS-8 0-6"		14:18			Core Sample 8		✓		
CS-8 12-18"		14:20					✓		
CS-8 24-36"		14:25						✓	
CS-9 0-6"		14:30			Core Sample 9		✓		
CS-9 12-18"		14:32					✓		
CS-9 24-36"		14:37						✓	

INDUSTRIAL HYGIENE SAMPLE: Y / N

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
			Y. Kapusta	10/29 1130	Anthony S. Langfeld
(Printed)		(Printed)	(Printed) Y. KAPUSTA		(Printed) A. LANGFELD
Relinquished by: (Signature) Anthony S. Langfeld	Date / Time 10/29/93 1300	Received for Laboratory by: (Signature) Denise Wilkening	Date / Time 10/29/93 1300	Remarks: Fax Preliminary Results to Dug Ahlborg @ (708) 990-7585	
(Printed) A. LANGFELD	10/29/93 1300	(Printed) Denise Wilkening			

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11/10/93 13:44 708 289 7347 NET MIDWEST CORP →→→ VERSAR INC. 024