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PRELIMINARY GROUNDWATER INVESTIGATION AT THE NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION CASTING FACILITY WAUKESHA, WISCONSIN

PREPARED BY
RMT, INC.
MADISON, WISCONSIN

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Section 1

INTRODUCTION

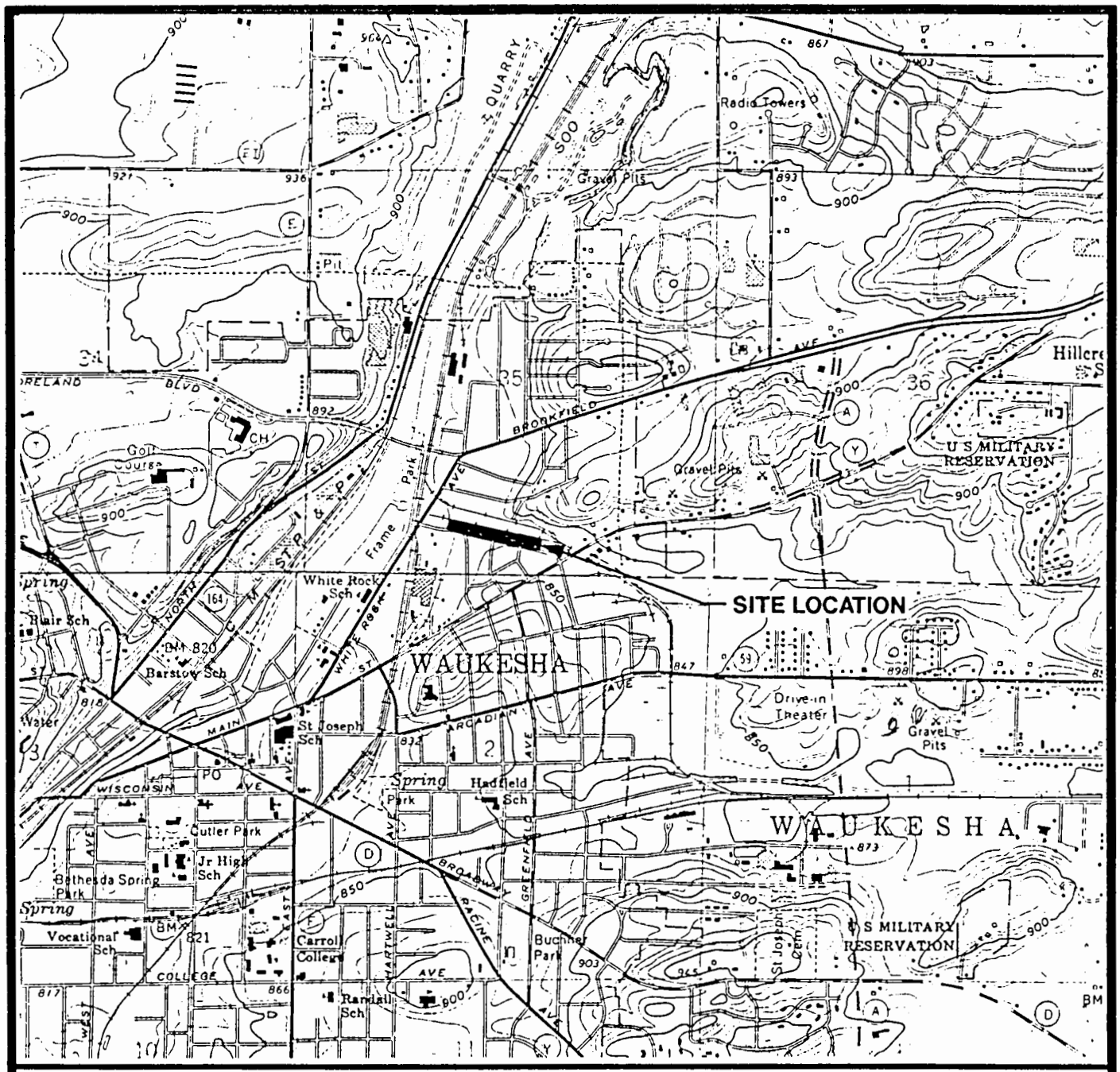
1.1 Background

The Navistar International Transportation Corporation (NITC) received a request from the Wisconsin Department of Natural Resources (WDNR), dated June 8, 1992 (see Appendix A), to investigate potential groundwater contamination by trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) at their manufacturing facility located at 1401 Perkins Avenue, Waukesha, Wisconsin, as shown on Figure 1. The WDNR's request followed the discovery of TCE and TCA in groundwater at the adjoining property to the north, which is occupied by Wisconsin Coach Lines, Inc. (WCL). The discovery of the chlorinated solvents was made during an investigation related to petroleum underground storage tank (UST) closures being conducted at WCL. RMT, Inc. (RMT), was retained by NITC to prepare and implement a workplan to address whether NITC may have released these constituents to groundwater. The investigation workplan (RMT, August 1992) was submitted after incorporating WDNR staff comments discussed during a July 2, 1992, meeting. The workplan was conditionally approved by the WDNR in a September 29, 1992, letter (see Appendix A).

Implementation of the workplan, the field component of which included monitoring well installation, soil and groundwater sampling, and hydraulic testing, began on October 4, 1992. the WDNR requested a revision to the original workplan conditions that included moving a proposed monitoring well (NMW-1) to a location near a chemical storage area at NITC.

This report presents the evaluation of information gathered from implementation of the NITC workplan as well as from investigations completed at the WCL site.

Because of the importance of understanding the environmental conditions in the combined site area, a brief background of the WCL site is included in the following subsections along with a description of the NITC facility.



STATE LOCATION

0 2000 4000

SCALE: 1"=2000'

N

SITE LOCATION MAP
NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

SOURCE: BASE MAP FROM
WAUKESHA, WISCONSIN
7.5 MINUTE USGS QUADRANGLE

RMT INC.

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DATE:	FEBURARY 1993
PROJ.#	2585.03
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FIGURE 1

1.1.1 Navistar Facility

Based on a review of records, NITC staff indicated that the NITC casting facility has used approximately 7,000 to 31,000 pounds of TCA annually in recent years. Less than 0.1 percent TCE is present in the TCA as an impurity. There is no record of the use of TCE in a more concentrated form. NITC has indicated that TCA has been, and still is being, used as a reducing agent (thinner) for a core coating process. This process takes place in the core room at the west end of the facility and is shown on the map on Figure 2. The coating is applied to the core and then allowed to air dry. TCA is used as the reducing agent because of its boiling point of 165°F. This allows the core to be coated and the product to be air dried since TCA will evaporate at room temperature. TCA is purchased in 55-gallon drums, in 4- to 6-drum lots. The material is stored on pallets under a roof in the west yard of the plant approximately 60 feet east of monitoring well NMW-1. The material is stored in the west yard for convenience as well as safety. The core room, where the material is used, is just east of the storage shed. The west yard is asphalted, and no storm drains are located in it. The TCA is transported by truck into the core room where it is opened and drained into the coating tank. At no time are the TCA drums opened in the west yard.

Parts washing is conducted at four self-contained stations located in the eastern portion of the facility as shown on Figure 2. These stations use mineral spirits which may contain up to 0.5 percent TCA as an impurity. The spent liquids are removed and replaced by Safety Kleen directly at each station. Former and existing locations of buried and aboveground storage tanks on NITC property are shown on Figure 2.

1.1.2 Wisconsin Coach Lines Facility

Since an environmental impact has been documented at the WCL site, a summary of WCL underground storage tank investigation activities and relevant findings contained in the report entitled "Initial Site Assessment, Extent of Contamination and Remediation Progress Report" (Graef, Anhalt, and Schloemer, July 1992) are included here as background. The location of the WCL property is to the north of the NITC facility as shown on Figure 2. Note that the fenced area in the northwest corner of the area mapped on Figure 2, where WCL monitoring wells MW-11, MW-12, MW-13, MW-15,

MW-16, and MW-19 are located, is also NITC property. The general sequence of the WCL investigation and remediation activities is as follows:

- October 24-25, 1990 - A 12,000-gallon diesel tank and a 1,000-gallon waste oil tank are removed from an area about 70 feet north of the NITC property line. This removal action occurred because results from preliminary borings conducted in August 1990 indicated a release of petroleum products. No visible leaks were observed in the diesel tank; however, the waste oil tank was pitted and had a 1-inch hole along a seam. There was evidence of soil staining near the waste oil tank. At this point, the maximum known concentration of total petroleum hydrocarbons (TPH) was 8,120 ppm (as waste oil) detected at soil boring SB-2, which is about 22 feet southwest of the former waste oil tank location.

  In conjunction with the waste oil and diesel tank removal, about 164 tons of contaminated soil were removed and disposed off-site. The excavation was backfilled with clean sand and gravel.

- March to July 1991 - Soil borings and monitoring wells are installed as part of a site investigation conducted to determine the extent of contamination from the removed waste oil and diesel tanks. The investigation delineated an area of waste oil–contaminated soil approximately 120 feet east/west by 150 feet north/south, which is shown by shading on Figure 2. Within this area, TPH (as waste oil) concentrations ranged as high as the following:

Concentration, ppb-TPH (as waste oil)	Location	Distance/Direction from Former Waste Oil Tank
67,400	SB-15	25 feet northwest
29,500	SB-19	40 feet southwest
22,700	SB-17	25 feet west
9,200	SB-29	47 feet northeast

Soil samples within the waste oil–impacted area were apparently not analyzed for VOCs. Investigation samples that were analyzed for VOCs, including TCE and TCA, were taken at the following 13 boring locations:

SB-62	SB-63	SB-64	SB-61
SB-56	SB-55	SB-44	
SB-60	SB-40	SB-53	
SB-59	SB-41	SB-45	

None of these samples indicated detectable concentrations of TCE and TCA. However, as shown on Figure 2, these borings are all located outside of the area where waste oil impacts were delineated by Graef, Anhalt, and Schloemer (G.A.S.). The closest boring (SB-56) is approximately 72 feet west of the former waste oil tank. Some of these borings, such as SB-63, are more than 160 feet away from the former tank. The G.A.S. analytical program used during the soil boring investigation does not allow direct determination of whether the soils impacted by the leaking waste oil tank were also impacted by TCE or TCA.

- April 10, 1991 - Groundwater is sampled and analyzed from monitoring well MW-5, about 10 feet away from the former waste oil tank. Analytical results indicate that TCE was present at 610 ppb. A mixture of diesel fuel and oil was detected floating on the water table at this monitoring well.

- June 7, 1991 - Groundwater is sampled and analyzed at monitoring well MW-6, about 60 feet northwest of the former waste oil tank. Results indicate that chlorinated solvents were present. A maximum concentration of 48,000 ppb cis-1,2-dichloroethene was reported.

- October 28 to November 7, 1991 - A total of 2,660 cubic yards of contaminated soil are removed from around the waste oil and diesel tanks. The excavation limit is shown on Figure 2. The soil is disposed at Parkview Landfill. Although WDNR Solid Waste Program requirements for soils to be landfilled include VOC analyses, no documentation in this regard has been found. Therefore, it is not directly known if soils in proximity to the removed tanks contained chlorinated solvents in addition to the petroleum compounds. The excavation was backfilled with a combination of uncontaminated overburden and clean sand and gravel fill.

- December 1991 and March 1992 - Additional monitoring wells (MW-11 through MW-20) are installed on the WCL site. Analytical results from monitoring well MW-17, which is close to the facility boundary shared with NITC, indicate the highest TCE, TCA, and GRO concentrations detected in groundwater during the sampling round conducted in March 1992. Corresponding groundwater data from near the former waste oil tank are not available for this period since monitoring well MW-5 was abandoned during excavation in October 1991 and was not replaced.

The leaking waste oil tank was 28 years old at the time of its removal. Waste analysis results of the contents of the waste oil tank at the time of its removal were obtained from Petroleum Equipment, Inc., and are included in Appendix B. These analytical

results indicate that a waste kerosene product was present. The distillation analysis performed on the tank contents is not capable of detecting individual organic compounds such as TCE or TCA. The presence of kerosene indicates that the waste oil tank has been used to store more than just waste oil.

The G.A.S. report states that parts-cleaning solvents used at WCL have been collected by a hazardous waste recycling company since the current owners have operated the business. The Dunn and Bradstreet registry indicates that current ownership dates from March 1986. The report does not specify what kind of parts cleaners were used or how waste solvents were handled under prior ownership.

The G.A.S. report states that diesel and waste oil are the primary soil contaminants around the waste oil and diesel tank excavation. The zone of greatest contamination was about 12 to 16 feet below ground surface. The overlying soils exhibited relatively little evidence of petroleum impacts. The report it further states that contamination apparently leaked from the tanks, migrated downward until either the water table or bedrock was encountered and then spread laterally to the north, south, east, and west through a 2- to 4- foot-thick layer of soil on top of the bedrock.

1.2 Purpose

This report has two primary purposes. First, it presents the results of a subsurface investigation which focused on determining the source of several chlorinated solvents detected in groundwater adjacent to the NITC site. Second, it identifies where current information is insufficient to delineate the nature and extent of contaminants or their source and recommends appropriate additional investigation.

1.3 Scope

The analysis of subsurface conditions presented in this report is based on a review and evaluation of WCL site information and on information collected during three phases of investigation, the initial phase of which was conducted in October 1992 and which included the following primary tasks:

- Drilling a total of six (6) soil and rock borings; four of which were located on NITC property and two of which were located on WCL property (adjacent to the former waste oil tank). Geologic logs were developed for each boring based on a sample interval of 2.5 feet.

- Conversion of the six borings to water table monitoring wells.

- Analysis of one soil sample from each soil boring for VOCs, GRO, DRO, and TRPH. Sample selection was aided by PID screening results.

- Analysis of two rounds of groundwater samples collected from the newly installed wells for VOCs, GRO, DRO, and TRPH.

- Analysis of groundwater samples from selected existing monitoring wells on the WCL site for VOCs, GRO and DRO.

- Estimation of hydraulic conductivity at the newly installed wells based on conducting single-well response tests.

- Determination of groundwater elevation at the newly installed NITC wells and selected wells at the WCL site.

The second phase of the investigation began when NITC gave permission to WCL to perform soil borings at their site. On March 19–20, 1993, WCL's consultant, Layne Geosciences, Inc., performed soil borings at five locations across the NITC site. RMT split samples with Layne Geosciences and analyzed one soil sample per boring. The laboratory results from RMT and Layne Geosciences are included in this report (Appendix G).

The third phase of investigation began when WCL gave permission to NITC to conduct soil sampling at their facility. On April 14, 1993, RMT performed four borings inside and adjacent to the bus garage. These soil samples were also split with Layne Geosciences. RMT's laboratory results for two samples per boring are included in this report (Appendix G).

Due to the importance of understanding conditions on the adjacent WCL property, the G.A.S. report entitled "Initial Site Assessment, Extent of Contamination and Remediation Progress" regarding the subsurface investigation of the former waste oil and diesel tanks near the NITC property line, was extensively reviewed. In addition to the aforementioned report, a supplementary round of groundwater results generated by G.A.S. for the period September 21–23, 1992, was also reviewed.

During the field investigation conducted by RMT October 4–14, 1992, NITC agreed to allow WCL, through its consultant G.A.S., to split soil and groundwater samples at the newly installed borings and wells (NMW-1, NMW-2, NMW-3, NMW-4, NMW-5, and NMW-6). This agreement included sharing the results after the analyses were completed. Data from eight soil samples and four groundwater samples collected and analyzed by G.A.S. during the RMT fieldwork were supplied and have been reviewed as part of the current evaluation. The results from the analysis of two groundwater split samples, NMW-5 and NMW-6, have not been provided by WCL for inclusion in this report.

Section 2

FINDINGS AND CONCLUSIONS

Geology

1. The geology beneath the NITC site is generally consistent with that beneath the WCL site. Dense glacial till overlies Niagara dolomite that is encountered at depths from 12 to 15 feet below ground surface beneath the NITC site. The glacial till is composed of a layer of up to 5 feet of clay with sand and a lower unit of gravel with silt and sand which reaches a thickness of 12 feet. As much as 8 feet of fill material were encountered at the surface. At NMW-2, the fill material resembled dark foundry sand.

2. The bedrock surface gradually slopes to the northwest. A small bedrock knob or mound occurs in the vicinity of the former WCL USTs.

Hydrogeology

3. Groundwater flows to the west-northwest based on monitoring well measurements made at both sites. This is consistent with findings of the WCL site study.

4. The water table is encountered at about 9 to 17 feet below ground surface at the NITC site. It occurs in the till soils toward the south and nearer the bedrock surface at wells further north. The WCL investigation has identified an area near the former USTs where the water table apparently occurs beneath the top of bedrock during some seasons.

5. Groundwater probably flows preferentially through fractured bedrock rather than through the saturated till, which contains some silt and clay. Flow velocity and, to some degree, flow direction will vary through the fractured dolomite aquifer depending on the frequency and size of fractures. Hydraulic conductivity field test results vary by almost two orders of magnitude at NITC wells. Groundwater velocity estimates suggest that, at least on a local scale, groundwater can travel up to 30 feet per day.

Contaminants in Soil

6. The chlorinated solvents found in soils at NMW-2 and NMW-3 on the NITC property do not appear to be the primary cause of groundwater contamination seen at WCL monitoring wells. Chlorinated solvents were detected in soil samples from the borings at NMW-2 and NMW-3 at relatively low levels. The maximum concentration detected (6160 μg/kg of 1,1,1-TCA as reported by G.A.S.) is associated with surficial foundry sand fill material from the 0.5- to 2.5-foot interval at NMW-2. RMT data from the 10-foot depth show that contaminants do not persist with depth through the soil column at NMW-2. For this reason, and because solvent concentrations in groundwater at NMW-2 and NMW-3 are many times less than those detected at WCL near the former waste oil tank, the source area does not appear to be on the NITC property.

7. Although groundwater concentrations of solvent compounds at NMW-1 were the highest detected at the NITC property, the source does not appear to be the overlying soils. Chlorinated solvents were not detected in soil samples from NMW-1 based on laboratory analyses conducted by RMT and G.A.S.

8. Petroleum-related compounds in shallow soils at NMW-1 or NMW-3 do not appear to be impacting underlying groundwater, since neither DRO or TRPH were detected in groundwater at these locations. The maximum soil concentration detected at NMW-1 was 230,000 μg/kg DRO in a sample collected from a depth of 3 to 5 feet. The maximum soil concentration at NMW-3 was 16,000 μg/kg TRPH from a sample collected from a depth of 0.5 to 2.5 feet. No potential sources, such as buried tanks or spill areas, are known to exist near these locations. The presence of these compounds may be related to old fill materials.

9. Elevated concentrations of petroleum-related compounds are still present in an area where contaminated soils were previously excavated at the WCL site. A TRPH concentration of 76,000 μg/kg was detected in a sample collected from a depth of 0.2 to 2.5 feet from NMW-6. The area near NMW-6 was reportedly backfilled with clean sand and gravel after excavation.

10. Residual levels of TCE were detected in soils in the vicinity of the former waste oil tank at the WCL site. Relatively small concentrations of TCE ranging from 3.3 to 21 μg/kg were detected in samples collected from depths of 8 to 15 feet at NMW-5 and NMW-6. These depths are above the water table. The concentrations from the 15-foot depth may be due to contact with solvent-contaminated groundwater. The source of the TCE at the shallower depths cannot be certain; however, it may be related to the "clean" soil backfilled after the excavation around the former waste oil tank.

11. Results from the supplemental soil investigation conducted March 19–20, 1993, by WCL's consultant did not identify an area on the NITC property that is the likely source of chlorinated solvent contamination in groundwater at the WCL site.

    The maximum chlorinated solvent concentrations detected in samples from the five borings completed during March are more than an order of magnitude less than the previously detected maximum concentration (6,160 μg/kg 1,1,1-TCA at NMW-2).

    Results from two borings conducted in the current and former core room areas did not indicate that source-level contamination was present. The core room, boring which is closest (less than 45 feet) to the highly impacted area of groundwater at the WCL site, (MW-17) contained a sum of TCE and 1,1,1-TCA concentrations of only 299 μg/kg.

Contaminants in Groundwater

12. Although chlorinated solvents were detected in excess of WDNR groundwater standards at each of the four monitoring wells on NITC property, the relatively low concentrations of these solvents are not indicative of a source area for contaminant levels found at the WCL site. Even the maximum concentration detected in groundwater at NITC (990 μg/L TCE at NMW-1) is an order of magnitude less than the concentrations detected immediately adjacent to the former UST locations at the WCL site.

13. Groundwater beneath portions of the NITC property may be impacted from off-site sources. A relatively low concentration (22 μg/L) of TCE was detected at monitoring well NMW-4, which is located upgradient (southeast) of most of the NITC property. Since there are no known potential sources of these compounds at NITC near this well location, it is possible that an upgradient source may be the cause.

14. The chemical nature of the contaminant plume does not suggest that solvents used at NITC could be the source. The proportion of TCE to 1,1,1 TCA in groundwater is not consistent with the relative amount of these compounds in products used at Navistar. Navistar uses 1,1,1 TCA with less than 1 percent TCE impurity. In every case, TCE concentrations are higher than 1,1,1 TCA concentrations in corresponding groundwater samples. Differential water solubilities do not explain this difference since 1,1,1 TCA is actually slightly greater than TCE.

15. According to the G.A.S. study, GRO concentrations in groundwater were detected in a pattern similar to that of the chlorinated solvents. Chlorinated solvents interfere with and can be quantified as GRO following the WDNR's Laboratory method. Since only small quantities of gasoline were reportedly disposed in the waste oil tank, it would be unlikely that large-scale GRO contamination would result. It is possible that many of the GRO concentrations can instead be explained by the presence of solvents.

16. Solvent concentrations have increased sharply at some WCL monitoring wells since their installation. The increase appears to be related to the seasonal increase in rainfall. This increase also suggests that at the least residual contamination remains in the source area and can come in contact with percolating water, thereby flushing more contaminants into the aquifer.

Potential Source(s) and Contaminant Migration

17. The initial (October, 1992) and supplemental (March, 1992) subsurface investigations have not identified the presence of chlorinated solvents in soil or groundwater at the NITC site that would account for contaminant levels documented in groundwater at the WCL site.

18. Chlorinated solvent concentrations in groundwater are highest near the area of the former waste oil tank at the WCL site based on the results from monitoring wells NMW-6, MW-17, and MW-22. Rapid increases in concentrations in this area appear to have occurred in conjunction with the placement of permeable backfill in the former tank area and an increase in rainfall. While no direct evidence of the presence of chlorinated solvents in the soils beneath the leaky waste oil tank are available via laboratory analyses, the rapid increase of the constituents in groundwater near the excavation suggests that residual amounts are still present in the weathered bedrock zone and are providing a continuing source of release.

19. It is apparent that contamination derived from the former leaking waste oil tank has impacted groundwater beneath portions of NITC property. Due to the downgradient proximity of the northwest NITC parcel (at monitoring wells MW-6, MW-11, MW-12, MW-19, MW-15, and MW-16), impacts are related directly to the former WCL tank. Due to likely horizontal spreading occurring in soil and/or bedrock fractures, the impacts detected at NMW-2 and possibly NMW-1 are also linked with the source area at the former waste oil tank.

20. Currently, it is not certain what the cause(s) may be for the chlorinated solvent concentrations detected in groundwater at NITC monitoring wells NMW-3 and NMW-4. These wells are located relatively far away in upgradient and sidegradient directions from WCL's former waste oil tank. Therefore, the former WCL tank may not be the source of the solvent concentrations detected at these wells.

Section 3

RECOMMENDATIONS

1. Because results indicate exceedances of state guidelines, perform a shallow subsurface investigation to determine the extent of elevated petroleum compounds found in soil near NMW-1 and NMW-3. Since groundwater at these locations did not appear to be impacted by petroleum compounds, the proposed investigation would be limited to the unsaturated soil zone.

2. Conduct a supplemental groundwater investigation to determine the source of chlorinated solvent contamination upgradient of NMW-3 and NMW-4.

3. Recommend that the WDNR require WCL to continue the investigation to delineate the extent of groundwater impacts they have caused to NITC property.

Section 4

INVESTIGATION RESULTS

4.1 Physical and Geologic Setting

NITC's Waukesha Casting Facility is located on an approximately 14-acre parcel of land bordered by White Rock, Perkins, and Cleveland Avenues and Niagara Street in the City of Waukesha. The land uses in the surrounding area include active and former industrial facilities as well as commercial and residential properties. The area to the east and south contains several small auto repair shops within the proximity of several blocks. In addition to the WCL property, immediately north of the NITC property, the only nearby property known to be of environmental concern is the former General Castings Foundry. The former General Casting property is located within several hundred feet south of the west end of the NITC facility. A WDNR investigation has begun at General Castings due to the presence of many USTs and illegally stored hazardous wastes, including solvents. Some initial groundwater monitoring has been conducted, but the extent of groundwater impacts has not been fully characterized.

4.1.1 Topography and Drainage

The land surface at the facility is approximately 832 feet above mean sea level (M.S.L.) and slopes gradually to the west. The Fox River, which flows to the southwest, is located about 600 feet west of the NITC property. The surface of the river is about 805 feet above M.S.L. Two small hills rise about 60 feet within a short distance to the east and south of the site. Between these hills passes a small intermittent creek which drains an area slightly more than 1 square mile to the east of the facility. The creek enters a culvert near the east end of the facility and is carried beneath it to a point of discharge to the west.

4.1.2 Regional Hydrogeology

The NITC site is located in a part of Waukesha County where unconsolidated deposits consist of a typically unsorted mixture of clay, silt, sand, and gravel comprising glacial till and formed as ground moraine. Due to its fine-grained texture and relatively low permeability, the glacial till does not commonly yield usable quantities of water. In

some parts of Waukesha County glacial outwash sand and gravel overlying or buried within the glacial till can be an important source of water. Maps presented in Gonthier (1975) do not suggest a potential for sand and gravel aquifer development in the site area. However, records of several drift wells located to the east of the site were reported by G.A.S. (July, 1992).

Glacial drift overlies the Silurian-aged Niagara Dolomite aquifer in much of Waukesha County, including the site area. The saturated thickness of the Niagara Dolomite aquifer can reach 200 feet in the site area. Secondary features, such as joints and bedding planes, which can be enlarged by solution activity, are the primary cause of permeability of the Niagara Dolomite aquifer. The upper few feet of the Niagara Dolomite aquifer generally has a greater hydraulic conductivity than deeper portions since this zone has been exposed to pre-glacial erosion (Gonthier, 1975).

The Niagara Dolomite aquifer is underlain by the Maquoketa Shale, which can reach a thickness of 200 feet in the site area. Where present, the Maquoketa Shale confines the underlying Cambrian Sandstone aquifer.

The Niagara Dolomite aquifer is commonly used for residential, commercial, and small municipal water supplies. The monitoring wells installed as part of the NITC investigation are completed in the top of the Niagara Dolomite. The City of Waukesha, including the site area, is supplied by a municipal water system. A review of water supply records was conducted by G.A.S. (July, 1992) for the adjacent WCL site. Thirteen private water supply wells were identified within a 1-mile radius of the site. All of the wells identified appear to be in the expected upgradient direction or across the Fox River.

Large-scale shallow groundwater flow in the site area can be interpreted from a water table map of Waukesha County developed by Gonthier from measurements made in shallow drift and bedrock wells in 1972 (Gonthier, 1975). The map indicates that groundwater flow is toward the Fox River in a west-northwesterly direction at the site.

The Gonthier map shows a small cone of depression in the water table surface centered at a gravel pit less than a mile north of the NITC site. At the time the map was constructed, it did not appear as though the influence of the pumping altered the water table in the vicinity of the NITC site. It is currently unknown whether the gravel pit operation continues and, if so, to what extent its operation may be influencing local groundwater flow.

4.2 Site Hydrogeology

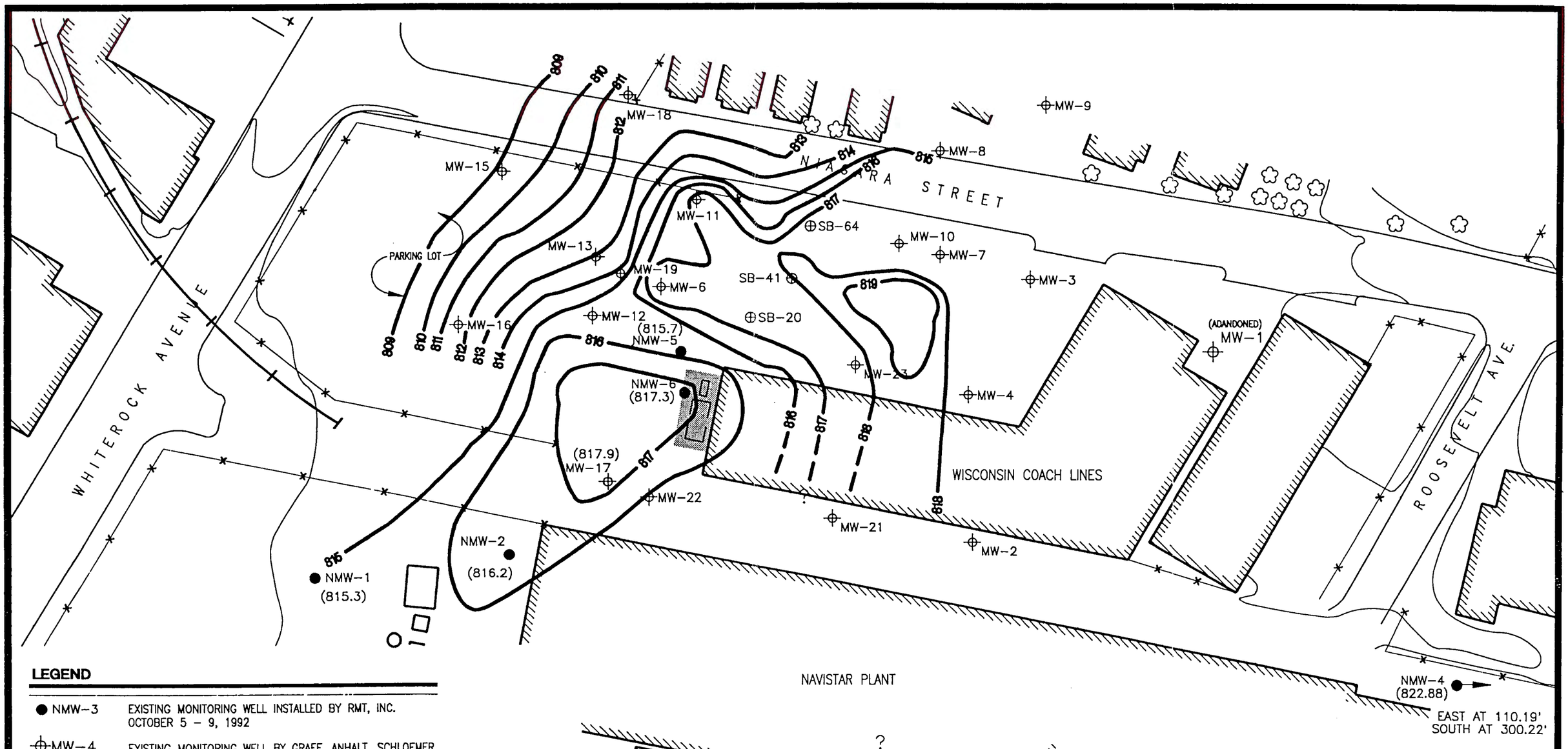
4.2.1 Geology

Knowledge of the shallow geology beneath the facility is based on completion of four soil and rock borings to a maximum depth of 25 feet on the NITC property. Information from the WCL subsurface investigation (Graef, Anhalt, Schloemer, July 1992) also contributes to the understanding of site hydrogeology.

The soil and rock borings were installed and sampled using standard methods which are discussed in Appendix C. Geologic logs developed from samples collected during the initial October 1992 and supplemental March 1993 investigation are included in Appendix D. Geologic logs from the initial investigation were combined with several from the WCL investigation to produce the geologic cross section shown on Figure 3 and passing through the points shown on the map on Figure 2.

In general, 12 to 17 feet of unconsolidated material, primarily glacial till, overlie the Niagara Dolomite at the site. The upper portion of the till is a lean clay with sand and gravel. This clay unit extends to a maximum depth of 9 feet (at NMW-2) and varies from 0 to 7 feet thick. Fill material was identified at borings NMW-2, NMW-3, and NMW-4 on the NITC property. Based on the excavation history, all of the unconsolidated material encountered at NMW-5 and NMW-6 on the WCL site is considered to be fill. Fill material was thickest on the WCL site at NMW-4, where it extended to a depth of 7.5 feet and apparently replaced the clay unit.

Beneath the clay unit and fill material, a dense till composed primarily of well graded gravel with silt and sand overlies the Niagara Dolomite. This coarse till unit also extends beneath the WCL site. Occasional sand layers with little to no silt, occur



LEGEND

● NMW-3	EXISTING MONITORING WELL INSTALLED BY RMT, INC. OCTOBER 5 – 9, 1992
⊕ MW-4	EXISTING MONITORING WELL BY GRAEF, ANHALT, SCHLOEMER AND ASSOCIATES INC.(G.A.S.)
⊕ SB-20	EXISTING BORINGS BY G.A.S.
	EXISTING BUILDINGS
—x—x—	FENCE
—809—	TOP OF DOLOMITE BEDROCK CONTOUR (CONTOURS ON WCL PROPERTY FROM BEDROCK CONTOUR MAP SUPPLIED BY G.A.S.– SLIGHTLY MODIFIED NEAR PROPERTY LINE)
(817.9)	ELEVATION OF TOP OF BEDROCK ESTIMATED FROM BORING LOGS

TOP OF DOLOMITE BEDROCK

RMT INC.

DWN. BY:	DPR
DATE:	FEBRUARY 1993
PROJ.#	2585.03
FILE #	25850313

FIGURE 4

within the dense gravel till. One such sand layer was encountered at NMW-1 overlying bedrock.

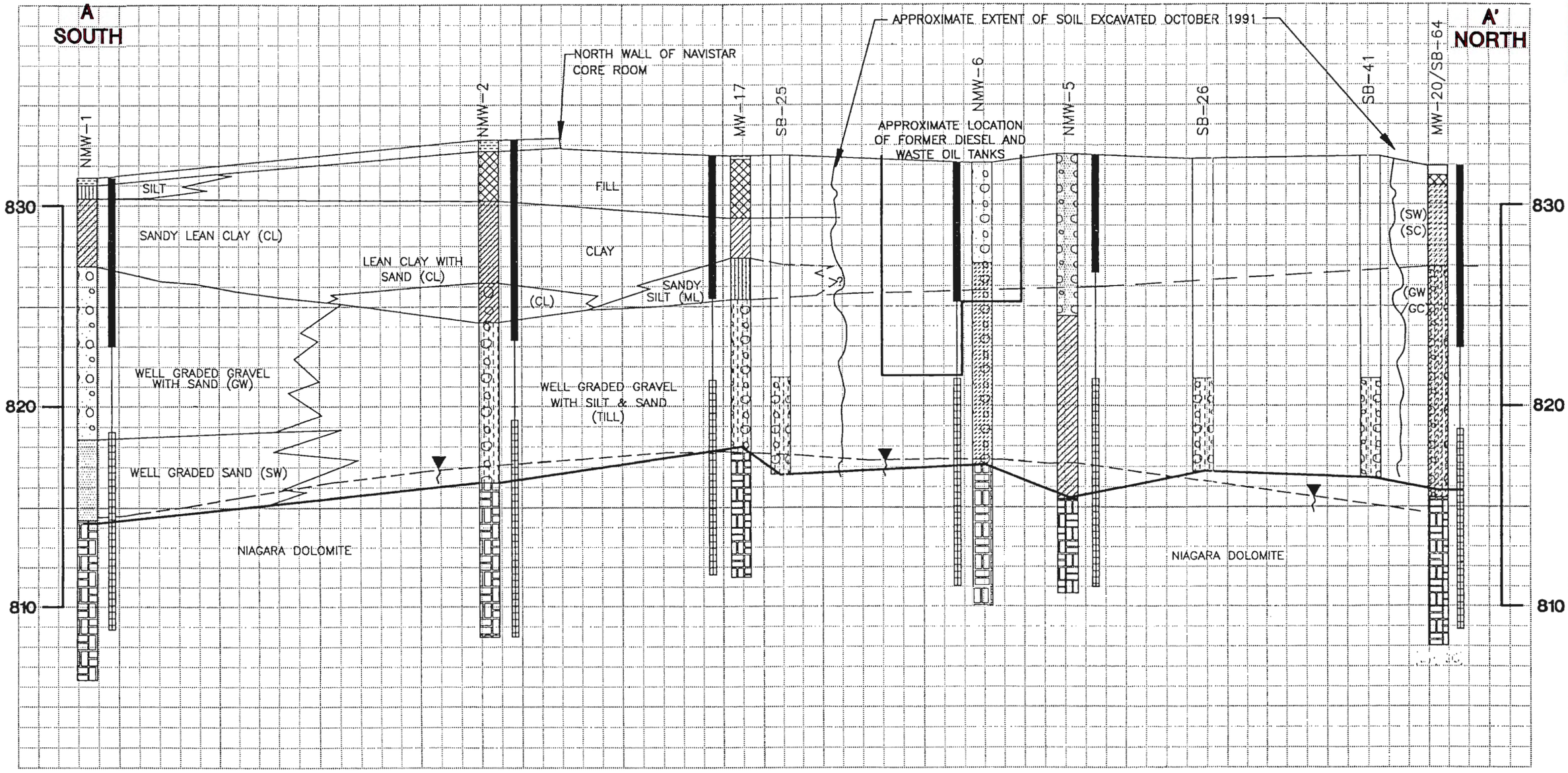
The Niagara Dolomite bedrock was encountered at 12 to 15 feet below ground surface at the NITC site. Top-of-bedrock data collected during this investigation were used to supplement and slightly modify a top-of-bedrock map constructed by G.A.S. for the WCL site. The resulting map is included as Figure 4. This map indicates that several small mounds occur on the bedrock surface but that, in general, it slopes gradually to the northwest.

4.2.2 Hydrogeology

Additional information regarding groundwater conditions beneath the site area was gathered by installing four water table monitoring wells at the NITC property (NMW-1, NMW-2, NMW-3, and NMW-4) and two on WCL property (NMW-5, NMW-6).

The six monitoring wells were installed using standard methods and materials consistent with Wisconsin Administrative Code NR141 which regulates monitoring well construction. A discussion of methods employed for well installation and development is included in Appendix C. Completed WDNR forms documenting well installation and development are included in Appendix E.

In conjunction with the first sampling round, stabilized water levels were measured on October 13 and 14, 1992, at the six newly installed wells and at the 21 existing wells on the WCL site. Groundwater elevations determined from these measurements are included in Table 1. As shown on the cross section on Figure 3, the water table occurs near the top of bedrock at much of the site. A water table contour map constructed from the October 13 and 14, 1992, elevations, is presented on Figure 5. The map shows that the water table slopes relatively uniformly toward the west-northwest, suggesting that the average groundwater flow direction is also in that direction. The total drop in groundwater elevation across the site is about 14 feet, and the resulting horizontal hydraulic gradient is 0.03. The relatively steep hydraulic gradient present at the site may be due, at least in part, to its proximity to the Fox River where the shallow groundwater likely discharges.



LEGEND

- LEAN CLAY WITH SAND AND GRAVEL (CL)
- WELL GRADED SAND (SW)
- NIAGARA DOLOMITE
- SILT (ML)
- FILL=(SAND & GRAVEL OR FOUNDARY SAND AT MW-2)
- SANDY LEAN CLAY (CL) GRAVEL
- WELL GRADED GRAVEL WITH SAND (GC)
- ASPHALT
- WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)
- SANDY SILT (ML)
- CLAYEY GRAVEL WITH (GC) SAND
- CLAYEY SAND WITH GRAVEL (SW/SC)
- CLAY SILTY GRAVEL WITH SAND (GW/GC)
- WATER TABLE DETERMINED OCTOBER 13-14, 1992
- MW-1 WELL NUMBER
- WELL SEALS
- WELL SCREEN

NOTE:

1. BORINGS AT NMW-5 AND NMW-6 WERE INSTALLED IN AN AREA DISTURBED BY EXCAVATION, THEREFORE THEY DO NOT REFLECT ORIGINAL GEOLOGY.
2. UPPER PORTION OF BORING SB-25, SB-26 AND SB-41 WERE BLIND DRILLED BY G.A.S. GEOLOGY NOT LOGGED

GEOLOGICAL CROSS SECTION

SCALE:	
HORIZONTAL	1"=30'
VERTICAL	1"=5'

RMT INC.

DWN. BY:	DPR
DATE:	FEBRUARY 1993
PROJ.#	2585.03
FILE #	25850305

FIGURE 3

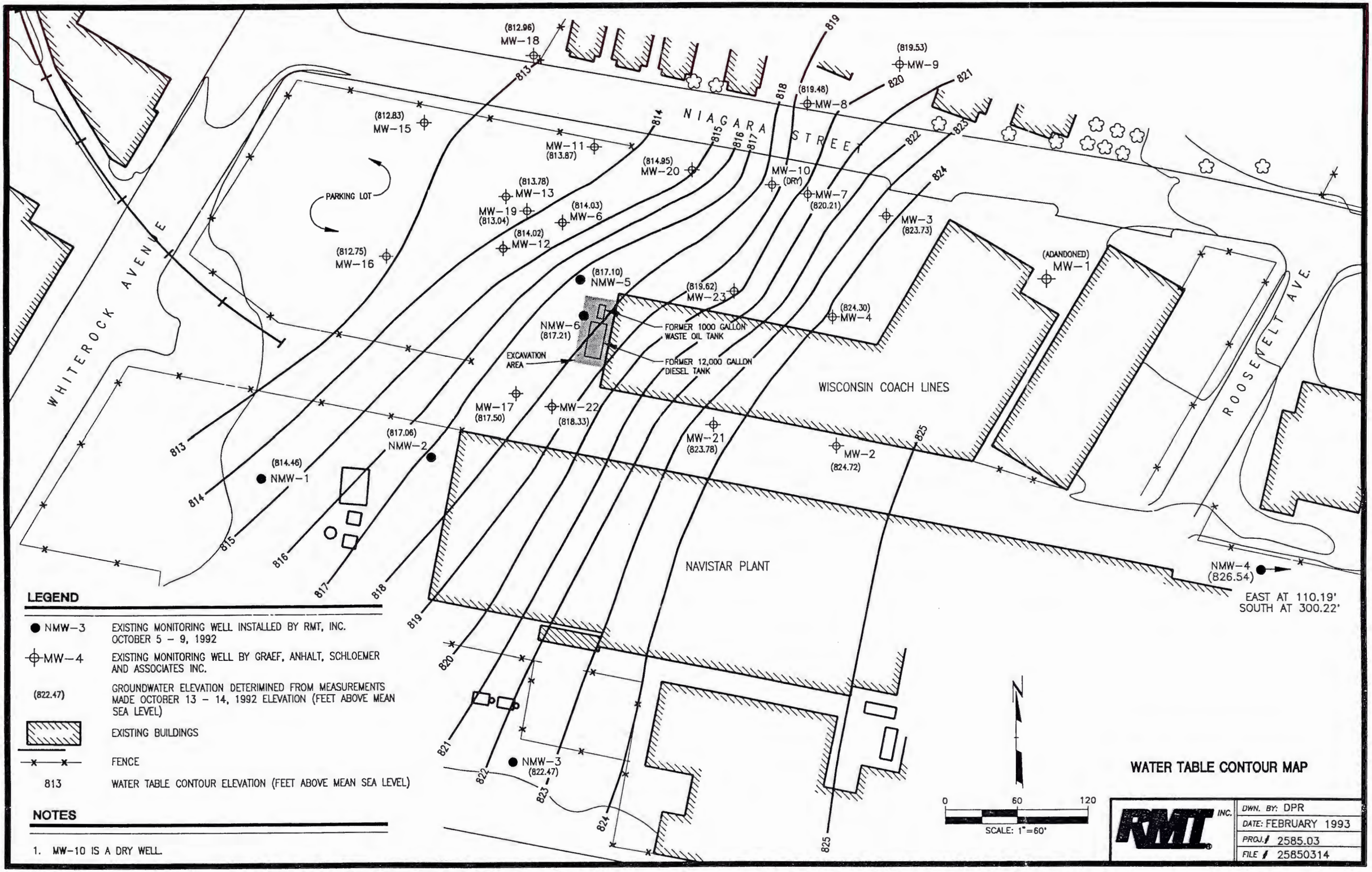
TABLE 1

GROUNDWATER ELEVATIONS DETERMINED FROM MEASUREMENTS MADE OCTOBER 13-14, 1992

Monitoring Well Name	Elevation of TPVC Measuring Point (ft., M.S.L.)	Depth to Water (ft. below TPVC)	Groundwater Elevation (ft., M.S.L.)
NMW-1	831.47	17.01	814.46
NMW-2	832.93	15.87	817.06
NMW-3	831.62	9.15	822.47
NMW-4	840.01	13.47	826.54
NMW-5	832.39	15.29	817.10
NMW-6	831.96	14.75	817.21
MW-1	abandoned		
MW-2	833.50	8.78	824.72
MW-3	832.47	8.74	823.73
MW-4	833.05	8.75	824.30
MW-6	831.90	17.87	814.03
MW-7	832.42	12.21	820.21
MW-8	832.32	12.84	819.48
MW-9	832.89	13.36	819.53
MW-10	832.39	dry	
MW-11	831.70	17.83	813.87
MW-12	832.09	18.07	814.02
MW-13	832.26	18.48	813.78
MW-14	832.94	13.45	819.49
MW-15	831.75	18.92	812.83
MW-16	831.60	18.85	812.75
MW-17	832.06	14.56	817.50
MW-18	832.55	19.59	812.96
MW-19	831.94	18.90	813.04
MW-20	831.92	16.97	814.95
MW-21	832.80	9.02	823.78
MW-22	832.15	13.82	818.33
MW-23	833.27	13.65	819.62

NOTE:

Measuring point reference elevations supplied by G.A.S. for WCL wells.



LEGEND

● NMW-3	EXISTING MONITORING WELL INSTALLED BY RMT, INC. OCTOBER 5 – 9, 1992
⊕ MW-4	EXISTING MONITORING WELL BY GRAEF, ANHALT, SCHLOEMER AND ASSOCIATES INC.
(822.47)	GROUNDWATER ELEVATION DETERIMINED FROM MEASUREMENTS MADE OCTOBER 13 – 14, 1992 ELEVATION (FEET ABOVE MEAN SEA LEVEL)
▭	EXISTING BUILDINGS
–x–x–	FENCE
813	WATER TABLE CONTOUR ELEVATION (FEET ABOVE MEAN SEA LEVEL)

NOTES

1. MW-10 IS A DRY WELL.

0 60 120
SCALE: 1"=60'

WATER TABLE CONTOUR MAP

RMT INC.

DWN. BY:	DPR
DATE:	FEBRUARY 1993
PROJ.#	2585.03
FILE #	25850314

FIGURE 5

The groundwater flow direction implied from the water table configuration shown on Figure 5 is consistent with the interpretation presented by G.A.S. (July, 1992) for the WCL site. Although separated by about 20 years, the current configuration of the water table also is consistent with the general water table map of Waukesha County constructed by Gonthier (1975) from data collected in December 1972.

Since no nested monitoring wells have been installed, vertical hydraulic gradients have not been determined at the NITC or WCL sites. It is likely that vertically downward flow occurs in the underlying bedrock aquifer. However, at least within the upper part of the aquifer, vertical flow would become upward as groundwater discharges to the Fox River. Therefore, it is probable that the Fox River constitutes a discharge boundary for groundwater flowing in a substantial portion of the Niagara Dolomite aquifer.

Single-well response tests were conducted at each newly installed and developed monitoring well to estimate hydraulic conductivity. The field test methods are described in Appendix C. Field data and analytical worksheets are included in Appendix F. A summary of test results is shown in Table 2. The geometric mean for the six hydraulic conductivity determinations is 2.8×10^{-3} cm/s. Perhaps a more informative characteristic of the hydraulic conductivity data is that the values range over about two orders of magnitude. Hydraulic conductivity data were not available for the WCL site; however, it is noted that one of the monitoring wells was dry when presumably installed to a depth similar to other wells, thus suggesting locally low-permeability conditions.

As would be expected in aquifers dominated by secondary permeability and as evidenced by the wide range of measured values, including very impermeable zones (such as at dry wells), the hydraulic conductivity of the dolomite on-site is variable depending on the distribution of joints, fractures, and solution features.

Groundwater velocity was calculated (see Appendix F) for the shallow aquifer based on field-determined hydraulic conductivity, horizontal hydraulic gradient, and an assumed effective porosity. To characterize this aquifer which appears to be

TABLE 2

SUMMARY OF HYDRAULIC CONDUCTIVITY TESTS

Well	Hydraulic Conductivity (cm/s)	Units Screened
NMW-1	4.0×10^{-4}	Dolostone
NMW-2	1.5×10^{-4}	Dolostone
NMW-3	2.9×10^{-3}	Gravel with silt and sand and dolomite
NMW-4	6.1×10^{-3}	Sand with clay and gravel and dolostone
NMW-5	1.8×10^{-2}	Sandy clay with gravel dolostone
NMW-6	2.3×10^{-2}	Dolostone
Geometric Mean: 2.8×10^{-3} cm/s.		

dominated by secondary permeability, an effective porosity of 0.05 was used to reflect the relatively small fraction of the rock mass through which groundwater flows.

Corresponding to the range of hydraulic conductivity, groundwater velocities between 0.25 and 40 feet per day were estimated. These results suggest that, at least over short distances, groundwater and conservative constituents dissolved in the water can move at highly variable rates within the fractured bedrock. Most organic compounds will be retarded with respect to the velocity of groundwater itself. Therefore, migration of contaminants as are observed at this site would not be expected to travel as far as predicted by the groundwater velocity. An accurate assessment of the contaminant migration rate is not currently possible at this site since the timing of the release and the actual extent of contamination are not known. As discussed in Subsection 4.5, rapid changes in groundwater quality suggest that relatively fast migration rates exist in at least a portion of the aquifer.

4.3 Contaminants In Soil

The presence of VOCs and petroleum-related compounds in soil was evaluated by RMT during this investigation by analyzing one soil sample from each of the six borings for GRO, DRO, TRPH, and VOCs. When sample recovery was sufficient, headspace screening using a photoionization detector (PID) aided in sample selection for laboratory analysis. Methods used for sample collection and screening are described in Appendix C. The results of soil analyses are included in Appendix G for the samples collected during the three field events (October 1992, and March and April 1993). Detected compounds are summarized in Tables 3A, 3B, 3C, and 3D. Three field blanks were collected to evaluate field sampling methods on the days when soil samples were collected in the field during October 1992. These field blanks were analyzed for GRO. No detectable quantities of GRO were quantified for the soil field blanks.

Soil samples were split for separate analysis with G.A.S. at each of the four borings on the NITC property (NMW-1, NMW-2, NMW-3, and NMW-4). G.A.S. collected and analyzed an additional soil sample each at NMW-2 and NMW-3. At borings NMW-5 and NMW-6, on WCL property, duplicate samples were not collected. Instead, soil samples from different depths were collected and analyzed. Results for soil samples analyzed by G.A.S. are shown in Table 3A in parentheses. Laboratory data reports or descriptions of quality control measures were not available for review for the G.A.S. information.

TABLE 3A
SUMMARY OF COMPOUNDS DETECTED IN SOIL - NAVISTAR INTERNATIONAL TRANSPORTATION, INC.

Sample Location	Sample Number	Sample Interval Depth	Field-Screening Results (Instrument units ppm benzene)	Concentration Units as µg/kg Tetrachlorethane	1,1,1-Trichloroethane (TCA)	Trichloroethene (TCE)	GRO	TRPH	DRO
NMW-1	1	0.5-2.5	1						
	2	3-5	1	ND (ND)	ND (ND)	ND (ND)	ND (ND)	160,000	230,000
	3	5.5-7.5	1						
	4	8-10							
NMW-2	1	0.5-2.5	43	(10)	(6160)	(ND)	(ND)		
	2	3-5							
	3	5.5-7.5	1						
	4	8-10	42	ND (ND)	ND (519)**	ND (ND)	ND (ND)	ND	ND
	5	10.5-12.5							
	6	13-14	1						
NMW-3	1	0.5-2.5	6	7.9 (ND)	1.7 (32)	40 (11.4)	ND (ND)	16,000	ND
	2	3-5	23						
	3	5.5-7.5	1						
	4	8-10	1	(ND)	(7.0)	(45)	(ND)		
	5	11-12	1						
NMW-4	1	0-2	1						
	2	2.5-4.5	1						
	3	5-7							
	4	7.5-9.5	1						
	5	10-12	1	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND	ND
	6	12.5-14.5	1						

TABLE 3A (CONTINUED)
SUMMARY OF COMPOUNDS DETECTED IN SOIL - NAVISTAR INTERNATIONAL TRANSPORTATION, INC.

Sample Location	Sample Number	Sample Interval Depth	Field-Screening Results (Instrument units ppm benzene)	Concentration Units as µg/kg					
				Tetrachlorethane	1,1,1-Trichloroethane	Trichloroethene	GRO	TRPH	DRO
NMW-5	1	0.5-2.5	1						
	2	3-5	1						
	3	5.5-7.5	1						
	4	8-10	1	(ND)	(ND)	(21.0)	(ND)		
	5	10.5-12.5	1						
	6	13-15	1	ND	ND	3.3	ND	57,000	ND
	7	15.5-17.5	13						
NMW-6	1	0.5-2.5	7	ND	ND	ND	ND	76,000	ND
	2	3-5	1						
	3	5.5-7.5	1						
	4	8-10	1						
	5	10.5-12.5		(ND)	(ND)	(14.0)	(ND)		
	6	13-15							

NOTES:

ND = Not detected.
** Sample suspected of containing non-representative soil from a shallower depth.

Concentrations shown in parentheses are reported by Graef, Anhalt, and Schloemer (G.A.S.).
G.A.S. samples were analyzed for VOCs and GRO only.

TABLE 3B

SUMMARY OF COMPOUNDS DETECTED IN SUPPLEMENTAL SOIL SAMPLES AT NITC

RMT RESULTS
(collected March 19–20, 1993, by Layne Geoscience)
(Concentrations in μg/kg)

Sample Identification	NAV1-S1	NAV3-S2	NAV4-S2	NAV5-S1	NAV6B-S1
Sample Depth (feet)	2-4	6-8	6-8	2-4	3-4
Compound					
1,1-Dichloroethene	9				
1,1-Trichloroethane	100			24	3
Trichloroethene				67	3
Benzene				3	
Toluene	7	1		17	2
Ethylbenzene	1			2	
Xylene	5	1	1	10	2

NOTES:

- No compounds were detected in the trip blank accompanying these samples.
- Samples were analyzed according to EPA Method 8260.

TABLE 3C

SUMMARY OF COMPOUNDS DETECTED IN SUPPLEMENTAL SOIL SAMPLES AT NITC

LAYNE GEOSCIENCE RESULTS

(Collected March 19–20, 1993 by Layne Geoscience)
(Concentrations in µg/kg)

Sample Identification	NAV1-S1	NAV3-S2	NAV4-S2	NAV5-S1	NAV6-S1
Sample Depth (feet)	2-4	2-4	2-4	2-4	2-4
Compounds					
Benzene	2.7	2.5		21.1	4.5
1,1-Dichloroethane	2				
Ethylbenzene	8.8	10.8	20.5	15.1	11
Naphthalene	9				
Toluene	14.4	15.1	17.1		17.1
1,1,1-Trichloroethene	360	14.1	19.3	203	
Trichloroethene	2.7			96	
Trichlorofluoromethane	2.4			19.7	
1,3,5-Trimethylbenzene			21	7.3	6.4
1,2,4-Trimethylbenzene	8.5				
Xylene	4.4		7.5	12	5.1

TABLE 3D

SUMMARY OF COMPOUNDS DETECTED IN SUPPLEMENTAL SOIL SAMPLES AT WCL

RMT RESULTS
(Collected April 14, 1993, by RMT)
(Concentrations in µg/kg)

Sample Identification	WCB-1(104)	WCB-1(06)	WCB-2A(04)	WCB-2A(08)	WCB-3(10)	WCB-3(12)	WCB-4(04)	WCB-4(12)
Sample Depth (feet)	3-5	5-7	3-5	7-9	9-11	11-13	3-5	11-13
Compounds								
Tetrachloroethene	62							
1,2,4-Trimethylbenzene							13	
N-butylbenzene							14	
Trichloroethylene								1.7W
Xylene							12	

NOTES:

- No compounds were detected in the trip blank accompanying these samples.
- Samples were analyzed according to EPA Method 8021.
- Only detected compounds are listed.

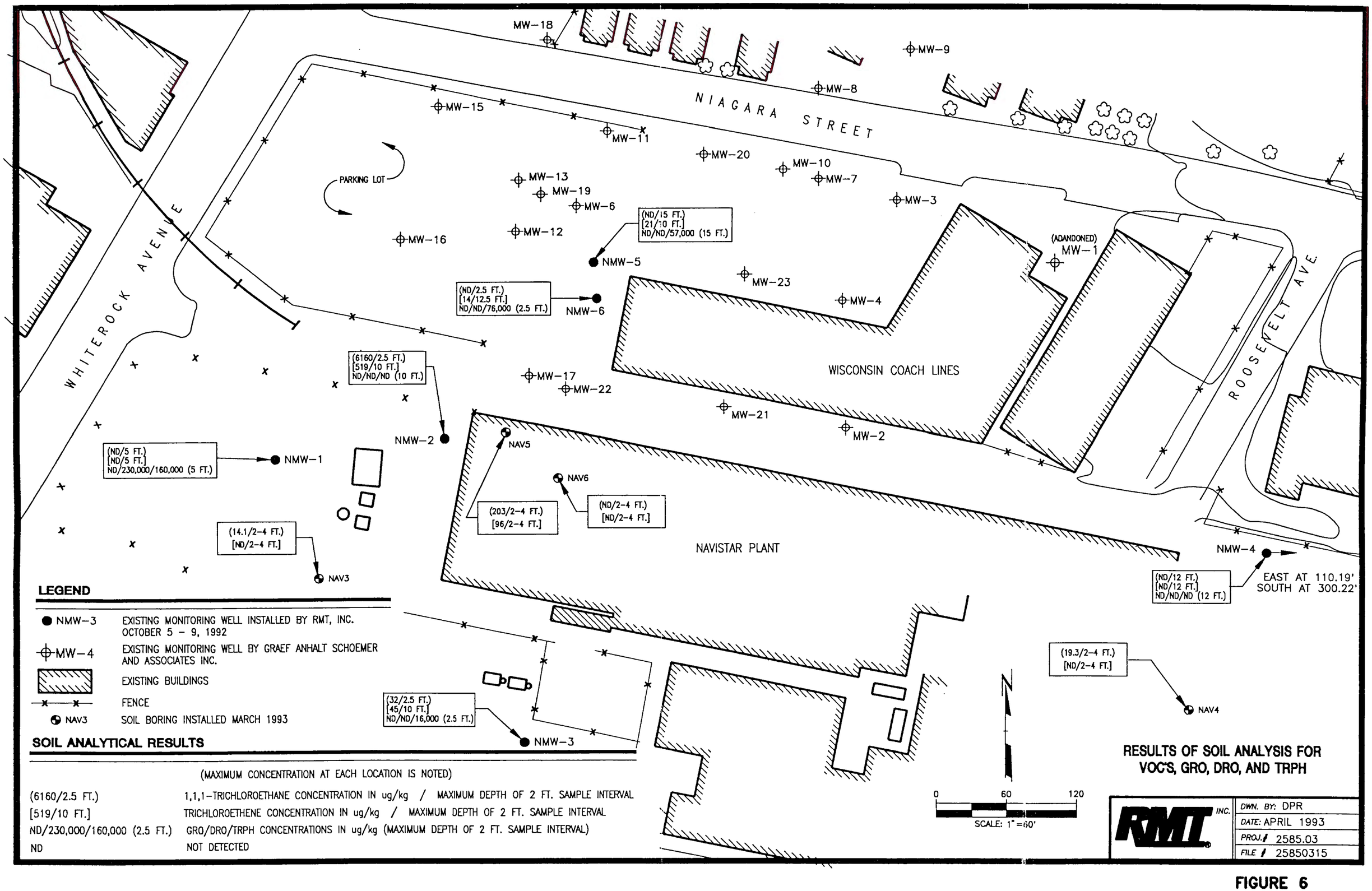
W = Sample received with headspace.

As discussed in the subsections that follow, chlorinated solvents and petroleum-related compounds were detected at several locations on the NITC property. However, neither the concentrations or the locations of these compounds with respect to groundwater flow direction suggest that they are the primary source of groundwater contamination in the NITC or WCL site areas. Results of soil sample analyses are also illustrated on Figure 6.

4.3.1 Chlorinated Solvents

The chlorinated solvents trichloroethene (TCE), 1,1,1-trichloroethane (TCA), and tetrachloroethane (PCE) were detected at borings NMW-2 and NMW-3 on the NITC site. The maximum concentration of the chlorinated solvents was detected in the 0.5- to 2.5-foot interval at NMW-2 as quantified by the G.A.S. analysis (see Table 3A). This soil interval appeared to be composed of black foundry sand fill and to extend to a depth of 4 feet. Results from the 8- to 10-foot interval of NMW-2, as quantified by RMT's analysis, indicate no persistent detectable concentrations of chlorinated solvents at this depth. Contrarily, G.A.S. results from the 8- to 10-foot sample suggest that 519 µg/kg 1,1,1-trichloroethane does exist at this depth. An observation made during the sampling of this interval raises questions about the validity of the G.A.S. results. The RMT field representative noticed that, when splitting the soil sample for this interval, the G.A.S. representative appeared to include soil from the top of the split-spoon which did not appear to be representative of the 8- to 10-foot sample interval. Instead, this soil from the top of the spoon seemed to resemble the dark-colored fill from the upper 4 feet of the borehole. A thin layer of loosely packed soil from the uppermost part of the borehole often remains inside the bottom of hollow-stemmed augers as drilling proceeds and subsequently can appear in the top of the split-spoons as they are taken from lower levels. This soil residue is commonly called "slough," and should not be considered as part of the sample interval. For the above-stated reasons, the extent of chlorinated solvents is likely restricted to the fill material above about 4 feet and does not extend through underlying clay soil to the 8- to 10-foot depth.

Relatively low concentrations of PCE, TCE, and TCA were detected in the 0.5- to 2.5-foot interval at NMW-3. The maximum concentration quantified from this depth was 40 µg/kg TCE. G.A.S. results suggest that TCE concentrations of a similar magnitude (45 µg/kg) extend to the 8- to 10-foot interval. Although distinct foundry sand fill was not observed at NMW-3, fill material was present near the surface and may be the source



LEGEND

● NMW-3	EXISTING MONITORING WELL INSTALLED BY RMT, INC. OCTOBER 5 – 9, 1992
⊕ MW-4	EXISTING MONITORING WELL BY GRAEF ANHALT SCHOEMER AND ASSOCIATES INC.
▭	EXISTING BUILDINGS
–x–x–	FENCE
⊕ NAV3	SOIL BORING INSTALLED MARCH 1993

SOIL ANALYTICAL RESULTS

(MAXIMUM CONCENTRATION AT EACH LOCATION IS NOTED)

(6160/2.5 FT.)	1,1,1-TRICHLOROETHANE CONCENTRATION IN ug/kg / MAXIMUM DEPTH OF 2 FT. SAMPLE INTERVAL
[519/10 FT.]	TRICHLOROETHENE CONCENTRATION IN ug/kg / MAXIMUM DEPTH OF 2 FT. SAMPLE INTERVAL
ND/230,000/160,000 (2.5 FT.)	GRO/DRO/TRPH CONCENTRATIONS IN ug/kg (MAXIMUM DEPTH OF 2 FT. SAMPLE INTERVAL)
ND	NOT DETECTED

RESULTS OF SOIL ANALYSIS FOR VOC'S, GRO, DRO, AND TRPH

RMT INC.

DWN. BY:	DPR
DATE:	APRIL 1993
PROJ.#	2585.03
FILE #	25850315

FIGURE 6

of the chlorinated solvents. As discussed below, the concentrations detected at NMW-3 are in the same range as concentrations detected in "clean" backfill as quantified by G.A.S. at NMW-5 and NMW-6 on the WCL site.

Chlorinated solvents were not detected in soil at NMW-1 or NMW-4 on the NITC site.

As discussed further in Subsections 4.4 and 4.5, comparison of the chlorinated solvent concentrations detected in soil at NMW-2 and NMW-3 with groundwater data at the same locations does not suggest that these areas are a source of the groundwater impacts observed in the WCL-NITC area.

Information regarding chlorinated solvent concentrations in soil was obtained during the second and third phases of investigation conducted on March 19–20 and April 14, 1993, respectively. The March 1993 investigation was planned and implemented by WCL and its consultant Layne Geosciences. It consisted of locating borings NAV1, NAV3, NAV4, NAV5, and NAV6 (shown on Figure 2) at locations on the NITC facility suspected of being the source of the large-scale chlorinated solvent impacts to groundwater in the area. These four borings were drilled using a geoprobe to depths of refusal (12 - 16 feet). Soil samples were screened by Layne Geosciences using an on-site gas chromatograph (Field GC).

In order to select samples for laboratory analysis, RMT split samples with Layne Geosciences based on the Field GC results. RMT and Layne Geoscience results are shown in Tables 3B and 3C, respectively. Field GC screening results have not been provided. The soil results for NAV3, NAV4, NAV5, and NAV6 are shown graphically on Figure 6.

In general, the maximum chlorinated solvent concentrations detected in the March 1992 samples are more than an order of magnitude less than those previously detected at the NITC facility (at NMW-2). It is not likely that the low concentrations detected in the March 1993 samples, the maximum of which is 360 mg/kg at NAV1, are the source of the heavily impacted groundwater at the WCL site. More specifically, the concentration of TCE plus 1,1,1-TCA detected at a sample location (NAV5) about

45 feet upgradient of one of the most impacted WCL monitoring wells (MW-17) was only 300 µg/kg. Furthermore, this slightly elevated concentration was related to a thin foundry sand fill layer beneath the NITC building, similar to that existing at NMW-2, and is not likely to migrate to groundwater through underlying fine-grained soils.

Four soil borings (WCB-1, WCB-2, WCB-3, and WCB-4 as shown on Figure 2) were conducted at the WCL site on April 14, 1993, order to determine whether chlorinated solvents which are believed to have been associated with the former WCL waste oil tank, may have migrated beneath the WCL building. As shown in Table 3D, only a slightly elevated concentration (62 µg/kg) of tetrachloroethene was detected at WCB-1. WCB-1 is relatively distant (about 200 feet) from the former waste oil tank. Therefore, the occurrence of this common chlorinated solvent at WCB-1 may be unrelated to the former waste oil tank. However, the presence of tetrachlorethene could be related to using and spilling the product at WCL in the past.

4.3.2 Petroleum-Related Compounds

Petroleum-related compounds were detected in soil samples at NMW-1 and NMW-3 at the NITC site and at NMW-5 and NMW-6 at the WCL site as shown in Table 3A. Total recoverable petroleum hydrocarbons (TRPH) indicative of oil range products and diesel range organics (DRO) were detected at elevated concentrations (maximum 230,000 µg/kg DRO) in shallow soils at NMW-1 and NMW-3. These analytical results indicate that soil is impacted to at least 3 to 5 feet at NMW-1. Field PID screening results from NMW-1 suggest that the impacts do not extend into the 5.5- to 7.5-foot interval. However, without additional laboratory analyses, the vertical extent of petroleum-related impacts at boring NMW-1 cannot be ascertained. Analytical results indicate that the 0.5- to 2.5-foot interval at NMW-3 has been impacted by oil range hydrocarbons (TRPH = 16,000 µg/kg). Field PID screening results from the 3- to 5-foot interval suggest that impacts may extend to these depths. Currently, there is no specific information concerning past spills or releases of these petroleum products to explain their presence at NMW-1 or NMW-3. It is possible that the elevated concentrations are related to fill materials brought from elsewhere. The concentrations quantified at NMW-1 and NMW-3 exceed the WDNR's guideline of 10 mg/kg (10,000 µg/kg) for determining whether soil is impacted by petroleum hydrocarbons.

As discussed further in Subsections 4.4 and 4.5, the concentrations of TRPH and DRO in shallow soil at NMW-1 and NMW-3 do not appear to be a source of impacts to groundwater at these or other areas.

Results from RMT's analyses of samples from NMW-5 and NMW-6 indicate that elevated concentrations of TRPH remain in the area of the WCL facility where impacted soils have been previously excavated. The TRPH concentration of 57,000 μg/kg at the 13- to 15-foot depth at NMW-5 is expected since it occurs in the area where a release from the former waste oil tank has been documented at WCL. However, the occurrence of a TRPH concentration of 76,000 μg/kg in the 0.5- to 2.5-foot interval at NMW-6 is difficult to understand since this area was reportedly backfilled with clean fill following remedial excavation. Since G.A.S. did not analyze soil samples for TRPH and DRO, duplicate data are not available for these parameters.

4.4 Contaminants in Groundwater

The potential presence of petroleum hydrocarbons and chlorinated solvents in groundwater beneath the NITC site was evaluated during this investigation by collecting and analyzing two rounds of samples from monitoring wells NMW-1, NMW-2, NMW-3, and NMW-4. The samples were collected using standard methods described in Appendix C on October 13 and 14, 1992 (Round 1), and on December 16 and 18, 1992 (Round 2), and were analyzed for VOCs, GRO, DRO, and TRPH.

In addition to sampling the new wells at the NITC property, new wells NMW-5 and NMW-6 installed near the former WCL waste oil tank were also sampled during Rounds 1 and 2 and analyzed for VOCs, GRO, DRO, and TRPH.

In order to aid in understanding the distribution of contaminants in groundwater over a large area, a selected number of existing wells were sampled during Rounds 1 and 2. These supplementary locations were analyzed for VOCs and GRO by RMT. A G.A.S. staff member split samples during Round 1 at NMW-1, NMW-2, NMW-3, NMW-4, NMW-5, and NMW-6.

A summary of the compounds detected in samples from Rounds 1 and 2 is presented in Table 4. Laboratory data sheets and chain-of-custody forms for the RMT samples are included in Appendix H.

Analytical results were provided in summary form by G.A.S. for a recent (September 21–23, 1992) round as well as for four of the six samples which were split on October 13, 1992. The data provided by G.A.S. have also been included in Table 4, but were not verified

against laboratory data sheets, since they were not provided. The results for split samples at NMW-5 and NMW-6 have not been provided by G.A.S. or WCL, even after multiple requests.

Prior to discussing results, it may be informative to review the purposes of each newly installed monitoring well. The reasoning behind placement of the monitoring wells was discussed in the investigation workplan (RMT, August 1992). Several modifications occurred following its submittal. The general purpose of each new monitoring well is as follows:

WELL	PURPOSE
NMW-1	Upon the request of the WDNR, this well was placed to investigate water quality in the downgradient (westerly) direction from an area that was used to store products containing chlorinated solvents.
NMW-2	To investigate water quality at a downgradient location near the core room where the majority of TCA is used at NITC.
NMW-3 and NMW-4	To investigate water quality in areas furthest from the northern property line where contamination had been documented on WCL property, in order to investigate potential upgradient contributions.
NMW-5 and NMW-6	After receiving permission from WCL, these wells were installed in the area near the former waste oil tank to gather current water quality data near where a previously abandoned well (MW-5) had recorded one of the highest TCE concentrations prior to the summer of 1992.

TABLE 4 (CONTINUED)
SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
(concentrations in µg/L)

Parameter	NR 141 Enforcement Standards	Monitoring Wells/Date 1992																	
		MW-13		MW-12 D-1	MW-12			MW-11		MW-15		MW-16		MW-18		MW-20		MW-23	
		9/21	10/14	9/21	9/21	10/13	12/16	9/22	10/13	9/21	10/13	9/21	10/13	9/22	10/14	9/22	10/14	9/23	12/16
Trichloroethene	5	950	1,100	1,100	1,300	1,100	680	920	560	2,700	1,100	530	350	510	380	530	630	1.3	27
1,1,1-Trichloroethane	200	290	300	320	420	310	J 240	140	230	400	420	120	120	91	69	120			
cis-1,2-Dichloroethene	100	480		820	1,100	1,300	790	300	280		300		7.7	250	230	450		45	
Trans-1,2-Dichloroethene	100		J58																
Chloromethane																			
1,1-Dichloroethene						140	J 78		67		120		31		22				
1,1-Dichloroethane	850			28				9.9	22		28				14		J14		
Methylene chloride	150		B(11) 240			B (5.5) 140	B (420) 530		B(2.8) 17		B (2.8) 28		B (2.8) 15		B (5.5) 42		B (11) 110		B(8.5) 7.6
Toluene	343																		
Benzene	5							18	290						28				
Naphthalene	40								12										
o-Xylene	620								38										
Chloromethane																			
1,1,2-Trichloroethane	0.6																150		
1,2,3-Trichloropropane		J 1.9																	J1.9
1,2-Dibromoethane	0.01							15											
1,2- and 2,2-Dichloropropane		900		1,050	1,400			320		63				330				63	
Vinyl chloride	0.2																	1	
GRO		360	510	440	410	1,000	950	300	1,200	360	830		220	210	300	290	330		
DRO			NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA
TRPH			NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA

NOTES:
Blank indicates not detected.

Applicable data qualifiers.
B = Analyte found in associated method blank at indicated concentration.
E = Estimated value; analyte is above calibration range.
J = Analyte positively identified below quantitation limit.

TABLE 4 (CONTINUED)
SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
(concentrations in µg/L)

		Monitoring Wells/Date 1992																	
		D-2 (MW-17)	MW-17			Dup (MW-17)	MW-22			MW-21			MW-2		MW-6		MW-19	
Parameter	NR 141 Enforcement Standards	9/22	9/22	10/14	12/16	12/16	9/23	10/14	12/16	9/23	10/14	12/16	9/22	10/14	9/22	10/14	9/22	10/14
Trichloroethene	5	11,000	14,000	5,400	8,600	8,500	290	2,700	3,500	58	J42	J 3.8	0.8		110	81	75	720
1,1,1-Trichloroethane	200	1,500	1,800	2,000	1,600	1,900	43	440	J 460	5.8					63	65	23	120
cis-1,2-Dichloroethene	100						3.4			340		29			200	490		
Trans-1,2-Dichloroethene	100							J55										J16
Chloromethane										1.4						B(4.0)37		
1,1-Dichloroethene		190	260	600	550	640	5.3		J 240	5.4						20		
1,1-Dichloroethane	850	56	71	96	J 89	J 100	1.3			6.6					7.9			J17
Methylene chloride	150			B (2.8) 350	B (420) 540	(256) 460		B (11) 220	B(850) 1000		B (11) 120	B(5.0) 8.3		B (5.5) 1.8		B (5.5) 31		B (11) 100
Toluene	343																	
Benzene	5									8.1	110							
Naphthalene	40																	
o-Xylene	620																	
Chloromethane																		
1,1,2-Trichloroethane	0.6																	
1,2-Dibromoethane	0.01																	
1,2- and 2,2-Dichloropropane	0.2						4.4			490					280			
Vinyl chloride							2.2											
GRO		1,100	880	620	1,800	1,700		340	970		130				110	250	100	250
DRO		NA		NA			NA	NA		NA	NA		NA	NA	NA	NA	NA	NA
TRPH		NA		NA			NA	NA		NA	NA		NA	NA	NA	NA	NA	NA

NOTES:
First data column beneath each well ID is from the October round, the second (shaded) column is from the December round.
NA = Not analyzed.
Blank indicates not detected.

Applicable data qualifiers:
B = Analyte found in associated method blank at indicated concentration.
E = Estimated value; analyte is above calibration range.
J = Analyte positively identified below quantitation limit.

TABLE 4

SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
(concentrations in µg/L)

		Monitoring Wells/Date 1992																
		NMW-1			NMW-2			DUP 1 (NMW-2)	NMW-3			NMW-4			NMW-5		NMW-6	
Parameter	NR 141 Enforcement Standards	10/13	10/13	12/16	10/13	10/13	12/16	10/13	10/13	10/13	12/16	10/13	10/13	12/16	10/13	12/16	10/13	12/16
Trichloroethene	5		750	980		E110	130	E 110	205	220	200		22	21	910	250	7900	7900
1,1,1-Trichloroethane	200	916	560	620	30	35	19	34	10	200	60				370	76	2300	1400
cis-1,2-Dichloroethene	100				52	35	35	34					3.0			290		
Trans-1,2-Dichloroethene	100					12	13	12										
Chloromethane								3.1										
1,1-Dichloroethene		97		160	50	5.2	7.7	5.4	21	11	J 23				86	J 30	580	540
1,1-Dichloroethane	850	16		J 11	5	3.9	J 2.3	3.8	11						25	J 10	120	
Methylene chloride	150		B (2.8) 67	B (190) 100		B(2.9) 2.1	B(5.0) 19	B(2.9) 2.9		B(2.8) 30	B(85) 110		B(2.9) 1.5	B(8.5) 8.7	B(2.8) 26	B85 (110)	B(J2.8) 2.5	B(850) 1100
Toluene	343	6			4	2.5		2.3				4	4.4					
Benzene	5																	
Naphthalene	40																	
o-Xylene	620																	
Chloromethane																		
1,1,2-Trichloroethane	0.6																	
GRO			530	420						140					1700	790	4300	1800
DRO		NA			NA				NA			NA			4200	6400	3800	4800
TRPH		NA			NA				NA			NA			2400	2400	2500	2600

NOTES:

DATA presented in shaded columns were reported in summary form by G.A.S. - not verified against data sheets.
DATA from split samples at NMW-5 and NMW-6 were not provided by G.A.S.
RMT's VOC analysis was conducted by EPA Method 8260.
Blank indicates not detected.

Applicable data qualifiers.
B = Analyte found in associated method blank at indicated concentration.
E = Estimated value; analyte is above calibration range.
J = Analyte positively identified below quantitation limit.

The underlying purpose for conducting the groundwater investigation is to determine if any area at the NITC site is the source of the chlorinated solvent contamination detected beneath the WCL site. To define a source area for chlorinated solvent contamination, it was anticipated that an area of higher soil and groundwater concentrations would need to be identified upgradient from the area of known impacts at the WCL site. As is discussed in further detail below and in Subsection 4.5, a qualified source area which can be linked positively to the WCL contamination, has not been identified by this investigation.

Groundwater quality standards established under Wisconsin Administrative Code Chapter NR 141 are shown in Table 4 and indicate that an Enforcement Standard is exceeded for at least one compound at each monitoring well on NITC property. Standards are also exceeded at many WCL wells.

4.4.1 Chlorinated Solvents

As shown in Table 4, chlorinated solvents were detected at each monitoring well on the NITC property. TCE was consistently detected at concentrations higher than TCA at each NITC monitoring well. The occurrences of TCE and TCA at the NITC and WCL sites are illustrated on Figures 7 and 8, respectively, for Round 1. The highest chlorinated solvent concentrations at the NITC property occurred at NMW-1 for both rounds. However, the maximum concentration observed at NMW-1 (980 μg/L) is about 8 times less than the TCE concentration from NMW-6 which is adjacent to the former WCL waste oil tank, for the comparable time. Since soil samples analyzed from NMW-1 did not contain chlorinated solvents, their presence in groundwater at this location must be due to a source that is located somewhere else.

The maximum chlorinated solvent concentration detected in groundwater at NMW-2 was 130 μg/L TCE. The highest chlorinated solvent concentration (6,160 μg/kg TCA) detected at the NITC borings occurred at NMW-2. As stated in Subsection 4.3, RMT soil results indicate that elevated chlorinated solvent levels in soil do not extend to groundwater. In addition, the chlorinated solvent concentrations at NMW-2 are many times less than at nearby WCL monitoring wells, and therefore are not indicative of an upgradient source of the impacts at the WCL wells.

Chlorinated solvents were also detected in groundwater at NMW-3 and NMW-4. The low concentrations of chlorinated solvents in the soils at NMW-3 are not likely the cause of the solvents detected in groundwater at this location. There were no detected solvent concentrations in soil at NMW-4; therefore, the leaching of overlying contaminated soil cannot explain the underlying groundwater concentrations.

The highest overall solvent concentrations measured at wells from both sites occurred at NMW-6 and MW-17 during Rounds 1 and 2. As shown on Figures 7 and 8, NMW-6 and MW-17 appear to be the center of the TCE and TCA plume that decreases in all directions from them. Concentrations are highest at NMW-6 based on Round 1, but during Round 2, MW-17 exhibited a slightly higher concentration. The highest chlorinated solvent concentration on record occurred on September 21, 1992, as reported by G.A.S. when 12,000 μg/L was detected. Since the monitoring wells at NMW-5 and NMW-6 were not installed as of September 21, there is no opportunity to know what the corresponding concentrations near the former WCL waste oil tank would have been. As discussed further in Subsection 4.5, relatively rapid changes in the concentration of solvents in groundwater have occurred at some locations. Therefore, an accurate portrayal of the actual distribution of contaminants in groundwater may not be possible unless data from the same time frame are compared. For this reason, the September 21, 1992, data are insufficient for comparison with later data collected from near the former waste oil tank.

A comparison of TCE and TCA concentrations at every monitoring well reveals that TCE is consistently the greater of the two. This characteristic of the contaminant plume is inconsistent with the proportion of these two compounds as they are mixed for use at the NITC casting facility. As stated previously, NITC uses TCA with less than 1 percent TCE as an impurity. In addition, it is not apparent that solubility differences could cause the observed distribution since TCA is actually somewhat more soluble in water than TCE. Therefore, the chemical nature of the contaminant plume is not indicative of solvents used at NITC.

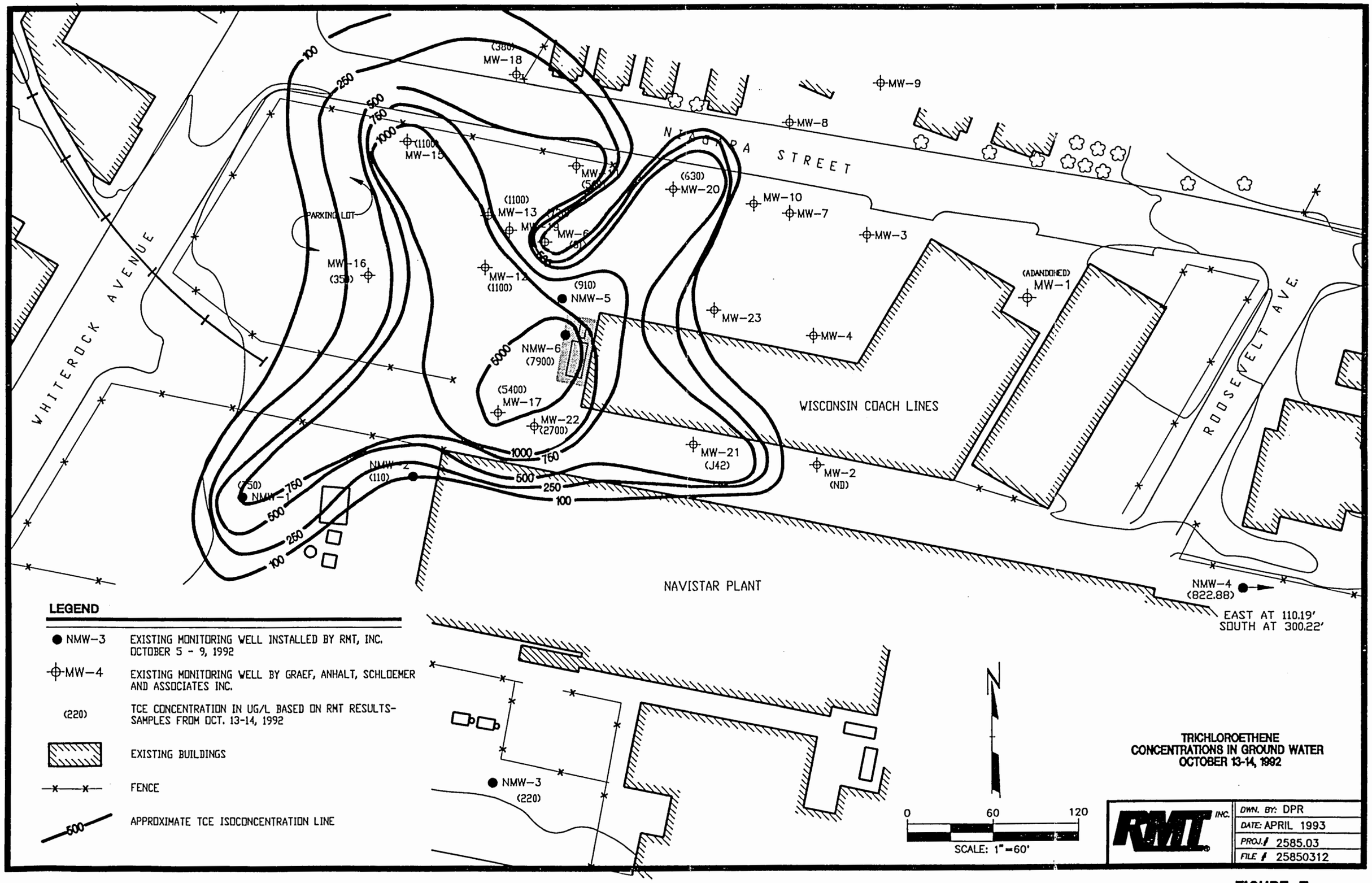
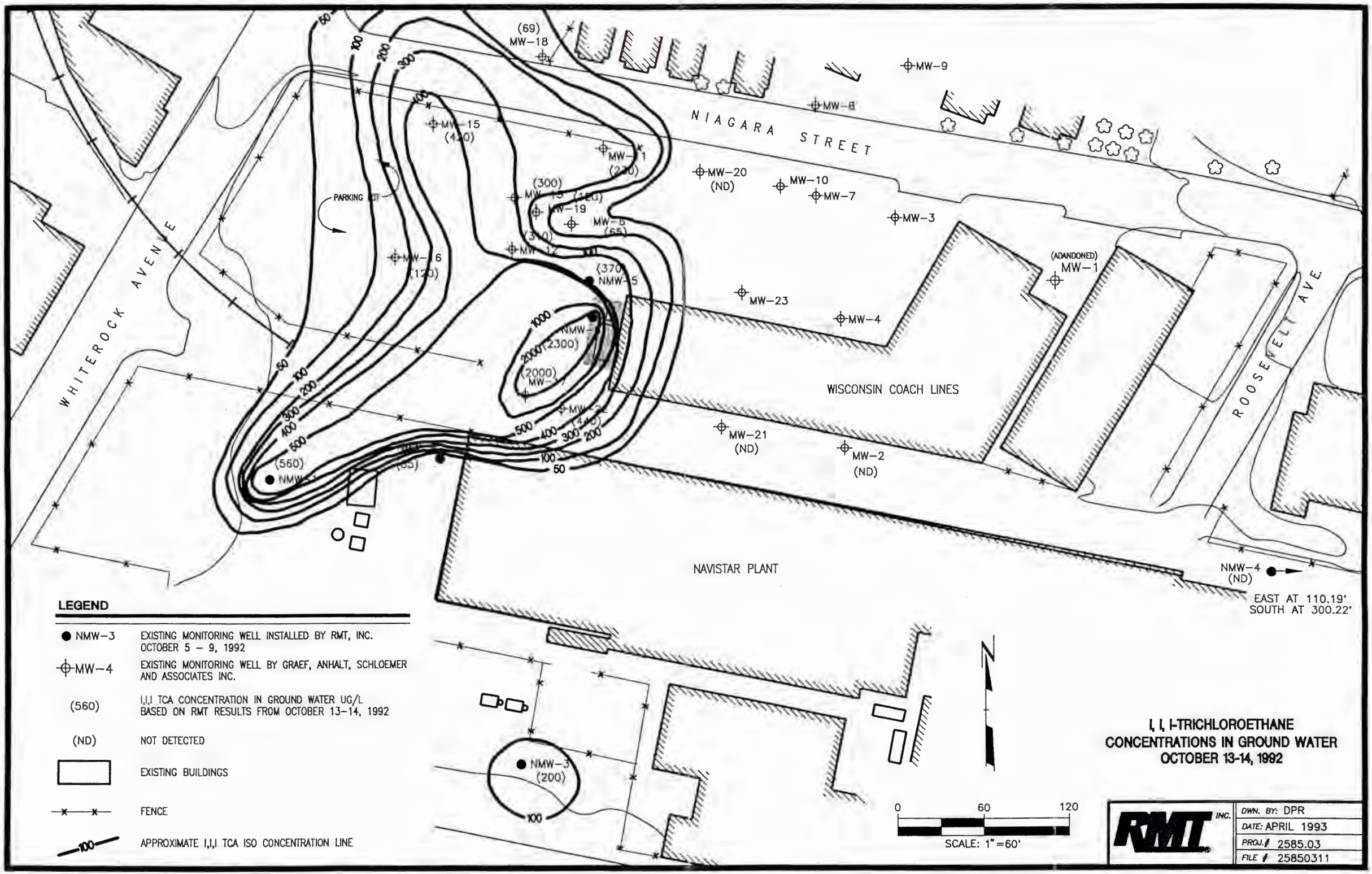

WHITEROCK AVENUE
NIAGARA STREET
ROOSEVELT AVE.
PARKING LOT
WISCONSIN COACH LINES
NAVISTAR PLANT
MW-1 (ABANDONED)
MW-2 (ND)
MW-3
MW-4
MW-5 (910)
MW-6 (5)
MW-7
MW-8
MW-9
MW-10
MW-12 (1100)
MW-13 (1100)
MW-15 (1100)
MW-16 (350)
MW-17 (5400)
MW-18 (380)
MW-20 (630)
MW-21 (J42)
MW-22 (2700)
MW-23
NMW-1 (110)
NMW-2 (250)
NMW-3 (220)
NMW-4 (822.88)
NMW-5
NMW-6 (7900)
EAST AT 110.19'
SOUTH AT 300.22'
100
250
500
750
1000
6000
LEGEND
NMW-3 EXISTING MONITORING WELL INSTALLED BY RMT, INC. OCTOBER 5 - 9, 1992
MW-4 EXISTING MONITORING WELL BY GRAEF, ANHALT, SCHLOEMER AND ASSOCIATES INC.
(220) TCE CONCENTRATION IN UG/L BASED ON RMT RESULTS- SAMPLES FROM OCT. 13-14, 1992
EXISTING BUILDINGS
FENCE
APPROXIMATE TCE ISOCONCENTRATION LINE
N
0 60 120
SCALE: 1"=60'
TRICHLOROETHENE
CONCENTRATIONS IN GROUND WATER
OCTOBER 13-14, 1992
RMT INC.
DWN. BY: DPR
DATE: APRIL 1993
PROJ.# 2585.03
FILE # 25850312

FIGURE 7



LEGEND

● NMW-3	EXISTING MONITORING WELL INSTALLED BY RMT, INC. OCTOBER 5 – 9, 1992
⊕ MW-4	EXISTING MONITORING WELL BY GRAEF, ANHALT, SCHLOEMER AND ASSOCIATES INC.
(560)	I,I,I TCA CONCENTRATION IN GROUND WATER UG/L BASED ON RMT RESULTS FROM OCTOBER 13–14, 1992
(ND)	NOT DETECTED
▭	EXISTING BUILDINGS
-x-x-	FENCE
100	APPROXIMATE I,I,I TCA ISO CONCENTRATION LINE

I, I, I-TRICHLOROETHANE CONCENTRATIONS IN GROUND WATER OCTOBER 13-14, 1992

RMT INC.

DWN. BY:	DPR
DATE:	APRIL 1993
PROJ.#	2585.03
FILE #	25850311

FIGURE 8

4.4.2 Petroleum-Related Compounds

Among the petroleum indicators tested—GRO, DRO, and TRPH—only detectable concentrations of GRO were quantified at the NITC wells NMW-1 and NMW-3. Of the other common petroleum VOCs—benzene, toluene, ethylbenzene, and xylenes—only low concentrations of toluene were detected at NMW-1, NMW-2, and NMW-4. As shown in Table 4, the maximum concentration of GRO, 530 μg/L, occurred at NMW-1. The maximum toluene concentration, 4.4 μg/L, occurred at NMW-4. These data do not indicate that groundwater standards for specific petroleum compounds have been exceeded beneath the NITC site.

Due to the non-specific nature of the GRO analytical method, there is a strong possibility that GRO concentrations detected in groundwater at the NITC wells are actually caused by chlorinated solvents. Chlorinated solvents interfere with and can be quantified within the same range as gasoline organics by the WDNR laboratory method. Since GRO concentrations at NMW-1 and NMW-3 are less than the sum of the chlorinated solvents detected at the same location, it is likely that the total GRO concentrations can be explained by the presence of the solvents. In other words, it is likely that no gasoline or petroleum fuel-related contamination has occurred in groundwater at NITC, since GRO was the only elevated indicator.

Maps presented in the G.A.S. report indicate that the distribution of GRO and the chlorinated solvents TCE and TCA are similar. Similar to the NITC data, a comparison of GRO and solvent concentrations from WCL samples suggests that most, if not all, of the GRO values can be explained by the presence of the chlorinated solvents. Therefore, it is likely that the nature of the petroleum-related plume is not predominantly in the gasoline range as implied by the G.A.S. report. Data gathered at new wells NMW-5 and NMW-6 (see Table 4) for other petroleum indicators show that the less volatile compounds detected by the DRO and TRPH methods are the primary constituents that contribute to the plume. Even though the leaky tanks being investigated contained diesel and waste oil, few DRO and TRPH analyses have been performed at WCL monitoring wells. Therefore, it may be difficult to delineate the area where groundwater is impacted by the compounds detectable by these methods. Since relative volatility of contaminants can play a major role in determining effective

removal technology, it will be important to fully characterize expected influent water quality before designing an appropriate treatment system at the WCL site.

4.4.3 Quality Control Sample Results

During each of the two RMT groundwater monitoring events, the following quality control samples were generated and analyzed for the noted parameters:

Sample Type	Frequency	Parameters Analyzed
Trip Blank	One per day; two total per round	VOCs
Field Blank	One per round	Round 1: GRO, DRO, TRPH, VOCs Round 2: GRO, VOCs
Duplicate	One per round	GRO, DRO, TRPH, VOCs

The only compound detected in the trip and field blanks was methylene chloride. The presence of methylene chloride was consistent in blanks as well as in every groundwater sample. Because of this consistency and the fact that methylene chloride is a common laboratory contaminant, it is not considered to be in the environment at this site.

The two duplicate samples analyzed by RMT, Dup1 (NMW-2) and Dup2 (MW-17), correspond closely. However, the samples split with G.A.S. were analyzed at different laboratories, and do not always correspond closely (see Table 4). The overall interpretation of the data is not significantly affected by the discrepancies between the two data sets.

4.5 Potential Source(s) and Contaminant Migration

For reasons listed below, the majority of currently available data suggests that the most likely source of chlorinated solvent contamination at the WCL site is residuals from the former waste oil tank on the WCL site itself. The following site information supports this interpretation:

- Groundwater concentrations of TCE and TCA are greatest at NMW-6 and MW-17 which are close to the former waste oil tank. To the extent defined by the current monitoring well network, TCE and TCA concentrations decrease downgradient and upgradient from the former waste oil tank area. Currently, water quality upgradient from this suspected source area is represented by MW-22, MW-21, MW-2, and possibly NMW-2.

- The only remaining upgradient pathway that could possibly carry contaminants from NITC to the former waste oil tank area, which has not been monitored, is a narrow strip between NMW-2 and MW-22 which is less than about 70 feet wide. If a source existed in this area, it apparently would have to be beneath the NITC core room. The March 1993 borings, NAV5 and NAV6, were drilled directly in this area and did not encounter source level concentrations in soil.

- Source level concentrations of chlorinated solvents were not detected in soil or water at NITC.

- Direct evidence of the presence of chlorinated solvents in the contaminated soils formerly in proximity to the leaking waste oil tank is not available. The appropriate analyses that would have quantified these compounds were not conducted on the soils, which have subsequently been excavated to bedrock and disposed at Parkview Landfill. The only testing performed relevant to chlorinated solvents for the disposed soils appears to be a "percent chlorine" analysis which was run on a sample from a "staged soil pile of drill cuttings." Although the percent chlorine analysis by no means a compound-specific method, the test results (included in Appendix I) do indicate that 0.02 percent chlorine was present in the sample. This percent value converts to an equivalent concentration by weight of 200 mg/kg. Chlorinated solvents present in soil would contribute to the percent chlorine quantification. Therefore, it is possible that soil containing solvents at higher concentrations than detected anywhere on the NITC site were removed from around the former WCL waste oil tank.

- Compositional testing of the product in the waste oil tank (see Appendix B) at the time of its removal was predominantly waste kerosene. While this information does not relate directly to the source of chlorinated solvents in groundwater, it does suggest that a pattern of non-waste oil disposal at the former tank had been established at WCL.

- The G.A.S. report (Figure 16, July 1992) shows the approximate outline of a TCE plume in the northeastern corner of the WCL property which extends in a narrow pattern further to the northeast. This plume consists of relatively low concentrations. It is located about 150 feet north of the NITC property line and is separated from it by several monitoring wells where no solvents were detected. The existence of this plume offers independent evidence that WCL has a history of TCE use and uncontrolled release of chlorinated solvents. Current environmentally responsible handling of degreasing agents reportedly began with the current ownership of WCL, that is, from 1986. Handling methods of degreasing agents during the first 18 years of the life of the waste oil tank have not been documented. Had chlorinated solvents been stored in the waste oil tank after the split seam or other holes developed, they would have also been released along with the petroleum products.

- If the former WCL waste oil tank is the source of chlorinated solvent contamination, the distribution of contaminants in groundwater could only be explained by a mechanism that would cause migration in directions other than

directly downgradient as defined by the water table map. Examination of existing site information suggests that two mechanisms could be at work to produce the pattern of contamination observed. Singly or in combination, these mechanisms could account for high solvent concentrations at MW-17, MW-21, MW-22, NMW-2, NMW-5, and perhaps others which are close to the former tank excavation but not in the apparent downgradient direction from it. The mechanisms are described below.

1. The first mechanism involves horizontal spreading of product released from the leaky tank through unsaturated soils. This horizontal spreading could be caused and accentuated by layers of relatively low-permeability soil as product moves downward by gravity toward the water table. The adjacent basin for the 12,000-gallon diesel tank, which is oriented north-south, could have allowed easy migration through the relatively more permeable backfill on top of less permeable native soil. Results from the soil investigation performed by G.A.S. prior to excavation provide evidence that horizontal spreading of waste oil occurred. As summarized in Subsection 1.1.2, high concentrations of TPH as waste oil were detected at locations, such as SB-19, that are as much as 40 feet to the southwest of the former tank. Boring SB-19 is only 35 feet from MW-17. In seasons when the water table is low, the top of bedrock is likely unsaturated. Fractures in the weathered portion of the bedrock on the top surface of the bedrock itself, could lead in numerous directions other than strictly downgradient.

   As shown on the map on Figure 4, a small knob on the bedrock surface occurs near the former waste oil tank. Product seeping downward could spread radially along the surface of the bedrock knob.

   The first mechanism is no longer active since the tank and most of the contaminated soil down to bedrock has been removed. However, prior to tank closure, the spreading mechanism probably allowed contaminants to move horizontally and finally downward into soil-filled cracks in the fractured bedrock, which could not be completely removed by excavation. If wastes containing TCE and TCA were mixed in the waste oil tank, they would be expected to move with the bulk waste in the unsaturated zone.

2. The second mechanism involves temporary mounding of the water table and subsequent small-scale radial saturated flow. When product seeped downward and finally intersected the water table, it would likely dissolve and be carried, over the long-term, in the average downgradient direction. Indeed, groundwater data define an extensive plume of chlorinated solvents downgradient of the former waste oil tank. However, the distribution of groundwater concentrations around the former tank and their substantial change over time suggests that

the excavation and backfilling may be helping to spread contaminants at an increased rate.

Backfilling of the excavated soil area (see Figure 2 for extent) was reportedly done with clean soil and sand and gravel. The topography in this part of the site is relatively flat and drains poorly. Infiltration has likely been enhanced greatly compared to pre-excavation conditions that included a shallow clay layer over much of the area. Increased infiltration could cause temporary mounding of the water table beneath the excavation. Resulting radial flow could carry dissolved contaminants in many directions away from the mound. No monitoring wells exist in the center of the excavated area where mounding would be expected to be greatest. Some evidence of mounding may exist at MW-17 based on the October 1992 groundwater elevations. As shown on Figure 3, the water elevation at MW-17 is higher than the other monitoring wells on the cross section. Therefore, groundwater flow away from the higher area of the water table near MW-17 in several directions is possible. Mounding is probably a temporary condition, depending on rainfall frequency. Currently, the frequency of groundwater elevation monitoring and the spacing of monitoring wells in the excavated area does not allow for a thorough evaluation of mounding.

Review of groundwater quality data leading back to March 1992 for MW-17 shows that chlorinated solvent concentrations at that well increased by more than an order of magnitude by the fall of 1992. Although the data are not available on a regular basis, the sharp increase observed at MW-17 occurred after the tank was removed and the excavation backfilled (October, 1991), and as rainfall increased during the fall of 1992 (see Appendix J).

An increased amount of recharge water flushing through a zone of residual solvent contamination in the weathered top of bedrock could produce a slug of elevated concentrations in groundwater, as suggested by the site data. If a pulse of recharge water was introduced to the aquifer in an area free of residual solvent contamination, a dilution effect would likely occur. A decrease in solvent concentration in groundwater near the waste oil tank does not appear to correlate with rainfall events at this site. Therefore, it is more likely that increasing concentrations in the contaminant plume near the former waste oil tank are due to continuing flushing of remaining contaminants rather than to some unidentified source somewhere beneath the NITC facility.

If the chlorinated solvent source were located beneath an NITC building, it is unlikely that rainfall could have a strong effect on flushing contaminants under an impermeable barrier, such as a building. The results from borings NAV5 and NAV6 also indicate that the soil beneath the core room is not a likely source area.

The two mechanisms described above may explain how chlorinated solvents could move from the former tank location; however, they cannot be expected to explain the occurrence of low to moderate concentrations of solvents at distant locations at NITC, such as at NMW-4 and NMW-3, without further investigation. It is possible that a separate and smaller or more distant source may be affecting these locations.

Section 5

REFERENCES

Bouwer and Rice. 1976.

Gonthier, Joseph, B. 1975. Groundwater resources of Waukesha County, Wisconsin. Information circular number 29. U.S. Geological Survey and Wisconsin Geological and Natural History Survey. 1975.

Graef, Anhalt and Schloemer. July 1992. Initial site assessment, extent of contamination and remediation progress report at Wisconsin Coach Lines, Inc. Waukesha, Wisconsin.

RMT, Inc. 1992. Workplan for a groundwater investigation at the Navistar International Casting facility, Waukesha, Wisconsin. August 1992.

APPENDIX A

AGENCY CORRESPONDENCE

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny
Secretary

Southeast District
2300 N. Dr. Martin Luther King Jr. Dr
Post Office Box 12436
Milwaukee, Wisconsin 53212
Telephone: 414-263-8500
Telefax: 414-263-8483

June 8, 1992

In Response Refer To EPA ID #:WID006118004
County of Waukesha
HW/RP

Doug Linn, Facilities Engineer
Navistar International Corp.
1401 Perkins Ave.
Waukesha, WI 53186

Dear Mr. Linn:

Re: Groundwater contamination at 901 Niagara Street, Waukesha, WI 53186

Under Wisconsin law, the Department of Natural Resources is responsible for enforcing statutes and administrative rules relating to the reporting and remediation of hazardous substance spills or discharges under s. 144.76, Wis. Stats., and to the disposal of hazardous waste under ss. 144.60 to 144.70, Wis. Stats. The purpose of this letter is to make sure persons who may be responsible for such hazardous substance spills or for hazardous waste disposal know their responsibilities under the law and act accordingly.

Under s. 144.76(2) and (3), Wis. Stats., a person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance must notify the Department immediately and must take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or waters of this state.

Under s. 144.64(2m), Wis. Stats., any person who disposes of hazardous wastes at an unapproved location or otherwise operates a hazardous waste disposal facility without a license from the Department must prepare and submit a hazardous waste facility closure plan to the Department for its review and approval. Unless there is to be a "clean closure", the person must also prepare and submit a long-term care plan for the disposal facility if wastes or constituents are to be left in place. The closure plan and long-term care plan must conform to Department rules, and the plans, as approved by the Department, must be implemented.

The Department has reason to believe that a hazardous discharge to the soil and/or groundwater has occurred. The reasons for believing that you are a potential responsible party include:

1. Trichloroethylene (TCE) and 1,1,1 trichloroethane (TCA) is found in groundwater at Wisconsin Coach Lines, Inc., which is located next door to Navistar International Corporation. The most contaminated groundwater monitoring well, MW-17, is located adjacent to the north property line of Navistar and contains TCE at 590 parts per billion (ppb) and TCA at 520 ppb.

The groundwater quality enforcement standard found in ch. NR 140, Wis. Adm. Code for TCE is 5 ppb and for TCA is 200 ppb. The groundwater quality standards found in ch. NR 140, Wis. Adm. Code requires that when a preventative action limit or enforcement standard is exceeded, remedial action is required to renovate or restore the groundwater quality.

2. Groundwater flows in a northwest direction towards the Fox River. In other words, groundwater flows from the Navistar International property towards the Wisconsin Coach Lines property. The most contaminated groundwater monitoring wells are located adjacent to the Navistar International property; as groundwater flows downgradient, the concentration of TCE and TCA decrease, indicating that the most likely source for TCE and TCA is upgradient from Wisconsin Coach Lines property.

3. Navistar International generates non-listed ignitable wastes (D001), non-listed corrosive wastes (D002), arsenic wastes (D004), chromium wastes (D007), lead wastes (D008), benzene wastes (D018), and tetrachloromethane or carbon tetrachloride wastes (U211). In addition, based on your Tier Two form, Navistar International handles TCA.

Based on the foregoing, the Department is requesting that you conduct the following activities without delay:

1. Show proof that you have retained a qualified environmental consultant, acceptable to the Department, to conduct the necessary environmental investigation and any necessary remediation or facility closure activities.

2. Submit a scope of work to determine and document the degree and extent of soil and/or groundwater contamination.

3. Once the scope of work for determining the degree and extent of contamination is reviewed and approved by the Department,

    a. recommend alternative remedial or closure measures;

    b. discuss their feasibility;

    c. propose a schedule for completion; and,

    d. propose a schedule for regular progress reports regarding completion of the above tasks.

4. Upon receipt of written Department approval, implement the remedial or closure activities.

The Department wishes to remind you that time is of the essence in responding to environmental contamination incidents. Generally, the more quickly a release is discovered and responded to, the smaller the damaging impacts and the lower the costs of investigation and clean-up. Furthermore, since each day of violation is a separate offense, prompt action can minimize potential penalties.

Attached to this letter is guidance developed by the Department to aid you in investigating and cleaning up releases of hazardous substances or hazardous wastes, as well as a list of environmental consultants.

Thank you for your cooperation. If you have any questions regarding this letter, please call me at (414)263-8604.

Sincerely,

Scott J. Ferguson - Hydrogeologist
Hazardous Waste Management
Southeast District Headquarters

Attachments

xc: Gina Keenan - SED
John Van Lieshout - Reinhart, Boerner
Bureau - HWS - SW/3
SED HW File

SF:NAVISTAR.PRP

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

Carroll D. Beasdny
Secretary

Southeast District
2300 N. Dr. Martin Luther King Jr. Dr
Post Office Box 12436
Milwaukee, Wisconsin 53212
Telephone: 414-263-8500
Telefax: 414-263-8483

September 29, 1992

In Response Refer To EPA ID #:WID006118004
County of Waukesha
HW/

Mr. Woody Deischel
Environmental Engineer
Navistar International Transporation Corp.
1401 Perkins Avenue
Waukesha, WI 53187

SUBJECT: Conditional Approval For A Groundwater Investigation
Navistar International Transportation Corp.
Waukesha Manufacturing Facility
1401 Perkins Avenue
Waukesha, Waukesha County, Wisconsin 53187
FID #:268005430
U.S. EPA ID #:WID006118004

Dear Mr. Deischel:

The Wisconsin Department of Natural Resources, Southeast District, acknowledges receipt of your report entitled "*Workplan For A Groundwater Investigation At The Navistar International Casting Facility; Waukesha, Wisconsin*", dated August 28, 1992 and received by the Department on September 2, 1992. The report was submitted on your behalf by RMT, Inc. of Waukesha, Wisconsin. The Department conditionally approves the above referenced report as proposed, pending inclusion of the following:

1. The relocation of proposed groundwater monitoring well NMW-1 to an area approximately 25-to-50 feet west of the isocure storage shed.

2. A revision of the Quality Assurance/Quality Control ("QA/QC") procedures which allows for the preparation and analysis of a minimum of one soil field duplicate per 10 samples and a minimum of one trip blank per day when soil samples for VOC analysis are collected. In addition, a temperature blank shall be included in each sample shipper used to collect VOC samples. If samples are shipped on ice, this blank may be omitted, <u>if</u> enough ice is present to keep the samples at 4° C until their receipt at the laboratory and the temperature is verified by the laboratory.

   Navistar International Transporation Corp. ("Navistar") shall collect and analyze one equipment blank and one duplicate per groundwater sampling event. The equipment blank shall be collected while sampling a downgradient well. In addition, a trip blank shall be included in each sample shipper used to collect VOC samples.

All samples shall be processed through the sampling equipment in a manner identical to actual samples. Results of the analysis of duplicates and blanks shall be included in the investigative report(s), and shall be taken into account in the data assessment portion of the report(s).

Bottom emptying devices shall be used when collecting water samples for VOC analysis.

3. At least two rounds of water quality sampling shall be performed on all wells a minimum of one month between sampling round.

4. All soils and fluids, including drill cuttings, decontamination water, surge and wash, contaminated clothing and supplies, sludges, etc., from all borehole and groundwater monitoring well construction and development, sampling activities and remedial actions, etc., shall be collected, containerized and properly managed as either a solid waste or hazardous waste. Navistar is responsible for making a hazardous waste determination on the above materials according to ss. NR 605.04 and 615.06, Wis. Adm. Code and 40 CFR 261.3(a)(2). If the wastes are determined to be hazardous, Navistar shall manage the wastes in accordance with ch. NR 615, Wis. Adm. Code.

   Navistar proposes to stockpile soil cuttings on-site; Navistar must demonstrate that this proposal meets all applicable requirements of ch. NR 502, Wis. Adm. Code.

5. Navistar is hereby advised that if the direction of local groundwater flow in the vicinity of the facility is not known, additional monitoring wells may be required to properly implement a groundwater monitoring program that clearly defines the direction of groundwater flow and at the same time monitors groundwater quality. Also be advised if groundwater samples collected from monitoring wells installed at the Navistar facility indicate that contamination is present, Navistar shall immediately notify the Department, in writing, of any exceedances of groundwater quality standards contained in ch. NR 140, Wis. Adm. Code. If groundwater samples collected from monitoring wells installed at the Navistar facility indicate that contamination is present, the Department reserves the right to make any necessary changes to the program, including, but not limited to, installation of additional groundwater monitoring wells both on and off the Navistar property; installation of nested wells in order to define the vertical extent of contamination; and continued monitoring of groundwater quality at the facility during the period of owner responsibility.

The Department of Natural Resources, Southeast District, determines that Navistar's groundwater investigation work plan is hereby approved, provided that all conditions set forth are complied with. The Department retains jurisdiction to require submittal and additional information or to modify this approval at any time if, in the Department's opinion, further modifications are necessary. Please be reminded that issuance of a conditional approval does not guarantee facility closure and does not relieve Navistar of legal obligations to meet all other state and local permit, zoning, and regulatory requirements.

The Department reserves the right to require additional work if the site investigation proves insufficient to:

1. Define the degree, extent, and character of contamination at the facility.

2. Develop an adequate remedial action plan.

Thank you for your cooperation. Should you have any questions concerning this Conditional Approval, please contact me at (414)263-8604.

Sincerely,

Scott J. Ferguson, Hydrogeologist
Hazardous Waste Management Section
Southeast District Headquarters

xc: Gina Keenan - SED
Chris Kallaher - Quarles & Brady
Dave Seitz - RMT, Inc.
John Van Lieshout - Reinhart, Boerner et al
George Garneau - GAS
Bureau - HWS - SW/3
SED HW File

SF:navistar.app

APPENDIX B

ANALYSIS OF WASTE OIL TANK CONTENTS

Date: 12/03/92 Analysis No.: 053191R

Customer: WISCONSIN COACH
Address: 901 NIAGARA ST.
City Ste: WAUKESHA WI 531860000
Phone: 4144663000
EPA No.:
Contact: TOM H
Salesman: 30
Broker:

Phases/Layers: 1
Color: BROWN
pH: 6.6

	Components	Percent
1)	KEROSENE	76.0
2)	KEROSENE L.S.	24.0
3)	WATER	.1
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		

EPA Waste Code: D001
Percent Recovery: 14
Specific Gravity: 0.810
Water Content: .01
pH: 4.4
Date: 6/07/91
Tested by: TF
DOT Description: WASTE KEROSENE
Other Information: COMBUSTIBLE LIQUID UN1223

Comments:

$200/DRUM. WASTE PETROLEUM. DIFFICULT TO DISTILL.

Date: 12/03/92

Analysis No.: 053191T

Customer: WISCONSIN COACH
Address: 901 NIAGARA ST.
City Ste: WAUKESHA WI 531860000
Phone: 4144663000
EPA No.:
Contact: TOM H
Salesman: 30
Broker:

Phases/Layers: 1
Color: BLACK
pH: 7.5

	Components	Percent
1)	KEROSENE	.1
2)	GASOLINE, UNLEADED	.1
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		

EPA Waste Code: D001
Percent Recovery:90
Specific Gravity: 0.940
Water Content: .01
pH: 7.5
Date: 8/12/91
Tested by: JB
DOT Description: WASTE COMBUSTIBLE LIQUID NOS (GASOLINE, KEROSENE)
Other Information: COMBUSTIBLE LIQUID D001

Comments:

$200/DRUM. OIL SLUDGE. NO OTHER SOLIDS THAN SLUDGE. GASOLINE TRACE.

APPENDIX C

FIELD METHODS

APPENDIX C

FIELD METHODS

Soil Borings

The six soil borings were drilled using hollow-stemmed augers and air rotary methods in bedrock to minimize introducing drilling fluids into the formation and to minimize downhole contamination. Logs of each borehole were prepared at the time of drilling, and field soil classification was verified later during examination of the soil samples in the soils laboratory. Completed soil boring logs were amended as necessary. The finalized boring logs and documentation required under NR 141 are included in Appendix D to the report.

Precautions were taken to minimize potential contamination between samples. The split-spoon soil sampler was cleaned prior to its initial use on-site and between samples. Cleaning procedures involved the following:

- Scrubbing away soil material with a stiff brush in a trisodium phosphate soap solution
- Double-rinsing in clean potable water

Soil samples were collected using a 3-inch-I.D. split-spoon sampler at 2.5-foot intervals, according to ASTM D-1586. The soil samples were examined to classify the subsurface materials. Bedrock was encountered in the borings at a depth of 12 to 16 feet below the ground surface, at which point the HSAs were removed from the boring. Temporary steel 6-inch-I.D. casing was installed in the borings, and the borings were advanced using a 6-inch-O.D. rotary air hammer. Cuttings were sampled at 5-foot intervals and described by the RMT geologist on-site.

To minimize potential contamination between boreholes, drilling equipment was cleaned using a steam-cleaner.

Soil Sampling

Soil samples collected with a split-spoon sampler were split out for laboratory chemical analysis. Samples collected were stored in appropriate bottles and put on ice immediately after collection. The samples were transported to the Precision Analytical Laboratory in Milwaukee with chain-of-custody documentation.

Well Installation and Development

The wells were installed in accordance with NR 141. The annular space seal consisted of bentonite. The sealant material was poured down the inside of the temporary casing. Well development and well construction forms are included in Appendix E. After completion of the well installation, each well was developed following the procedures in NR 141, Wisconsin Administrative Code, which governs monitoring well construction. First, the water level in each well was measured, and the volume of standing water in each was estimated. Surging and purging with a B-K hand pump was performed for at least 30 minutes until 10 well volumes of water were removed, or until the well was pumped dry. Volumes were measured using 5-gallon buckets. Well casing elevations were surveyed to the nearest 0.01 foot by RMT and related to the Wisconsin State Plane Coordinate System.

Groundwater Sampling

Groundwater samples were collected from each well by RMT after well development was completed. The groundwater sampling procedures are summarized as follows:

- The samples were collected using PVC bailers with bottom discharges, washed and rinsed with distilled water, and dedicated for use in only one well.
- Each sample for chemical analysis was placed in appropriate bottles and properly preserved where necessary.
- The samples were immediately placed on ice.
- The samples were delivered to the laboratory under chain-of-custody procedures.
- The samples were analyzed according to USEPA-approved procedures and QA/QC protocols.

QA/QC Sampling

Soil samples collected for laboratory analysis were split with a representative from Graef, Anhalt, and Schloemer, and Associates, Inc. (G.A.S.), who were representing WCL. Three field blanks were collected by placing 20 mL of methanol preservative into precleaned 60-mL glass containers. The field blanks were analyzed for GRO.

Groundwater samples collected for laboratory analysis were split with a representative from G.A.S. during removal. Two duplicate samples were collected (one per round). The duplicate and its corresponding sample were collected using the same bailer and bottom discharge. The duplicates were analyzed for GRO, DRO, TRPH, and VOCs. Four trip blanks (two per round, one per day) were collected and analyzed for VOCs. Two equipment blanks (one per round) were collected by passing distilled water through a precleaned bailer and bottom discharge. The equipment blank from the first round of sampling was analyzed for GRO, DRO, TRPH, and VOCs. The second round was analyzed for GRO and VOCs.

In-Field Hydraulic Conductivity Tests

Hydraulic conductivity of the screened intervals at monitoring wells was estimated by conducting rising-head single-well response tests. Changes in water levels during the tests were measured using a pressure transducer. The slug test data were analyzed using the method of Bouwer and Rice (1976) as implemented by the AQTESOLV computer package (Gerrahty and Miller).

APPENDIX D

GEOLOGIC LOGS FROM OCTOBER 1992 AND MARCH 1993 BORINGS

- **Borings Conducted October 1992**
- **Borings Conducted April 1993 (at WCL)**

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information

Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.02		NMW-1

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling; Crew Chief: Rick O'Gorman	10/6/92	10/7/92	HSA/AR

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			814.5 Feet MSL	831.8 Feet MSL	6.0 Inches

Boring Location
State Plane 378060.00 N, 2476161.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				ASPHALT										
1	15	8	1	SILT (ML), slightly plastic, very dark gray 5YR 3/1, stiff.	ML			1	-	D				SS
			2	SANDY LEAN CLAY (CL), plastic, brown 7.5YR 4/4, stiff.	CL									
2	14	8	3					1	-	M				SS
			4											
			5	WELL GRADED GRAVEL WITH SAND (GW), brown 7.5YR 4/4, dense.	GW									
3	10	48	6					1	-	D				SS AR-6'
			7											
4	N/A		8							D				Grab
			9											
			10											
5	N/A		11							D				Grab
			12											

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **NMW-1** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	RQD/ Comments
6	N/A		13	WELL GRADED SAND (SW), fine to coarse.	SW					D				Grab
			14											
			15											
7	N/A		16							D				Grab
			17	DOLOMITE, white 5YR 8/1, hard.										
8	N/A		18							D				Grab
			19											
			20											
			21											
9	N/A		22							D				Grab
			23											
			24											
			25	End of Boring at 25 Ft.										

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.02		NMW-2

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling; Crew Chief: Rick O'Gorman	10/6/92	10/7/92	HSA/AR

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			817.1 Feet MSL	833.2 Feet MSL	6.0 Inches

Boring Location
State Plane 378146.00 N, 2476342.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				ASPHALT.										
1	16	15	1	WELL GRADED SAND (SW), very dark brown 10YR 2/2, medium dense, foundry sand (Fill).	SW			43	-	D				SS
2	19	9	3					1	-	M				SS
			4	LEAN CLAY WITH SAND (CL), dark yellowish brown 10YR 4/4, stiff.	CL									
3	16	7	6					1	-	W				SS
			7	LEAN CLAY WITH SAND AND GRAVEL (CL), plastic, dark yellowish brown 10YR 4/4, medium stiff.	CL									
4	16	26	8					42	-	M				SS
			9	WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM), white 2.5YR 8/1, dense.	GW-GM									
5	12	40	11					N/A	-	M				SS
			12											

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

Signature	Firm
	RMT 744 Heartland Trail, Madison Wisconsin Tel: 608-831-4444, Fax: 608-831-3334

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

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **NMW-2** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	RQD/ Comments
6	6		13 14 15 16					1		M				AR-13'
7	N/A		17 18 19 20 21 22	LIMESTONE, white 2.5YR 8/1, hard.						M				GRAB
8	N/A		23 24							M				GRAB
				End of Boring at 24.5 Ft.										

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.02		NMW-3

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling; Crew Chief: Rick O'Gorman	10/7/92	10/7/92	HSA/AR

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			822.5 Feet MSL	831.9 Feet MSL	6.0 Inches

Boring Location
State Plane 377825.00 N, 2476593.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				ASPHALT.										
1	19	9	1	SANDY LEAN CLAY WITH GRAVEL (CL), black 10YR 2/1, loose, brick fragments (Fill).	CL			5	-	D				SS
			2											
2	11	10	3					23	-	D				SS
			4	Same as above, but some medium sand pockets.										
			5											
3	14	14	6	Same as above, but more gravel.				1	-	M				SS
			7											
4	14	36	8	WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM), brown 7.5YR 5/4, dense.	GW-GM			1	-	W				SS
			9											
			10											
5	7		11	Same as above, but mostly gravel to cobbles.						W				SS
			12											

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **NMW-3** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
			13	DOLOSTONE, white 2.5YR 8/1, hard.										AR-12'
			14											
			15											
			16											
			17											
			18											
			19	End of Boring at 19 Ft.										

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.02		NMW-4

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling; Crew Chief: Rick O'Gorman	10/5/92	10/5/92	HSA/AR

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			826.5 Feet MSL	837.9 Feet MSL	6.0 Inches

Boring Location
State Plane 377891.00 N, 2477686.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	20	8	0–2	TOPSOIL.				1	-	D				SS
				WELL GRADED GRAVEL (GW), olive yellow 2.5YR 6/6, medium dense, brick fragments (Fill).	GW									
2	14	10	2–4					1	-	D				SS
3	NR	11	4–6						-					SS
				Same as above, but some concrete fragments.										
4	13	23	7–9	WELL GRADED SAND WITH CLAY AND GRAVEL (SC), fine to coarse sand, little gravel, yellowish brown 10YR 5/6, medium dense.	SW			1	-	M				SS
5	24	18	9–11					1	-	W				SS

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **NMW-4** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
6	12	9	13					1	-	W				SS
			14	Same as above, but more gravel.										
7	11	37	15	DOLOSTONE, yellow 10YR 7/6, hard, fractured.				1	-	W				SS
			16											AR-16'
			17											
8	N/A		18											Grab
			19	End of Boring at 19 Ft.										

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information

Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.02		NMW-5

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling; Crew Chief: Rick O'Gorman	10/8/92	10/8/92	HSA/AR

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			817.1 Feet MSL	832.7 Feet MSL	6.0 Inches

Boring Location
State Plane 378397.00 N, 2476486.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	13	27	1	WELL GRADED SAND WITH GRAVEL (SW), very pale brown 10YR 7/3, medium dense.	SW			1	-	D				SS
2	5	22	3	Same as above, but trace silt.				1	-	D				SS
3	5	17	6	WELL GRADED GRAVEL WITH SAND (GW), very pale brown 10YR 7/3, medium dense.	GW			1	-	D				SS
4	9	2	8	SANDY LEAN CLAY WITH GRAVEL (CL), plastic, dark yellowish brown 10YR 4/4, loose.	CL			1	-	M				SS
5	11	6	11					1	-	M				SS

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

State of Wisconsin
Department of Natural Resources

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **NMW-5** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	RQD/ Comments
6	13	12	13					1	-	M				SS
			14	Same as above, but more gravel.										
			15											
7	5	8	16	Same as above, but slight petroleum odor.				13	-	D				SS
			17	DOLOSTONE, white 2.5Y N81, hard.										AR-17'
			18											
			19											
			20											
			21	End of Boring at 21 Ft.										

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information

Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.02		NMW-6

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling; Crew Chief: Rick O'Gorman	10/8/92	10/8/92	HSA/AR

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			817.2 Feet MSL	832.3 Feet MSL	6.0 Inches

Boring Location
State Plane 378325.00 N, 2476464.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
1	14	11	1	WELL GRADED GRAVEL WITH SAND (GW), very pale brown 10YR 7/3, medium dense.	GW			7	-	D				SS
2	11	12	3					1	-	D				SS
3	8	10	6	CLAYEY GRAVEL WITH SAND (GC), plastic, dark yellowish brown 10YR 4/4, stiff.				1	-	M				SS
4	2	13	8		GC			1	-	M				SS
5	10	8	11					1	-	M				SS

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **NMW-6** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
6	15	20	13					1	-	M				SS
			14											
			15	DOLOSTONE, white 2.5Y N81, hard.										AR-15'
			16											
			17											
			18											
			19											
			20											
			21											
			22	End of Boring at 22 Ft.										

BORINGS CONDUCTED APRIL 1993 (AT WCL)

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information

Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.03		WCB-1

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling, Crew Chief: Rick O'Gorman	4/14/93	4/14/93	HSA

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	834.0 Feet MSL	4 1/4 Inches

Boring Location
State Plane 378348.00 N, 2476710.00 E
1/4 of 1/4 of Section T N,R
Lat o , "
Long o , "

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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	RQD/ Comments
				CONCRETE 8".										
02	15	10	1–2	POORLY GRADED SAND (SP), fine, 90% sand, 10% fines, black 2.5YR 2.5N, very dense.	SP			<5	-	D				SS
04	18	11	3–4	SANDY SILT (ML), 60% silt, 30% sand, 10% clay, nonplastic, brown 10YR 5/3, very stiff, little peat-like material.	ML			<5	-	D				SS
06	16	40	5–6	SANDY LEAN CLAY (CL), 60% clay, 40% sand, plastic, brown 10YR 5/3, stiff.	CL			<5	-	D				SS
08	3	30	7–8	WELL GRADED SAND WITH SILT AND GRAVEL (SW/SM), 80% sand, 10% gravel, 10% silt, light brown 7.5YR 6/4, very dense, rounded gravel.	SW/ SM			<5	-	M				SS
10	7	64	9–10					<5	-	W				S
			11	SANDY SILT WITH GRAVEL (ML), 50% si, 30% sa, 20% gr, nonplastic, gray 7.5YR N6, hard.	ML									
				End of Boring at 11 Ft.										

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.03		WCB-2

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling, Crew Chief: Rick O'Gorman	4/14/93	4/14/93	HSA

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	834.0 Feet MSL	4 1/4 Inches

Boring Location
State Plane 378330.00 N, 2476660.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				CONCRETE 8".										
02	23	17	1-2	SANDY SILT (ML), 60% silt, 40% sand, nonplastic, black 2.5YR 2.5N, medium dense, trace root material.	ML			<5	-	D				SS
04	13	13	3-4	SANDY LEAN CLAY WITH GRAVEL (CL), 75% clay, 20% sand, 5% gravel, plastic, brown 10YR 5/3, very stiff.	CL			<5	-	D				SS
06	8	9	5-6	POORLY GRADED SAND WITH SILT (SP/SM), 85% sand, 15% silt, brown 10YR 5/5, loose.	SP/SM			<5	-	M				SS
				End of Boring at 6 Ft.										

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information

Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.03		WCB-2A

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling, Crew Chief: Rick O'Gorman	4/14/93	4/14/93	HSA

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	834.0 Feet MSL	4 1/4 Inches

Boring Location
State Plane 378322.00 N, 2476665.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
			1	CONCRETE 8". Concrete plug in sample 02.										
02	2	13	2					16	-	D				SS
04	21	8	3	SANDY LEAN CLAY WITH GRAVEL (CL), 70% clay, 25% sand, 5% gravel, plastic, brown 10YR 5/3, stiff.	CL			16	-	M				SS
06	20	12	5					<5	-	M				SS
08	20	14	7					<5	-	W				SS
			8	WELL GRADED SAND WITH GRAVEL (SW), 90% sand, 5% gravel, 5% silt, brown 10YR 5/3, medium dense.	SW									
			9	End of Boring at 9 Ft.										

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.03		WCB-3

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling, Crew Chief: Rick O'Gorman	4/14/93	4/14/93	HSA

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	834.0 Feet MSL	4 1/4 Inches

Boring Location
State Plane 378370.00 N, 2476524.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
02	1	14	1-2	CONCRETE 8". Broken sandstone/limestone (FILL).				<5	-	D				SS
04	NC	50	3-4					<5	-					SS
06	17	18	5-6	SANDY SILT WITH GRAVEL (ML), 60% silt, 20% sand, 20% gravel, plastic, brown 10YR 5/3, very stiff.	ML			<5	-	D				SS
08	11	30	7-8					<5	-	D				SS
10	15	36	9-10	WELL GRADED SAND WITH GRAVEL AND CLAY (SW/SC), 70% sand, 20% gravel, 10% clay, brown 10YR 5/3, dense, gravel is tan limestone with solution features.	SW/ SC			<5	-	M				SS
12	15	55	11-12					<5	-	M				SS

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

Signature

Firm RMT
744 Heartland Trail, Madison Wisconsin
Tel: 608-831-4444, Fax: 608-831-3334

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State of Wisconsin
Department of Natural Resources

Soil Boring Log Information Supplement
Form 4400-122A 7-91

Boring Number **WCB-3** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	RQD/ Comments
14	5	50	13	As above but slight petroleum-like odor and less gravel.				<5	-	M				SS
15	4	23	14	SANDY CLAY (CL), 70% clay, 30% sand, brown 10YR 5/3, stiff.	CL			<5	-	W				SS
			15											
			16	End of Boring at 16 Ft.										

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information

Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
NAVISTAR 2585.03		WCB-4

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
WTD Environmental Drilling, Crew Chief: Rick O'Gorman	4/14/93	4/14/93	HSA

DNR Facitity Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	832.0 Feet MSL	4 1/4 Inches

Boring Location
State Plane 378305.00 N, 2476499.00 E
1/4 of 1/4 of Section T N,R
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	Sample Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
02	4	37	1–2	POORLY GRADED SAND WITH SILT AND GRAVEL (SP/SM), 60% sand, 25% gravel, 15% silt, gray 5YR 5/1, dense (FILL).	SP/SM			121	-	M				SS
04	16	12	3–4					16	-	M				SS
06	4	16	4–6	SANDY LEAN CLAY (CL), 80% clay, 20% sand, brown 10YR 5/3, stiff.	CL			<5	-	M				SS
08	14	12	7–8	POORLY GRADED SAND WITH GRAVEL AND CLAY (SP/SC), 60% sand, 35% gravel, 5% clay, brown 10YR 5/3, medium dense.	SP/SC			<5	-	M				SS
10	2	51	9–10					9	-	M				SS
12	8	36	11–12					<5	-	M				SS
			12–13	As above but more clay. Limestone at 13'.										
			13	End of Boring at 13 Ft.										

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

Signature	Firm
	RMT 744 Heartland Trail, Madison Wisconsin Tel: 608-831-4444, Fax: 608-831-3334

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

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 7-89

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: WCB-1

County: Waukesha

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location: 378548 ft ☒ N. ☐ S., 2476710 ft ☒ E. ☐ W.

Civil Town Name: Waukesha

Street Address of Well: 901 Niagara St

City, Village: Waukesha

(2) FACILITY NAME

Original Well Owner (If Known): Wisconsin Coach Lines

Present Well Owner: As above

Street or Route: 901 Niagara St

City, State, Zip Code: Waukesha WI 53186

Facility Well No. and/or Name (If Applicable): ___ WI Unique Well No. _____

Reason For Abandonment: Test boring

Date of Abandonment: 4-14-93

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date): 4-14-93

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 11 Casing Diameter (ins.) N/A
(From groundsurface)

Casing Depth (ft.) N/A

Was Well Annular Space Grouted? ☐ Yes ☒ No ☐ Unknown
If Yes, To What Depth? N/A Feet

(4) Depth to Water (Feet) 7.5

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☒ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☒ No

(5) Required Method of Placing Sealing Material
☒ ~~Gendustar Pipe~~ Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☐ Other (Explain)

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☒ Granular Bentonite

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
Hole plug	Surface	11	1½ bag	

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: Rick O'Gorman

Signature of Person Doing Work: Rick O'Gorman Date Signed: 4-14-93

Street or Route: ___ Telephone Number: (715) 359-7090

City, State, Zip Code: Schamberg WI

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 7-89

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: WCB-2

County: Waukesha

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location: 378330 ft ☒ N. ☐ S., 2476660 ft ☒ E. ☐ W.

Civil Town Name: Waukesha

Street Address of Well: 901 Niagara

City, Village: Waukesha

(2) FACILITY NAME

Original Well Owner (If Known): Wisconsin Coach Lines

Present Well Owner: As above

Street or Route: 901 Niagara St.

City, State, Zip Code: Waukesha WI 53186

Facility Well No. and/or Name (If Applicable): ___ WI Unique Well No.: _____

Reason For Abandonment: Test boring

Date of Abandonment: 4-14-93

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date): 4-14-93

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 6 (From groundsurface) Casing Diameter (ins.) N/A

Casing Depth (ft.) N/A

Was Well Annular Space Grouted? ☐ Yes ☒ No ☐ Unknown
If Yes, To What Depth? N/A Feet

(4) Depth to Water (Feet) N/A

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☒ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☒ No

(5) Required Method of Placing Sealing Material
☒ ~~Conductor Pipe~~-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☐ Other (Explain)

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☒ Granular Bentonite

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
hole plug	Surface	6	1 bag	

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: Gregory J. Kitson

Signature of Person Doing Work: [signature] Date Signed: 4-14-93

Street or Route: 2727 Grandview Telephone Number: (414) 521-1100

City, State, Zip Code: Waukesha WI 53188

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected | District/County

Reviewer/Inspector

Follow-up Necessary

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 7-89

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: WCB-2A

County: Waukesha

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location: 378322 ft ☒ N. ☐ S., 2476665 ft ☒ E. ☐ W.

Civil Town Name: Waukesha

Street Address of Well: 901 Niagara

City, Village: Waukesha

(2) FACILITY NAME

Original Well Owner (If Known): Wisconsin Coach Lines

Present Well Owner: As Above

Street or Route: 901 Niagara St

City, State, Zip Code: Waukesha WI 53186

Facility Well No. and/or Name (If Applicable): ___ WI Unique Well No.: _____

Reason For Abandonment: test boring

Date of Abandonment: 4-14-93

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 4-14-93

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 9 (From groundsurface) Casing Diameter (ins.) N/A

Casing Depth (ft.) N/A

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? N/A Feet

(4) Depth to Water (Feet) 7.5

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☒ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☒ No

(5) Required Method of Placing Sealing Material
☒ ~~Conductor Pipe~~-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☐ Other (Explain)

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☒ Granular Bentonite

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
hole plug	Surface	9	1½ bag	

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work: WTD

Signature of Person Doing Work	Date Signed
[signature]	4-14-93
Street or Route: 2727 Grandview	Telephone Number: (414) 521-1100
City, State, Zip Code: Waukesha WI 53188	

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 7-89

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: WCB-3

County: Waukesha

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location: 328370 ft ☒ N. ☐ S., 2476524 ft ☒ E. ☐ W.

Civil Town Name: Waukesha

Street Address of Well: 901 Niagara

City, Village: Waukesha

(2) FACILITY NAME

Original Well Owner (If Known): Wisconsin Coach Lines

Present Well Owner: as above

Street or Route: 901 Niagara

City, State, Zip Code: Waukesha WI 53186

Facility Well No. and/or Name (If Applicable) | WI Unique Well No.: _____

Reason For Abandonment: Test boring

Date of Abandonment: 4-14-93

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 4-14-93

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 16 Casing Diameter (ins.) N/A
(From groundsurface)

Casing Depth (ft.) N/A

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? N/A Feet

(4) Depth to Water (Feet) 16

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain _____

Was Casing Cut Off Below Surface?	☐ Yes	☒ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☒ No

(5) Required Method of Placing Sealing Material
☒ ~~Conductor Pipe~~-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☐ Other (Explain)

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☒ Granular Bentonite

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
hole plug	Surface	16	2 bags	

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work: Greg K. Itson

Signature of Person Doing Work: [signature] | Date Signed: 4-14-93

Street or Route: 2727 Grandview | Telephone Number: (414) 521-1100

City, State, Zip Code: Waukesha WI 53188

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected | District/County

Reviewer/Inspector

Follow-up Necessary

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 7-89

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: WCB-4

County: Waukesha

___ 1/4 of ___ 1/4 of Sec. ___ ; T. ___ N; R. ___ ☐ E ☐ W

(If applicable) ___ Gov't Lot ___ Grid Number

Grid Location: 38305 ft. ☒ N. ☐ S., 247649 ft. ☒ E. ☐ W.

Civil Town Name: Waukesha

Street Address of Well: 901 Niagara St

City, Village: Waukesha

(2) FACILITY NAME

Original Well Owner (If Known): Wisconsin Coach Lines

Present Well Owner: As above

Street or Route: 901 Niagara St

City, State, Zip Code: Waukesha WI 53186

Facility Well No. and/or Name (If Applicable): ___ WI Unique Well No.: _____

Reason For Abandonment: Test boring

Date of Abandonment: 4-14-93

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date): 4-14-93

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ___

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 13 Casing Diameter (ins.) N/A
(From groundsurface)

Casing Depth (ft.) N/A

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? N/A Feet

(4) Depth to Water (Feet) 13

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain ___

Was Casing Cut Off Below Surface?	☐ Yes	☒ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☒ No

(5) Required Method of Placing Sealing Material
☒ ~~Conductor Pipe~~-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☐ Other (Explain)

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Pellets
☒ Granular Bentonite

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
hole plug	Surface	13	2 bags	

(8) Comments: ___

(9) Name of Person or Firm Doing Sealing Work

Signature of Person Doing Work | Date Signed

Street or Route | Telephone Number ( )

City, State, Zip Code

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected | District/County

Reviewer/Inspector

Follow-up Necessary

APPENDIX E

MONITORING WELL CONSTRUCTION AND DEVELOPMENT FORMS

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: Navistar	Local Grid Location of Well: _____ ft. ☐N ☐S _____ ft. ☐E ☐W	Well Name: NMW-1
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ___ ___ ___ Long. ___ ___ ___ or	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: 04/07/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: _____ ft.	Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E ☐W	Well Installed By: (Person's Name and Firm) Rick OGorman, Wisconsin Test Well
Is 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 832.8 ft. MSL
B. Well casing, top elevation 831.47 ft. MSL
C. Land surface elevation 831.8 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 0.5 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

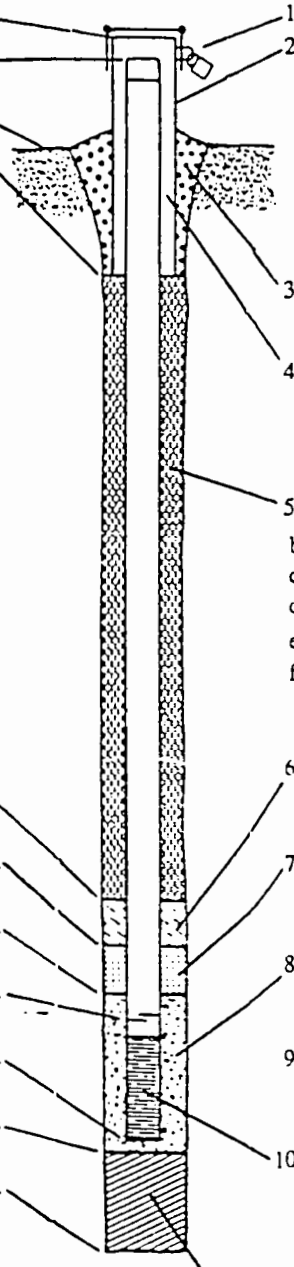
14. Drilling method used: Rotary ☒ 50; Hollow Stem Auger ☒ 41; Other ☐ __ _____

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

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 6.5 ft.
F. Fine sand, top _____ ft. MSL or 8.5 ft.
G. Filter pack, top _____ ft. MSL or 10.5 ft.
H. Screen joint, top _____ ft. MSL or 12.5 ft.
I. Well bottom _____ ft. MSL or 22.5 ft.
J. Filter pack, bottom _____ ft. MSL or 22.5 ft.
K. Borehole, bottom _____ ft. MSL or 25.0 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☐ 04; Other ☒ __ Al. cast
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. _____ 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. Bentonite 3/8 Other ☒ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining Co 20/40
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #3
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __ _____
10. Screen material: PVC sch. 40
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __ _____
b. Manufacturer Northern Aire
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☐ 14; Other ☒ __ Cave in

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

Signature _____ Firm GMT Inc.

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

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
Navistar	Waukesha	NMW - 1

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	__	_____	___

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

2. Well development method

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

3. Time spent developing well 95 min.

4. Depth of well (from top of well casisng) 21.0 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 3.3 gal.

7. Volume of water removed from well 330 gal.

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

9. Source of water added N/A

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. 17.15 ft.	17.52 ft.
Date	b. 10/09/92 (m m d d y y)	10/09/92 (m m d d y y)
Time	c. 7:55 ☒ a.m. ☐ p.m.	9:30 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	very turbid	slightly turbid last 5 gal.
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

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

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: Rick O'Gorman

Firm: WTD

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

Signature: [signature]

Print Initials: RJM

Firm: RMT

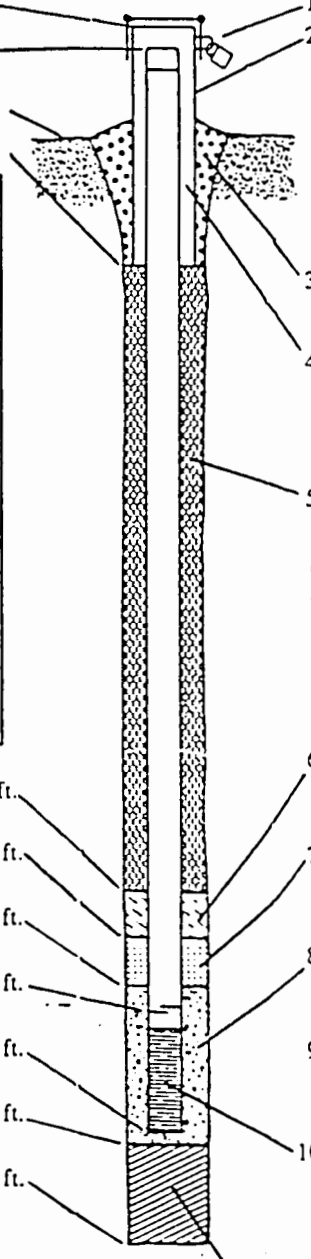
NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Navistar	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: NMW-2
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ___ ___ ___ Long. ___ ___ ___ or	Wis. Unique Well Number / DNR Well Number: _____ / ___
Type of Well: Water Table Observation Well ☐ 11; Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: 10/07/92 (mm/dd/yy)
Distance Well Is From Waste/Source Boundary: _____ ft.	Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E. ☐W.	Well Installed By: (Person's Name and Firm): Rick O'Gorman / Wisconsin Test Dr. II
Is Well A Point of Enforcement Std. Applicaiton? ☐ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☒ Sidegradient; d ☐ Downgradient n ☐ Not Known	



A. Protective pipe, top elevation 833.2 ft. MSL
B. Well casing, top elevation 832.93 ft. MSL
C. Land surface elevation 833.2 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 0.5 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 N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 8.0 ft.
F. Fine sand, top _____ ft. MSL or 10.0 ft.
G. Filter pack, top _____ ft. MSL or 12.0 ft.
H. Screen joint, top _____ ft. MSL or 14.0 ft.
I. Well bottom _____ ft. MSL or 24.0 ft.
J. Filter pack, bottom _____ ft. MSL or 24.5 ft.
K. Borehole, bottom _____ ft. MSL or 24.5 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☐ 04; Other ☒ __ Al cast
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. _____ 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. Bentonite chip 3/8 Other ☒ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining Co 20/40 __
b. Volume added 3 ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #30 __
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __
10. Screen material: PVC sch 40 __
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __
b. Manufacturer Northern Aire
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ __

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

Signature: _____ Firm: RMT Inc

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

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

Facility/Project Name	County Name	Well Name
Navistar	Waukesha	NMW-2

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	__	_____	___

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

2. Well development method

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

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 22.4 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 5.8 gal.

7. Volume of water removed from well 10.0 gal.

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

9. Source of water added N/A

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. 15.87 ft.	21.55 ft.
Date	b. 10,09,92 (m m d d y y)	10,09,92 (m m d d y y)
Time	c. 11:35 ☒ a.m. ☐ p.m.	11:50 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) very turbid	Clear ☐ 20 Turbid ☒ 25 (Describe) very 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:

slowly pumped well and allowed it to recover; repeated 3 times

Well developed by: Person's Name and Firm

Name: Rick O'Gorman

Firm: WTD

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

Signature: [signature]

Print Initials: AIM

Firm: RMT, Inc.

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

FIGURE 6

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: Navistar	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: NMW-3
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ___ ___ ___ Long. ___ ___ ___ or	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: 10/07/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: _____ ft.	Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E. ☐W.	Well Installed By: (Person's Name and Firm) Rick O'Gorman; Wisconsin Test Drill
Is 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 831.54 ft. MSL
B. Well casing, top elevation 831.62 ft. MSL
C. Land surface elevation 831.9 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 0.5 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

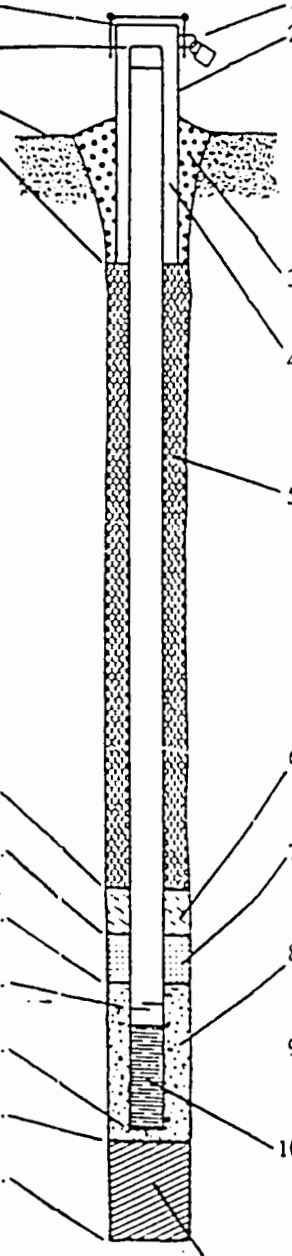
14. Drilling method used: Rotary ☒ 50; Hollow Stem Auger ☒ 41; Other ☐ __

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

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 3.0 ft.
F. Fine sand, top _____ ft. MSL or 5.0 ft.
G. Filter pack, top _____ ft. MSL or 6.0 ft.
H. Screen joint, top _____ ft. MSL or 8.0 ft.
I. Well bottom _____ ft. MSL or 18.0 ft.
J. Filter pack, bottom _____ ft. MSL or 18.5 ft.
K. Borehole, bottom _____ ft. MSL or 19.0 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☐ 04; Other ☒ __ (Al cast)
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. _____ 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. Bentonite chip 3/8 Other ☒ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining Co 20/40 __
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #30 __
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __
10. Screen material: PVC sch. 40 __
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __
b. Manufacturer Northern Aire
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☐ 14
Cave in Other ☒ __

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

Signature: (Mike Boyd) Firm: RMT

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

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

Facility/Project Name	County Name	Well Name
Navistar	Waukesha	NMW-3
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well Number**
_____	__	_____ / ___

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

2. Well development method

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

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 16.1 ft.

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 6.2 gal.

7. Volume of water removed from well 62.0 gal.

8. Volume of water added (if any) 2.0 gal.

9. Source of water added N/A

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. 9.09 ft.	10.49 ft.
Date	b. 10,09,92 (m m d d y y)	10,09,92 (m m d d y y)
Time	c. 11:50 ☒ a.m. ☐ p.m.	12:20 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe) very turbid	Clear ☐ 20 Turbid ☐ 25 (Describe) moderately turbid

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

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

16. Additional comments on development:

Well developed by: Person's Name and Firm	I hereby certify that the above information is true and correct to the of my knowledge.
Name: Rick O'Connor	Signature:
Firm: WTD	Print Initials: RJM
	Firm: RMT

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

FIGURE 6

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: Navistar	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: NMW-4
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ ____ ____ Long. ____ ____ ____ or	Wis. Unique Well Number / DNR Well Number: [redacted]
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: 10/05/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: _____ ft.	Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐ E. ☐ W.	Well Installed By: (Person's Name and Firm): Rick Gorman; Wisconsin Test Drilling
Is 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 840.13 ft. MSL
B. Well casing, top elevation 840.01 ft. MSL
C. Land surface elevation 837.9 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 0.5 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

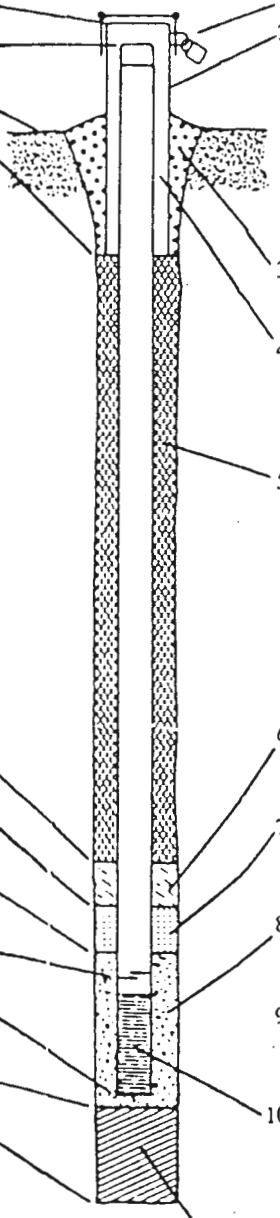
14. Drilling method used: Rotary ☒ 50; Hollow Stem Auger ☒ 41; Other ☐ __
Rotary 16' to 19'

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):
N/A

E. Bentonite seal, top _____ ft. MSL or 4.5 ft.
F. Fine sand, top _____ ft. MSL or 6.5 ft.
G. Filter pack, top _____ ft. MSL or 7.5 ft.
H. Screen joint, top _____ ft. MSL or 8.5 ft.
I. Well bottom _____ ft. MSL or 18.5 ft.
J. Filter pack, bottom _____ ft. MSL or 19.0 ft.
K. Borehole, bottom _____ ft. MSL or 19.0 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 7.0 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. _____ 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. Benseal 3/8 chip Other ☒ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining Co 20/40
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #30
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __
10. Screen material: PVC sch 40
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __
b. Manufacturer Northern Aire
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ __

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

Signature _____ Firm RMT Inc.

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

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

Facility/Project Name	County Name	Well Name
Navistar	Waukesha	NMW-4

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	__	_____	___

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

2. Well development method

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

3. Time spent developing well __67 min.

4. Depth of well (from top of well casisng) __19.1 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing __5.1 gal.

7. Volume of water removed from well __3.0 gal.

8. Volume of water added (if any) __0.0 gal.

9. Source of water added N/A

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. 13.45 ft.	14.90 ft.
Date	b. 10/09/92 (m m d d y y)	10/09/92 (m m d d y y)
Time	c. 12:30 ☐ a.m. ☒ p.m.	1:37 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe) very turbid	Clear ☐ 20 Turbid ☐ 25 (Describe) moderately turbid

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

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

16. Additional comments on development:

slowly pumped well dry and allowed it to recover. repeated 3 times

Well developed by: Person's Name and Firm

Name: Rick O'Connor

Firm: WTD

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

Signature: _____

Print Initials: RJM

Firm: RMT

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

FIGURE 6

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: Navistar	Local Grid Location of Well: ____ ft. ☐N ☐S ____ ft. ☐E ☐W	Well Name: NMW-5
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ Long. ____ or St. Plane ____ ft. N, ____ ft. E.	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location of Waste/Source: ___1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E ☐W	Date Well Installed: 10/08/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: _____ ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☒ Downgradient n ☐ Not Known	Well Installed By: (Person's Name and Firm) Rick O'Gorman / Wisconsin Test Drill
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		

A. Protective pipe, top elevation 833.10 ft. MSL
B. Well casing, top elevation 832.39 ft. MSL
C. Land surface elevation 832.7 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 0.5 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

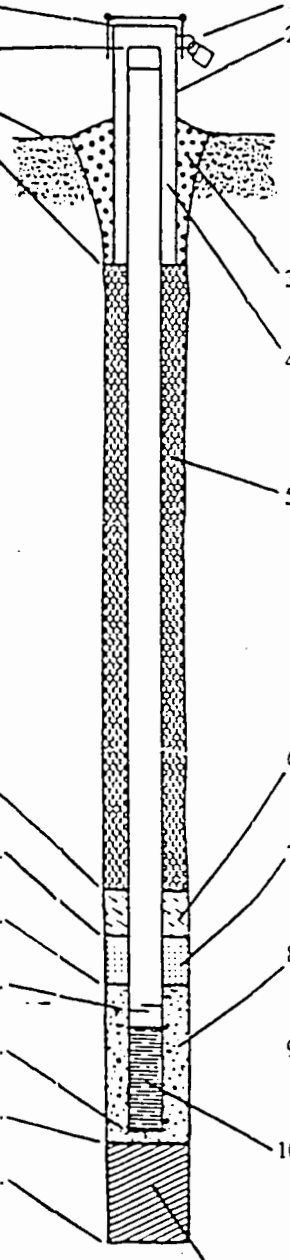
14. Drilling method used: Rotary ☒ 50; Hollow Stem Auger ☒ 41; Other ☐ __ _____

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

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 5.0 ft.
F. Fine sand, top _____ ft. MSL or 7.0 ft.
G. Filter pack, top _____ ft. MSL or 9.0 ft.
H. Screen joint, top _____ ft. MSL or 11.0 ft.
I. Well bottom _____ ft. MSL or 21.0 ft.
J. Filter pack, bottom _____ ft. MSL or 21.5 ft.
K. Borehole, bottom _____ ft. MSL or 21.5 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Al cast — 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. _____ 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. Bentonite Chips ☒ Other ☒ __
7. Fine sand material: Manufacturer, product name & mesh size: a. Badger Mining Co 20/40 — b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size: a. Red Flint #3 — b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __ _____
10. Screen material: PVC sch 40
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __ _____
b. Manufacturer Northern Hire
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ __ _____

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

Signature _____ Firm RMT

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
Navistar	Waukesha	NMW-5

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	__	_____	___

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

2. Well development method

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

3. Time spent developing well __37 min.

4. Depth of well (from top of well casisng) __19.6 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing __3.5 gal.

7. Volume of water removed from well __19.0 gal.

8. Volume of water added (if any) __0.0 gal.

9. Source of water added N/A

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. 15.56 ft.	15.68 ft.
Date	b. 10/09/92 (m m d d y y)	10/09/92 (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	0.0 inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) very turbid	Clear ☐ 20 Turbid ☒ 25 (Describe) very 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:
pumped slowly and allowed the well to recover; repeated 3 times

Well developed by: Person's Name and Firm

Name: Rat O'Connor

Firm: WTD

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

Signature: _____

Print Initials: AJM

Firm: RMT

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 ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 4-90

Facility/Project Name: Navistar	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: NMW-6
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ ____ ____ Long. ____ ____ ____ or	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: 10/08/92 (m m d d y y)
Distance Well Is From Waste/Source Boundary: _____ ft.	Section Location of Waste/Source: ___1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E. ☐W.	Well Installed By: (Person's Name and Firm) Rick O'Gorman; Wisconsin Test Drill
Is 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 833.36 ft. MSL
B. Well casing, top elevation 831.96 ft. MSL
C. Land surface elevation 832.3 ft. MSL
D. Surface seal, bottom _____ ft. MSL or 0.5 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

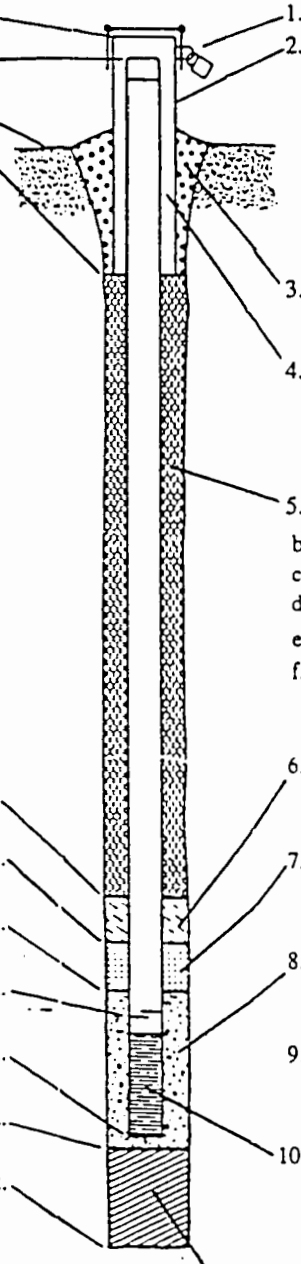
14. Drilling method used: Rotary ☒ 50; Hollow Stem Auger ☒ 41; Other ☐ __ _____

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

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 5.0 ft.
F. Fine sand, top _____ ft. MSL or 7.0 ft.
G. Filter pack, top _____ ft. MSL or 9.0 ft.
H. Screen joint, top _____ ft. MSL or 11.0 ft.
I. Well bottom _____ ft. MSL or 21.0 ft.
J. Filter pack, bottom _____ ft. MSL or 22.0 ft.
K. Borehole, bottom _____ ft. MSL or 22.0 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Al cast; 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. _____ 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. Bentonite chips 3/8 Other ☒ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining Co 20/40 __
b. Volume added J ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #3 __
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ __ _____
10. Screen material: PVC sch 40 __
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ __ _____
b. Manufacturer Northern Aire
c. Slot size: 0.01 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ __ _____

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

Signature _____ Firm AMT

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

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

Facility/Project Name	County Name	Well Name
Navistar	Waukesha	NMW-6

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_____	__	_____	___

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

2. Well development method

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

3. Time spent developing well __35 min.

4. Depth of well (from top of well casisng) _19.7 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing __4.2 gal.

7. Volume of water removed from well _42.0 gal.

8. Volume of water added (if any) __0.0 gal.

9. Source of water added N/A

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. 15.05 ft.	14.75 ft.
Date	b. 10/09/92 (m m d d y y)	10/09/92 (m m d d y y)
Time	c. 10:45 ☑ a.m. ☐ p.m.	11:20 ☑ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☑ 15 (Describe) very turbid	Clear ☐ 20 Turbid ☑ 25 (Describe) moderately turbid last 10 = 1

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:

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: R & K Company	Signature: [signature]
Firm: WTD	Print Initials: AFM
	Firm: RMT

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

FIGURE 6

APPENDIX F

HYDRAULIC CONDUCTIVITY AND GROUNDWATER VELOCITY CALCULATIONS

COMPUTATION SHEET

RMT INC

744 Heartland Trail P.O. Box 8923 Madison WI 53708-8923 608 831-4444 FAX (608) 831-3334

SHEET 1 OF 1

PROJECT / PROPOSAL NAME	PREPARED By: SCO Date: 2/25/93	CHECKED By: JM Date: 2/25/93	PROJECT/PROPOSAL NO.
Navistar			2585.03

Estimated Range of Ground water Velocity

$$V = K I / n_e$$

$$V = \frac{(3.0 \times 10^{-4} \text{ FT/min})(0.03)}{0.05}$$

$$V = 2.0 \times 10^{-4} \text{ ft/min} \times \left(\frac{60 \text{ min}}{1 \text{ hr}}\right) \times \left(\frac{24 \text{ hr}}{1 \text{ day}}\right) \left(\frac{365 \text{ day}}{1 \text{ year}}\right)$$

$$V = 2.59 \times 10^{-1} \text{ ft/day}$$

$$V = 94.6 \text{ ft/year}$$

$$V = \frac{(4.6 \times 10^{-2} \text{ ft/min})(0.03)}{0.05}$$

$$V = 2.76 \times 10^{-2} \text{ ft/min} \left(\frac{60 \text{ min}}{\text{hr}}\right)\left(\frac{24 \text{ hr}}{1 \text{ day}}\right)\left(\frac{365 \text{ day}}{1 \text{ year}}\right)$$

$$V = 39.7 \text{ ft/day}$$

$$V = 14,506.56 \text{ ft/year}$$

COMPUTATION SHEET

RMT INC
744 Heartland Trail P.O. Box 8923 Madison WI 53708-8923 (608) 831-4444 FAX (608) 831-3334

SHEET _____ OF _____

PROJECT / PROPOSAL NAME	PREPARED By:	Date:	CHECKED By:	Date:	PROJECT/PROPOSAL NO.
NAVISTAR					

		K [illegible]	K [illegible]
[illegible]-1	Limestone	7.27×10^{-4}	4.0×10^{-4}
[illegible]-2	Limestone	3.025×10^{-4}	1.5×10^{-4}
[illegible]-3	Limestone/ [illegible]	5.8×10^{-3}	2.9×10^{-3}
[illegible]	Mod SP [illegible]	1.2×10^{-3}	6.1×10^{-3}
[illegible]	Limestone	3.6×10^{-2}	1.8×10^{-2}
[illegible]-6	Limestone	4.6×10^{-2}	2.3×10^{-2}

Geometric Mean

$$\bar{K} = \sqrt[4]{7.27\times10^{-4} \cdot 3.0\times10^{-4} \cdot 5.8\times10^{-3} \cdot 1.2\times10^{-2} \cdot 3.6\times10^{-2} \cdot 4.6\times10^{-2}} = 5.5\times10^{-3} \text{ ft/min}$$

GROUNDWATER [illegible] $\frac{3.0}{\text{[illegible]}} \times$ [illegible]

$n_e = 0.25$

$\bar{K} = 1$

$= \frac{5.5 \times 10^{-3} \text{ [illegible]} \times .03}{.25}$

$= .0033 \times$ [illegible] $\times$ [illegible] / yr

$=$ [illegible] ft/year

→ 1730 ft/year

Where: $\bar{K} = 5.5 \times 10^{-3}$ ft/min from above

i = horiz. hydraulic gradient between [illegible]

$\frac{822 - 81 + 15}{25'} = \frac{8.01}{2.5} = .03$

n_e = [illegible] x porosity [illegible] % = fractional

$n_e = 20\%$

$V = \frac{3.6 \times 10^{-3}}{.2} \times .03$

$=$ [illegible]

$=$ [illegible] ft/yr

→ 430 ft/yr

COMPUTATION SHEET

RMT INC
744 Heartland Trail P.O. Box 8923 Madison WI 53708-8923 (608) 831-4444 FAX (608) 831-3334

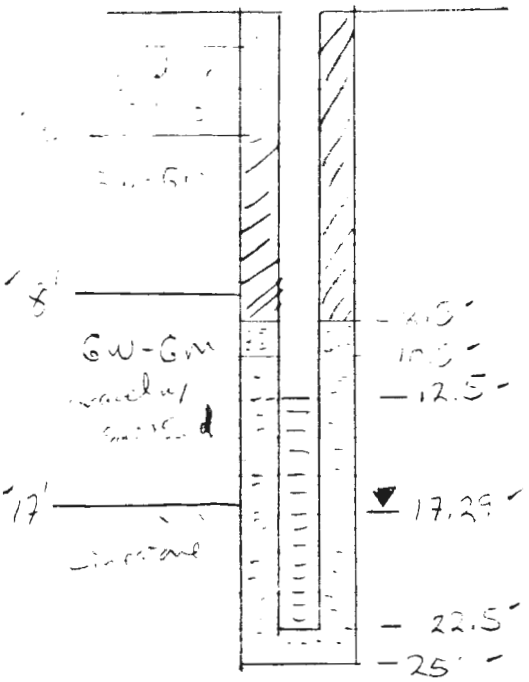
SHEET _____ OF _____

PROJECT / PROPOSAL NAME	PREPARED By:	Date:	CHECKED By: GNK	Date: 1/8/93	PROJECT/PROPOSAL NO.

MW-1

Time (min)	Temperature (°F)
.006	1.494
.01	3.058
.015	2.311
.019	1.835
.023	1.717
.027	1.617
.031	1.523
.035	1.446
.04	1.376
.085	.8
.127	.541
.169	.429
.21	.388
.252	.365
.294	.353
.335	.347
.377	.318
.419	.318
.46	.318
.877	.283
1.294	.23
1.71	.218
2.127	.201
2.544	.189
2.96	.171
3.377	.16
3.794	.148
4.21	.148
4.627	.137
8.79	.113
12.96	.101

Stick-up = -.36



r_c' = 0.[illegible]'

r_w = 0.25 ✓

L-L' = 25 - 17.29 = 7.71 ✓

-<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

A Q T E S O L V   R E S U L T S

12/12/92 14:25:06

PROBLEM DEFINITION

Problem title: NAVISTAR NMW-1 Trial 1

Knowns and Constants:
No. of data points............... 31
Radius of well casing............ 0.14
Radius of well................... 0.25
Aquifer saturated thickness...... 7.71
Well screen length............... 7.71
Static height of water in well... 7.71
Log(Re/Rw)....................... 2.594

ESTIMATION RESULTS

Analytical method: Bouwer and Rice (unconfined aquifer slug test)

PARAMETER ESTIMATES

	Estimate		Std. Error
K =	7.8720E-004	+/-	4.7863E-005
y0 =	3.5426E-001	+/-	8.1085E-003

✓ GNK 1/8/93

ANALYSIS OF MODEL RESIDUALS

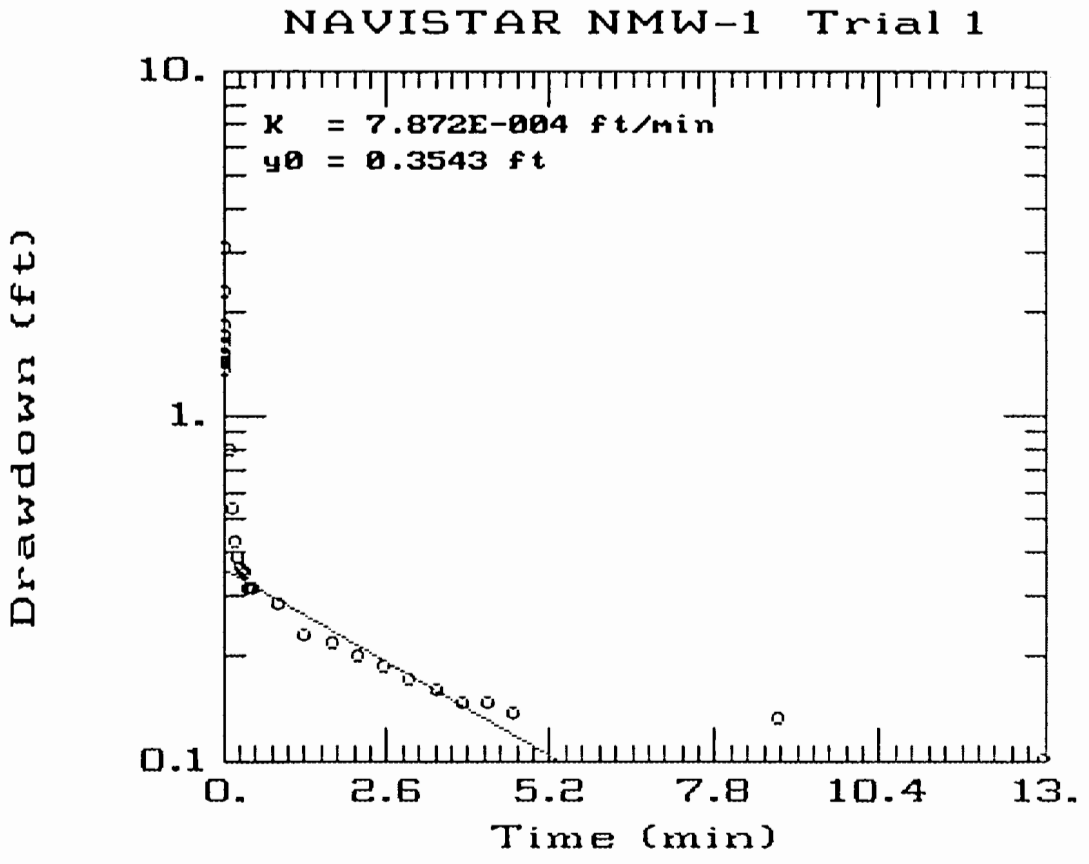
residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:
Number of residuals............... 15
Number of estimated parameters.... 2
Degrees of freedom................ 13
Residual mean..................... 0.0005201
Residual standard deviation....... 0.01548
Residual variance................. 0.0002396

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.294	0.353	0.33024	0.022759	1
0.335	0.347	0.32702	0.019976	1
0.377	0.318	0.32376	-0.0057614	1
0.419	0.318	0.32053	-0.002531	1
0.46	0.318	0.31741	0.00059144	1
0.877	0.283	0.28733	-0.0043288	1
1.294	0.23	0.2601	-0.0301	1
1.71	0.218	0.23551	-0.017507	1

2.127	0.201	0.21319	-0.012189	1
2.544	0.189	0.19299	-0.0039857	1
2.96	0.171	0.17474	-0.0037388	1
3.377	0.16	0.15818	0.0018206	1
3.794	0.148	0.14319	0.0048107	1
4.21	0.148	0.12965	0.018349	1
4.627	0.137	0.11736	0.019636	1


NAVISTAR NMW-1 Trial 1
K = 7.872E-004 ft/min
y0 = 0.3543 ft
Drawdown (ft)
10.
1.
0.1
0.
2.6
5.2
7.8
10.4
13.
Time (min)

✓ GWK
1/8/93

COMPUTATION SHEET

RMT INC
744 Heartland Trail P O Box 8923 Madison, WI 53708-8923 (608) 831-4444 FAX (608) 831-3334

SHEET _____ OF _____

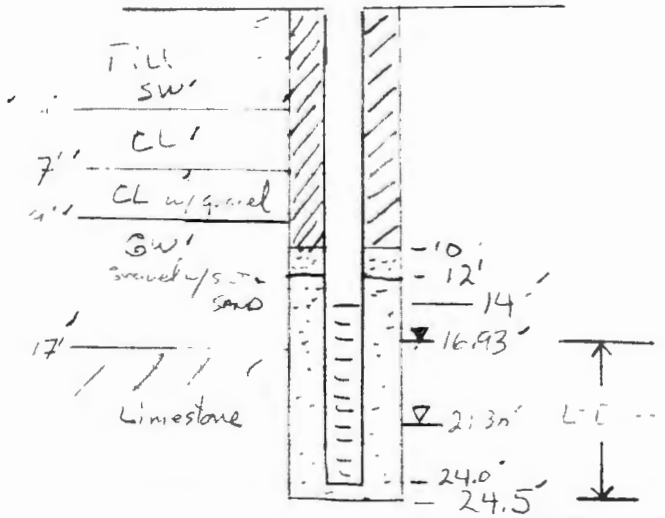
PROJECT / PROPOSAL NAME	PREPARED By:	Date:	CHECKED By:	Date:	PROJECT/PROPOSAL NO.
NAVISTAR			GNK	1/8/93	2

In-Field Aquifer Conditions

NMW-2

Time (min)	Drawdown (Ft)
0	4.37
1.0	3.72
	3.78
2.5	3.13
	2.98
	2.85
	2.61
	2.50
	2.39
	2.29
	2.10
	1.99
9.0	1.78
10.0	1.65
12.0	1.40
14.0	1.18
16.0	
18.0	0.80
20.0	0.66
23.0	

Tick gp = .25



L-D = 24.5 - 16.93 = 7.57'

r_c = 0.083'
r_w = 3" = 0.25'
n_e = 0.25

r_c' required - recovery - Jacob

$$r_c' = \sqrt{r_c^2 + n_e(r_w^2 - r_c^2)}$$

$$= \sqrt{(.083)^2 + 0.25\left((.25)^2 - (.083)^2\right)}$$

$$r_c' = \sqrt{.0208} = 0.14'$$

5

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

A Q T E S O L V   R E S U L T S

12/12/92 13:43:06

PROBLEM DEFINITION

Problem title: NAVISTAR NMW-2

Knowns and Constants:
- No. of data points............... 22
- Radius of well casing............ 0.14
- Radius of well................... 0.25
- Aquifer saturated thickness...... 7.57
- Well screen length............... 7.57
- Static height of water in well... 7.57
- Log(Re/Rw)....................... 2.578

ESTIMATION RESULTS

Analytical method: Bouwer and Rice (unconfined aquifer slug test)

PARAMETER ESTIMATES

	Estimate		Std. Error
K =	3.0250E-004	+/-	5.0077E-006
y0 =	3.9952E+000	+/-	3.0176E-002

✓GNK 1/9/93

ANALYSIS OF MODEL RESIDUALS

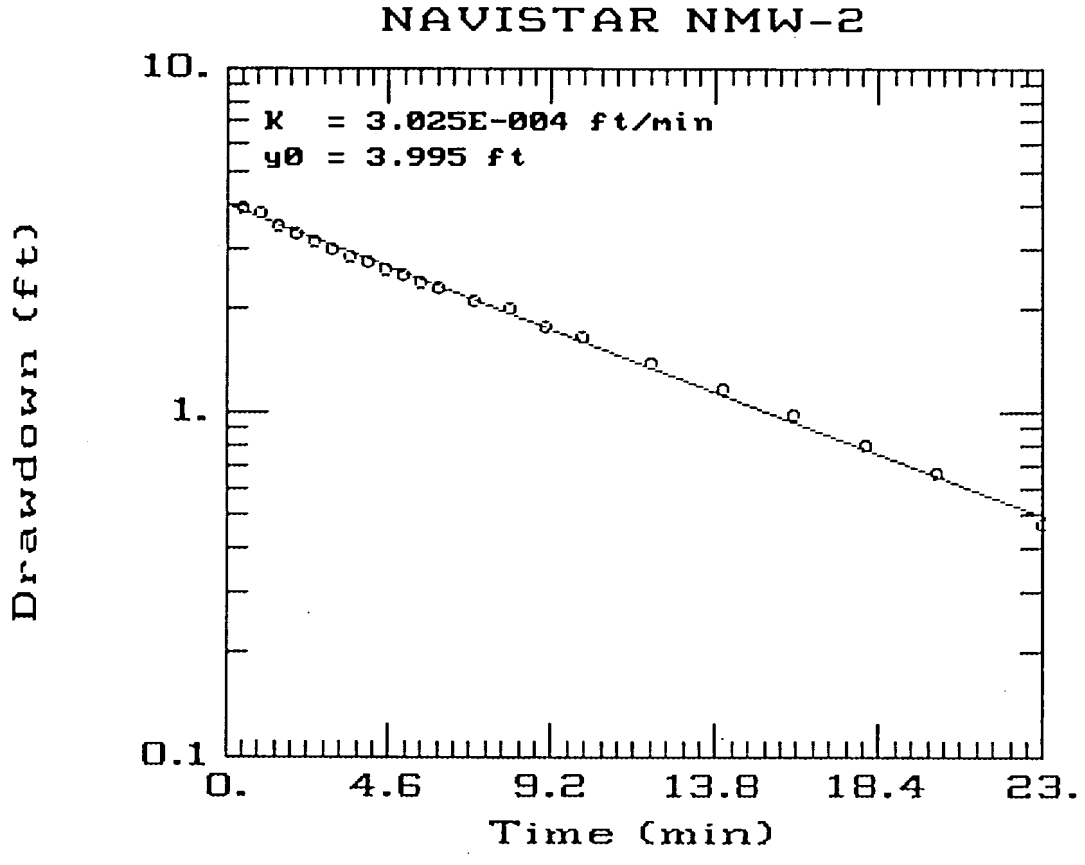
residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:
- Number of residuals............... 22
- Number of estimated parameters.... 2
- Degrees of freedom................ 20
- Residual mean..................... 0.002182
- Residual standard deviation....... 0.05676
- Residual variance................. 0.003221

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.5	3.94	3.8182	0.12183	1
1	3.77	3.649	0.12098	1
1.5	3.48	3.4874	-0.0073566	1
2	3.29	3.3329	-0.042859	1
2.5	3.13	3.1852	-0.055206	1
3	2.98	3.0441	-0.064094	1
3.5	2.85	2.9092	-0.059234	1
4	2.73	2.7803	-0.050348	1

4.5	2.61	2.6572	-0.047173	1
5	2.5	2.5395	-0.039454	1
5.5	2.39	2.427	-0.036951	1
6	2.29	2.3194	-0.029431	1
7	2.1	2.1185	-0.018472	1
8	1.99	1.9349	0.055076	1
9	1.78	1.7673	0.012722	1
10	1.65	1.6142	0.035842	1
12	1.4	1.3466	0.053432	1
14	1.18	1.1233	0.056661	1
16	0.98	0.93712	0.042885	1
18	0.8	0.78176	0.018237	1
20	0.66	0.65217	0.0078349	1
23	0.47	0.49691	-0.026914	1


NAVISTAR NMW-2
K = 3.025E-004 ft/min
y0 = 3.995 ft
10.
1.
0.1
Drawdown (ft)
0.
4.6
9.2
13.8
18.4
23.
Time (min)

✓GWK
1/8/93

RMT INC

744 Heartland Trail P.O. Box 8923 Madison, WI 53708-8923 (608) 831-4444 FAX (608) 831-3334

COMPUTATION SHEET

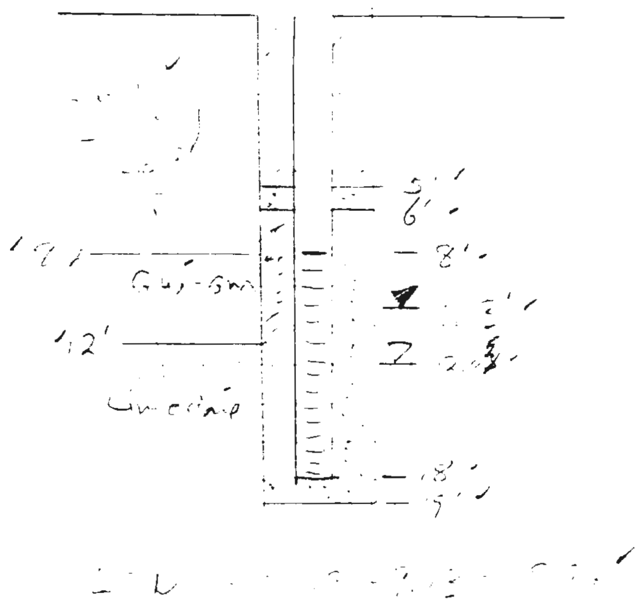
SHEET ______ OF ______

PROJECT / PROPOSAL NAME	PREPARED By:	Date:	CHECKED By:	Date:	PROJECT/PROPOSAL NO.
[illegible]			GNK	4/8/93	

[illegible]

Stick up = -.32

Time	Drawdown
[illegible]	FT
.006	.906
.01	2.73
.015	2.919
.019	2.072
.023	2.048
.027	1.271
.031	.612
.035	.477
.04	.406
.085	.182
.127	.094
.169	.088
.21	.071
.252	.047
.294	.059
.335	.047
.377	.047
.419	.047
.46	.047
.877	.035
1.294	.029
1.71	.022
2.127	.01
2.544	.011
2.96	.012
3.377	.01
3.794	.01



r_w = 0.25

r_c = 0.14

[illegible]

A Q T E S O L V R E S U L T S

12/12/92 14:59:05

PROBLEM DEFINITION

Problem title: NAVISTAR NMW-3 Trial 2

Knowns and Constants:
- No. of data points..... 24
- Radius of well casing..... 0.14'
- Radius of well..... 0.25'
- Aquifer saturated thickness..... 9.87'
- Well screen length..... 9.87'
- Static height of water in well... 9.87'
- Log(Re/Rw)..... 2.801

ESTIMATION RESULTS

Analytical method: Bouwer and Rice (unconfined aquifer slug test)

PARAMETER ESTIMATES

	Estimate	Std. Error
K =	5.6755E-003 +/-	1.3374E-003
y0 =	1.1001E-001 +/-	1.4754E-002

ANALYSIS OF MODEL RESIDUALS

V GWK 4/8/93

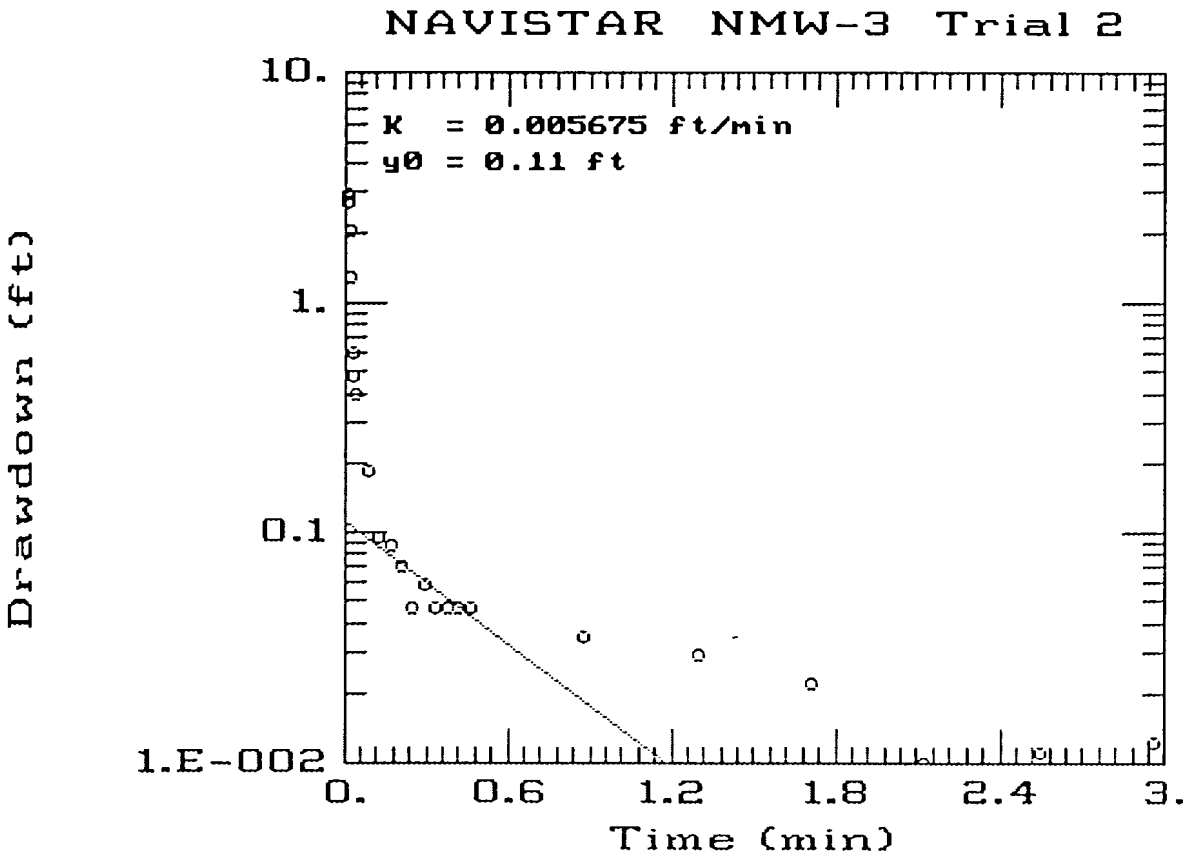
residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:
- Number of residuals..... 10
- Number of estimated parameters.... 2
- Degrees of freedom..... 8
- Residual mean..... 0.0006659
- Residual standard deviation..... 0.01073
- Residual variance..... 0.000115

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.127	0.094	0.084894	0.0091056	1
0.169	0.088	0.077922	0.010078	1
0.21	0.071	0.071668	-0.00066801	1
0.252	0.047	0.065782	-0.018782	1
0.294	0.059	0.060379	-0.0013789	1
0.335	0.047	0.055533	-0.0085331	1
0.377	0.047	0.050972	-0.003972	1
0.419	0.047	0.046786	0.00021447	1

0.46	0.047	0.043031	0.0039694	1
0.877	0.035	0.018375	0.016625	1


NAVISTAR NMW-3 Trial 2
K = 0.005675 ft/min
y0 = 0.11 ft
10.
1.
0.1
1.E-002
0.
0.6
1.2
1.8
2.4
3.
Drawdown (ft)
Time (min)

✓ GNC
1/8/93

COMPUTATION SHEET

RMT INC

SHEET _____ OF _____

744 Heartland Trail P.O. Box 8923 Madison, WI 53708-8923 608 831 4444 FAX 608 831 3334

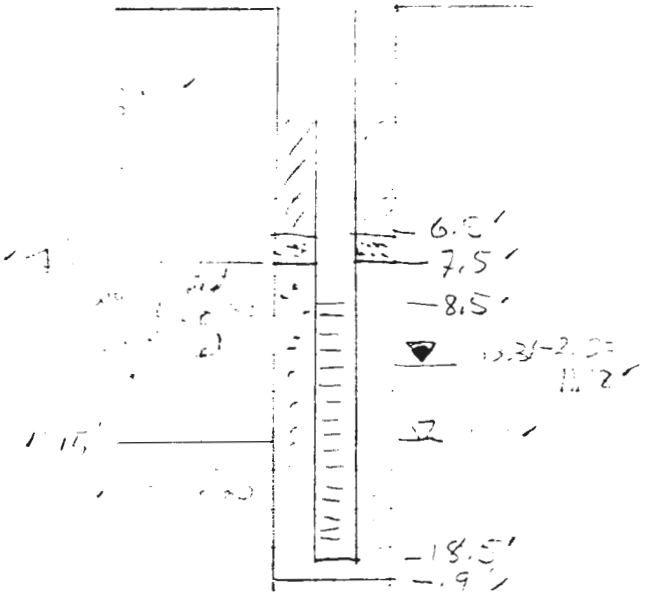
PROJECT / PROPOSAL NAME	PREPARED By:	PREPARED Date:	CHECKED By:	CHECKED Date:	PROJECT/PROPOSAL NO.

NMW-4

Trial 2

Stick-up = 2.5

Time	Drawdown
.01	4.677
.015	1.714
.019	1.991
.023	1.749
.027	1.555
.031	1.378
.035	1.272
.04	1.119
.085	.607
.127	.53
.169	.412
.21	.389
.252	.295
.294	.259
.335	.247
.377	.206
.419	.183
.46	.153
.877	.071
1.294	.053
1.71	.036
2.127	.024
2.544	.018
2.96	.012



r_c = 0.1 ft

r_w = 0.25 ft

L = D - H = 7.82 ft

NRVMW4-2

A Q T E S O L V   R E S U L T S

12/12/92 15:26:25

PROBLEM DEFINITION

Problem title: NAVISTAR NMW-4 Trial 2

Knowns and Constants:

- No. of data points............... 23
- Radius of well casing............ 0.14
- Radius of well................... 0.25
- Aquifer saturated thickness...... 7.82
- Well screen length............... 7.82
- Static height of water in well... 7.82
- Log(Re/Rw)....................... 2.606

ESTIMATION RESULTS

Analytical method: Bouwer and Rice (unconfined aquifer slug test)

PARAMETER ESTIMATES

	Estimate		Std. Error
K =	1.2152E-002	+/-	7.0476E-004
y0 =	8.1743E-001	+/-	4.1244E-002

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual * weight

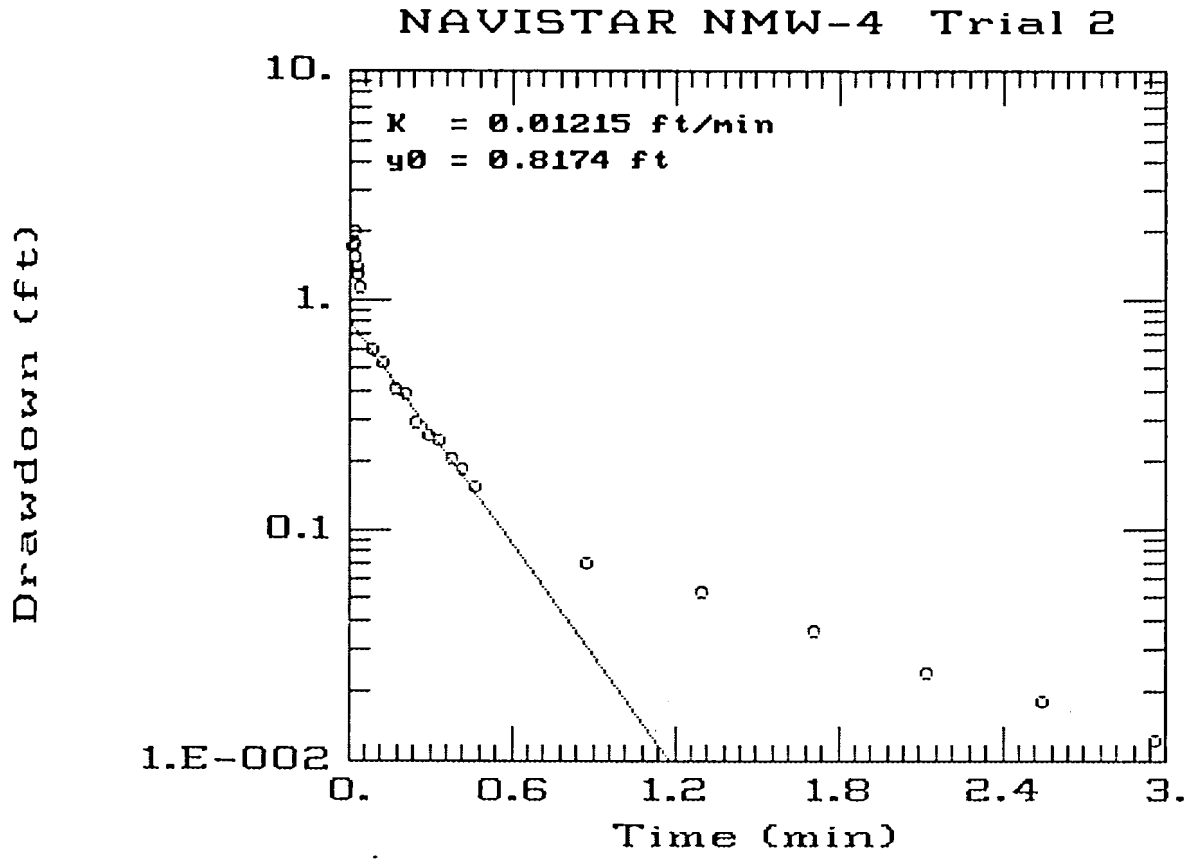
Weighted Residual Statistics:

- Number of residuals.............. 9
- Number of estimated parameters.... 2
- Degrees of freedom............... 7
- Residual mean..................... 0.0005539
- Residual standard deviation....... 0.0184
- Residual variance................. 0.0003387

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.127	0.53	0.50959	0.020409	1
0.169	0.412	0.43586	-0.023863	1
0.21	0.389	0.37419	0.014808	1
0.252	0.295	0.32005	-0.025054	1
0.294	0.259	0.27375	-0.014749	1
0.335	0.247	0.23502	0.011984	1
0.377	0.206	0.20101	0.0049861	1
0.419	0.183	0.17193	0.011069	1

15


NAVISTAR NMW-4 Trial 2
K = 0.01215 ft/min
y0 = 0.8174 ft
Drawdown (ft)
10.
1.
0.1
1.E-002
0.
0.6
1.2
1.8
2.4
3.
Time (min)

✓ GWK
1/8/93

COMPUTATION SHEET

RMT INC
744 Heartland Trail P.O. Box 8923 Madison WI 53708-8923 (608) 831-4444 FAX (608) 831-3334

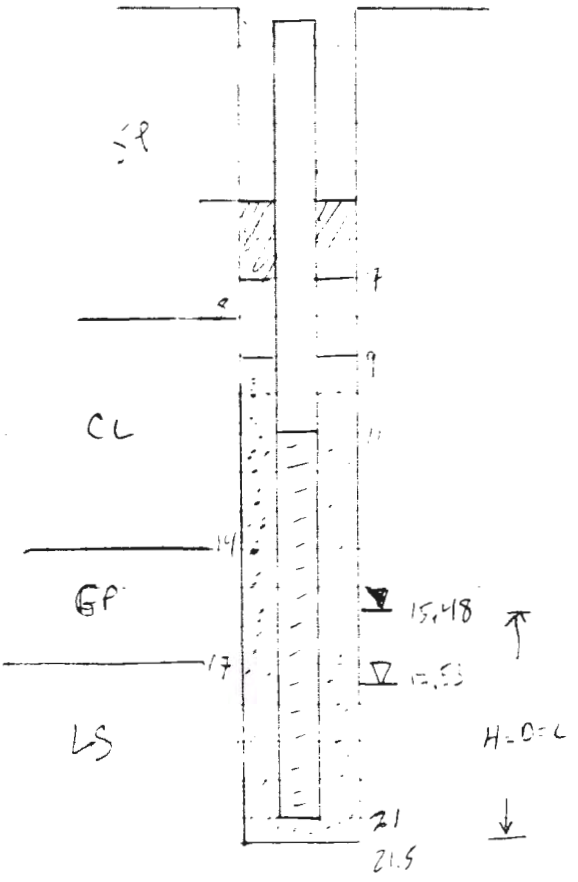
SHEET ____ OF ____

PROJECT / PROPOSAL NAME	PREPARED By:	Date:	CHECKED By:	Date:	PROJECT/PROPOSAL NO.
NAVISTAR				1/11/93	25[illegible]02

NMW-5
Trial 3

T_{av} = -0.31

Time min	Dwdn ft
1230	5.376
0	2.562
.006	1.125
.01	2.046
.015	1.823
.019	1.665
.023	1.542
.027	1.377
.031	1.267
.035	1.137
.04	1.032
.085	.305
.127	.165
.169	.135
.21	.1
.252	.071
.294	.041
.335	.036
.377	.018
.419	.006
.46	.006
.877	-.046
1.294	-.064
1.71	-.052
2.127	-.064



r_w = 0.25'

r_c' = 0.14

H=D=L = 21.5 - 15.5 = 6.0'

NMW5.dat > r_c correction not used

NMW5a.dat > r_c' correction used

A Q T E S O L V R E S U L T S
Version 1.10

01/08/93 09:44:45

TEST DESCRIPTION

Data set..... navmw5a.dat
Data set title..... Navistar NMW-5 trial 3

Knowns and Constants:
No. of data points..... 15
Radius of well casing..... 0.14
Radius of well..... 0.25
Aquifer saturated thickness..... 6
Well screen length..... 6
Static height of water in well..... 6
Log(Re/Rw)..... 2.379
A, B, C..... 0.000, 0.000, 1.783

ANALYTICAL METHOD

Bouwer and Rice (unconfined aquifer slug test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate	Std. Error
K =	3.6030E-002 +/-	3.0777E-003
y0 =	6.3780E-001 +/-	6.5303E-002

$= 1.8 \times 10^{-2}$ cm/s

ANALYSIS OF MODEL RESIDUALS

Residual = calculated - observed
Weighted residual = residual * weight

Weighted Residual Statistics:
Number of residuals..... 8
Number of estimated parameters.... 2
Degrees of freedom..... 6
Residual mean..... 0.00117
Residual standard deviation..... 0.01552
Residual variance..... 0.0002408

Model Residuals:

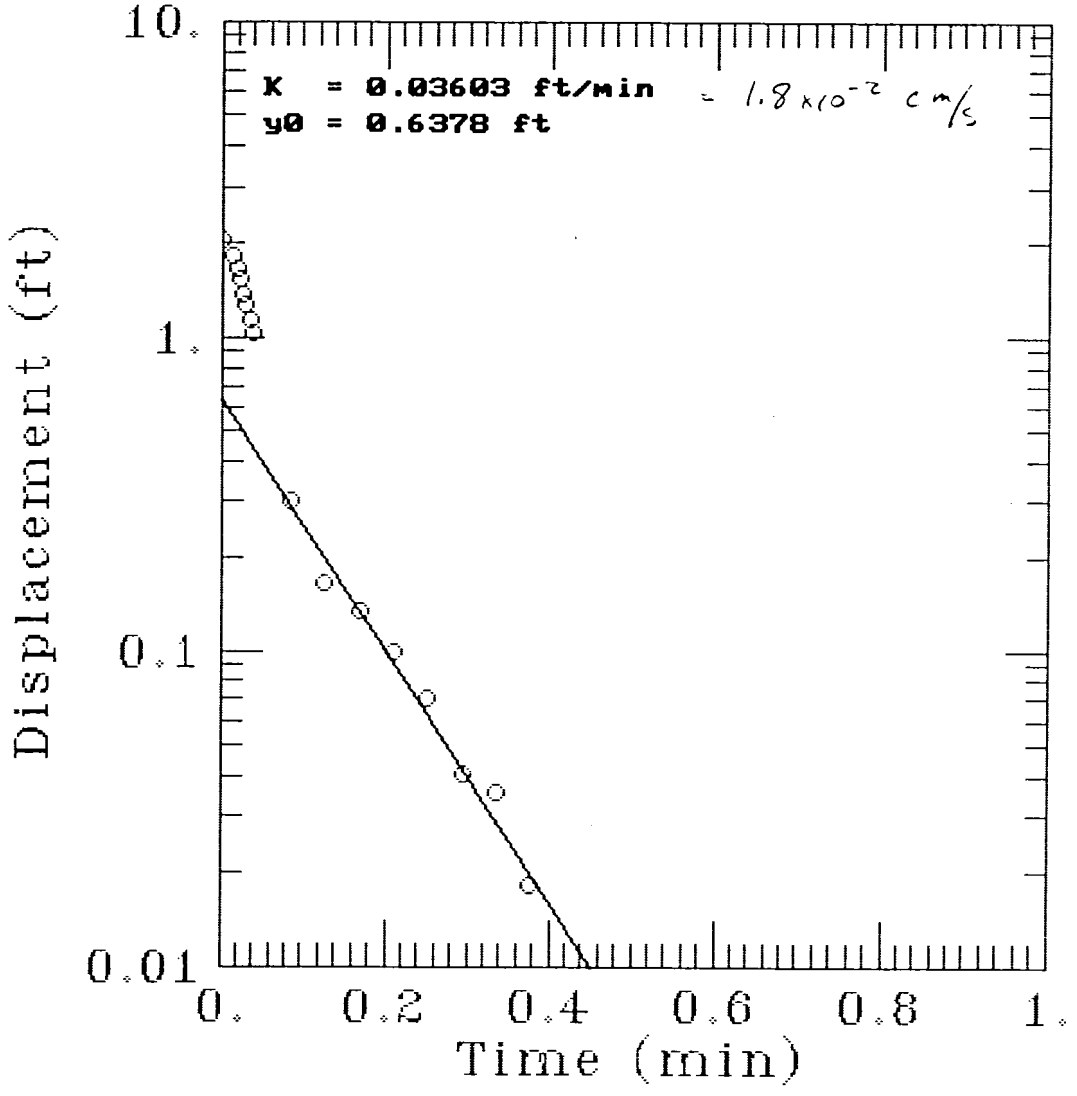
Time	Observed	Calculated	Residual	Weight
0.085	0.305	0.28996	0.015037	1
0.127	0.165	0.19642	-0.03142	1
0.169	0.135	0.13305	0.0019463	1
0.21	0.1	0.09097	0.0090303	1
0.252	0.071	0.061622	0.0093776	1
0.294	0.041	0.041743	-0.00074275	1
0.335	0.036	0.02854	0.0074602	1
0.377	0.018	0.019333	-0.0013327	1

RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	3.6030E-002
y0 =	6.3780E-001

Navistar NMW-5 trial 3



AQTESOLV

GERAGHTY & MILLER, INC.

Modeling Group

COMPUTATION SHEET

RMT INC

SHEET _____ OF _____

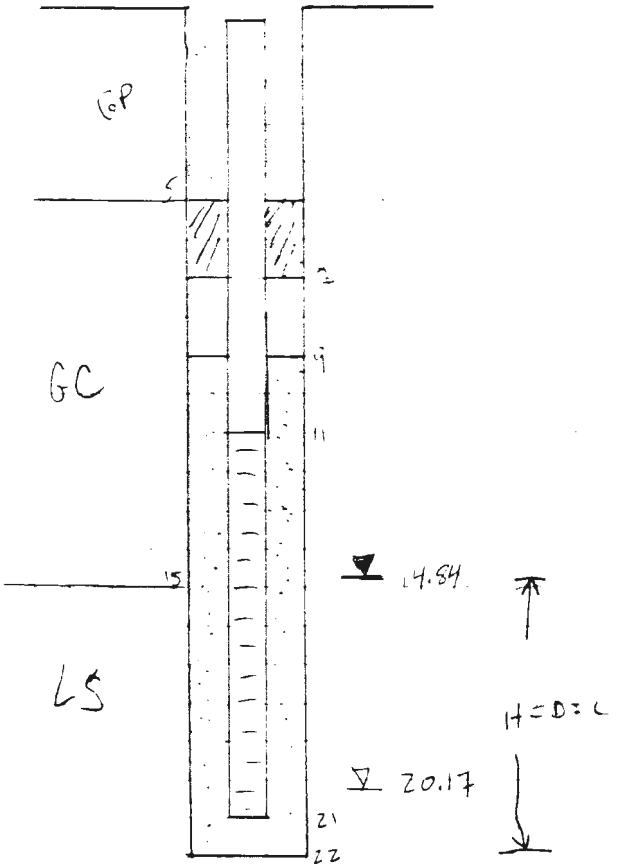
744 Heartland Trail P.O. Box 8923 Madison, WI 53708-8923 (608) 831-4444 FAX (608) 831-3334

PROJECT / PROPOSAL NAME	PREPARED By:	Date:	CHECKED By:	Date:	PROJECT/PROPOSAL NO.
NAVISTAR	[illegible]	1/8/93	[illegible]	1/11/93	2585.02

NMW-6
Trial 1

TOC = -0.30

Time min	Dwdn ft
1247	6.053
0	.282
.006	5.332
.01	2.422
.015	1.889
.019	2.182
.023	2.041
.027	1.93
.031	1.847
.035	1.748
.04	1.678
.085	.892
.127	.417
.169	.154
.21	.06
.252	.036
.294	.013
.335	.013
.377	.007
.419	.007
.46	.002
.877	-.02
1.294	-.026
1.71	-.032
2.127	-.032
2.544	-.032
2.96	-.032
3.377	-.032
3.794	-.032
4.21	-.02



$r_w = 0.25'$

$r_c' = 0.14$

$H = D = L = 22 - 14.8 = 7.2'$

NAUMW6.dat
.out > r_c [illegible] not used

[illegible]mw6a.dat
.out > r_c' [illegible] used

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

A Q T E S O L V   R E S U L T S
Version 1.10

01/08/93 09:40:21

TEST DESCRIPTION

Data set........... navmw6a.dat
Data set title..... Navistar NMW-6 trial 1

Knowns and Constants:
No. of data points.................. 15
Radius of well casing............... 0.14
Radius of well...................... 0.25
Aquifer saturated thickness......... 7.2
Well screen length.................. 7.2
Static height of water in well...... 7.2
Log(Re/Rw).......................... 2.536
A, B, C............................. 0.000, 0.000, 1.931

ANALYTICAL METHOD

Bouwer and Rice (unconfined aquifer slug test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate		Std. Error
K =	4.6138E-002	+/-	4.6440E-003
y0 =	2.7107E+000	+/-	1.1151E-001

= 2.3×10^{-2} cm/s

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:
Number of residuals............... 11
Number of estimated parameters.... 2
Degrees of freedom................ 9
Residual mean..................... -0.009196
Residual standard deviation....... 0.1326
Residual variance................. 0.01759

Model Residuals:

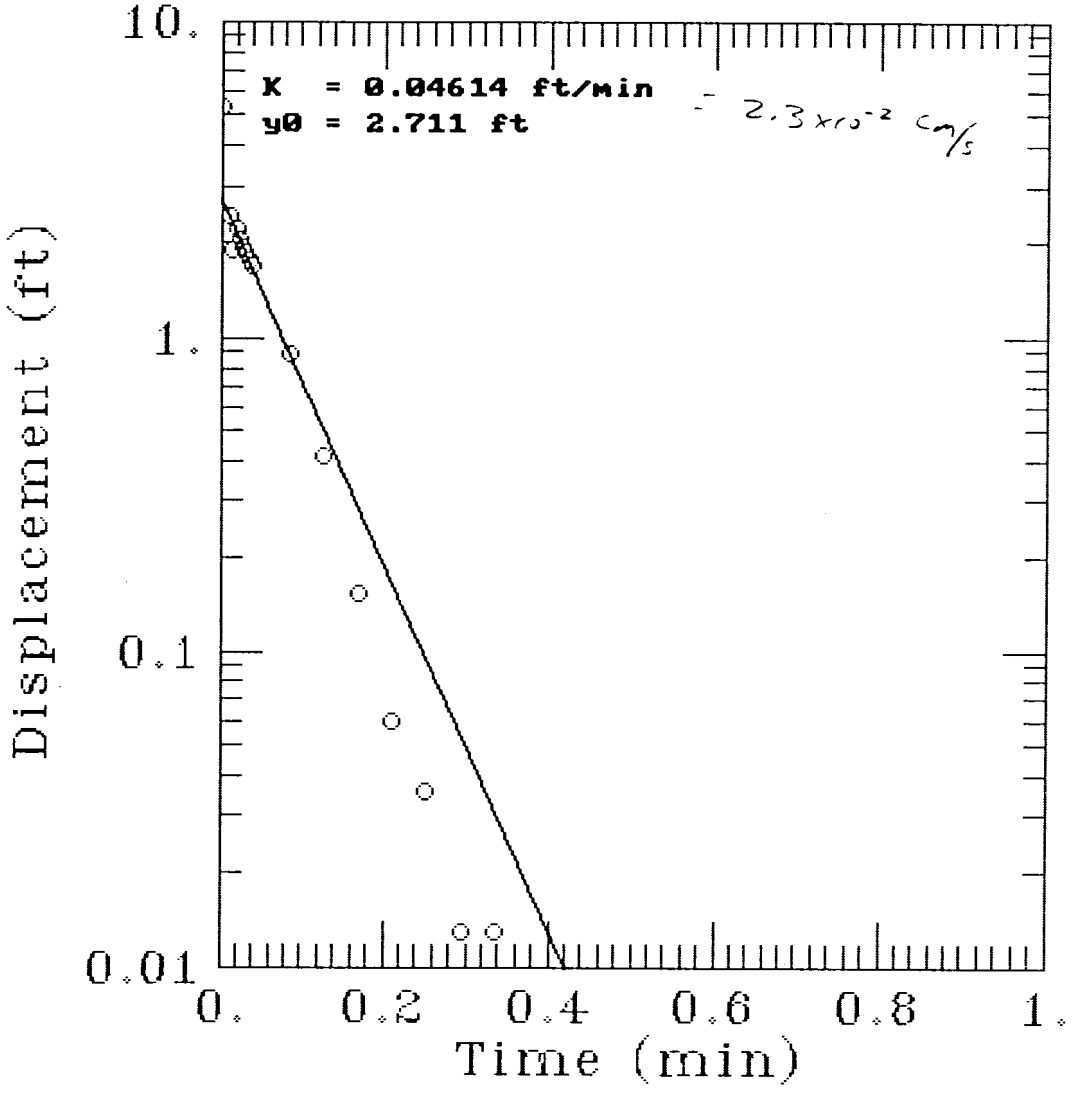
Time	Observed	Calculated	Residual	Weight
0.01	2.422	2.3715	0.05048	1
0.015	1.889	2.2182	-0.32918	1
0.019	2.182	2.1027	0.079323	1
0.023	2.041	1.9932	0.047812	1
0.027	1.93	1.8894	0.040599	1
0.031	1.847	1.791	0.055982	1
0.035	1.748	1.6978	0.050242	1
0.04	1.678	1.588	0.090018	1
0.085	0.892	0.87011	0.021891	1
0.127	0.417	0.49627	-0.079272	1
0.169	0.154	0.28305	-0.12905	1

RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	4.6138E-002
y0 =	2.7107E+000

Navistar NMW-6 trial 1



AQTESOLV

GERAGHTY & MILLER, INC.

Modeling Group

APPENDIX G

LABORATORY DATA SHEETS FOR SOIL SAMPLES

- October 1992
- March 1993 (Layne Geoscience)
- April 1993

SOIL SAMPLE RESULTS
FROM
OCTOBER 1992 BORINGS

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn: Greg Kitson
Invoice Number:

Order #: 92-10-082
Date: 10/22/92 08:13
Work ID: 2585.01
Date Received: 10/07/92
Date Completed: 10/22/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	FIELD BLK
02	NMW-1(2)
03	NMW-2(4)

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

Sample: 01A FIELD BLK **Collected: 10/06/92**

Test Description	Result	Limit	Units	Analyzed	By
Mod. GRO (WDNR)	< 5.0		mg/kg	10/12/92	SEL

Sample: 02A NMW-1(2) **Collected: 10/06/92**

Test Description	Result	Limit	Units	Analyzed	By
8021 Soil					
Benzene	< 1.0		ug/kg	10/19/92	LJS
Bromobenzene	< 1.0		ug/kg	10/19/92	LJS
Bromochloromethane	< 1.0		ug/kg	10/19/92	LJS
Bromodichloromethane	< 1.0		ug/kg	10/19/92	LJS
Bromoform	< 3.0		ug/kg	10/19/92	LJS
Bromomethane	< 1.0		ug/kg	10/19/92	LJS
n-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
sec-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
tert-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
Carbon tetrachloride	< 1.0		ug/kg	10/19/92	LJS
Chlorobenzene	< 1.0		ug/kg	10/19/92	LJS
Chloroethane	< 2.0		ug/kg	10/19/92	LJS
Chloroform	< 1.0		ug/kg	10/19/92	LJS
Chloromethane	< 1.0		ug/kg	10/19/92	LJS
2-Chlorotoluene	< 1.0		ug/kg	10/19/92	LJS
4-Chlorotoluene	< 1.0		ug/kg	10/19/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	10/19/92	LJS
Dibromochloromethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dibromoethane	< 1.0		ug/kg	10/19/92	LJS
Dibromomethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
Dichlorodifluoromethane	< 2.0		ug/kg	10/19/92	LJS
1,1-Dichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,3-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
2,2-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,1-Dichloropropene	< 1.0		ug/kg	10/19/92	LJS
Ethylbenzene	< 1.0		ug/kg	10/19/92	LJS
Hexachlorobutadiene	< 1.0		ug/kg	10/19/92	LJS
Isopropylbenzene	< 1.0		ug/kg	10/19/92	LJS
p-Isopropyltoluene	< 1.0		ug/kg	10/19/92	LJS
Methylene Chloride	< 1.0		ug/kg	10/19/92	LJS
M-t-butyl-ether	< 1.0		ug/kg	10/19/92	LJS
Naphthalene	< 1.0		ug/kg	10/19/92	LJS
n-Propylbenzene	< 1.0		ug/kg	10/19/92	LJS
Styrene	< 1.0		ug/kg	10/19/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,1,1,2-Tetrachloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/kg	10/19/92	LJS
Tetrachloroethene	< 1.0		ug/kg	10/19/92	LJS
Toluene	< 1.0		ug/kg	10/19/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,2,4-Trichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/kg	10/19/92	LJS
Trichloroethene	< 1.0		ug/kg	10/19/92	LJS
Trichlorofluoromethane	< 1.0		ug/kg	10/19/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/kg	10/19/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/kg	10/19/92	LJS
Vinyl Chloride	< 2.0		ug/kg	10/19/92	LJS
o-Xylene	< 1.0		ug/kg	10/19/92	LJS
m/p-Xylene	< 1.0		ug/kg	10/19/92	LJS
Mod. DRO (WDNR)	230		mg/kg	10/19/92	SEL
Mod. GRO (WDNR)	< 5.0		mg/kg	10/14/92	EMC
TRPH, Soil	160		ppm	10/19/92	CEP

Sample: 03A NMW-2(4) **Collected: 10/06/92**

Test Description	Result	Limit	Units	Analyzed	By
8021 Soil					
Benzene	< 1.0		ug/kg	10/19/92	LJS
Bromobenzene	< 1.0		ug/kg	10/19/92	LJS
Bromochloromethane	< 1.0		ug/kg	10/19/92	LJS
Bromodichloromethane	< 1.0		ug/kg	10/19/92	LJS
Bromoform	< 3.0		ug/kg	10/19/92	LJS
Bromomethane	< 1.0		ug/kg	10/19/92	LJS
n-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
sec-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
tert-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
Carbon tetrachloride	< 1.0		ug/kg	10/19/92	LJS
Chlorobenzene	< 1.0		ug/kg	10/19/92	LJS
Chloroethane	< 2.0		ug/kg	10/19/92	LJS
Chloroform	< 1.0		ug/kg	10/19/92	LJS
Chloromethane	< 1.0		ug/kg	10/19/92	LJS
2-Chlorotoluene	< 1.0		ug/kg	10/19/92	LJS
4-Chlorotoluene	< 1.0		ug/kg	10/19/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	10/19/92	LJS
Dibromochloromethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dibromoethane	< 1.0		ug/kg	10/19/92	LJS
Dibromomethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
Dichlorodifluoromethane	< 2.0		ug/kg	10/19/92	LJS
1,1-Dichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichloroethane	< 1.0		ug/kg	10/19/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,1-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,3-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
2,2-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,1-Dichloropropene	< 1.0		ug/kg	10/19/92	LJS
Ethylbenzene	< 1.0		ug/kg	10/19/92	LJS
Hexachlorobutadiene	< 1.0		ug/kg	10/19/92	LJS
Isopropylbenzene	< 1.0		ug/kg	10/19/92	LJS
p-Isopropyltoluene	< 1.0		ug/kg	10/19/92	LJS
Methylene Chloride	< 1.0		ug/kg	10/19/92	LJS
M-t-butyl-ether	< 1.0		ug/kg	10/19/92	LJS
Naphthalene	< 1.0		ug/kg	10/19/92	LJS
n-Propylbenzene	< 1.0		ug/kg	10/19/92	LJS
Styrene	< 1.0		ug/kg	10/19/92	LJS
1,1,1,2-Tetrachloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/kg	10/19/92	LJS
Tetrachloroethene	< 1.0		ug/kg	10/19/92	LJS
Toluene	< 1.0		ug/kg	10/19/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,2,4-Trichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/kg	10/19/92	LJS
Trichloroethene	< 1.0		ug/kg	10/19/92	LJS
Trichlorofluoromethane	< 1.0		ug/kg	10/19/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/kg	10/19/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/kg	10/19/92	LJS
Vinyl Chloride	< 2.0		ug/kg	10/19/92	LJS
o-Xylene	< 1.0		ug/kg	10/19/92	LJS
m/p-Xylene	< 1.0		ug/kg	10/19/92	LJS
Mod. DRO (WDNR)	< 10		mg/kg	10/18/92	SEL
Mod. GRO (WDNR)	< 5.0		mg/kg	10/14/92	EMC
TRPH, Soil	< 5.0		ppm	10/19/92	CEP

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

The samples ordered for 8021 were analyzed according to Method 8021 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

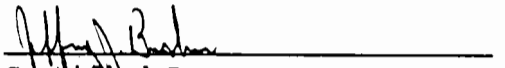
RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn: Greg J. Kirtz
Invoice Number:

Order #: 92-10-113
Date: 10/23/92 15:04
Work ID: 2585.01, Navistar
Date Received: 10/09/92
Date Completed: 10/23/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	FIELD BLK
02	NMW-5(6)
03	NMW-6(1)

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Sample: 01A FIELD BLK **Collected: 10/08/92**

Test Description	Result	Limit	Units	Analyzed	By
Mod. GRO (WDNR)	< 5.0		mg/kg	10/14/92	EMC

Sample: 02A NMW-5(6) **Collected: 10/08/92**

Test Description	Result	Limit	Units	Analyzed	By
8021 Soil					
Benzene	< 1.0		ug/kg	10/20/92	LJS
Bromobenzene	< 1.0		ug/kg	10/20/92	LJS
Bromochloromethane	< 1.0		ug/kg	10/20/92	LJS
Bromodichloromethane	< 1.0		ug/kg	10/20/92	LJS
Bromoform	< 3.0		ug/kg	10/20/92	LJS
Bromomethane	< 1.0		ug/kg	10/20/92	LJS
n-Butylbenzene	< 1.0		ug/kg	10/20/92	LJS
sec-Butylbenzene	< 1.0		ug/kg	10/20/92	LJS
tert-Butylbenzene	< 1.0		ug/kg	10/20/92	LJS
Carbon tetrachloride	< 1.0		ug/kg	10/20/92	LJS
Chlorobenzene	< 1.0		ug/kg	10/20/92	LJS
Chloroethane	< 2.0		ug/kg	10/20/92	LJS
Chloroform	< 1.0		ug/kg	10/20/92	LJS
Chloromethane	< 1.0		ug/kg	10/20/92	LJS
2-Chlorotoluene	< 1.0		ug/kg	10/20/92	LJS
4-Chlorotoluene	< 1.0		ug/kg	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	10/20/92	LJS
Dibromochloromethane	< 1.0		ug/kg	10/20/92	LJS
1,2-Dibromoethane	< 1.0		ug/kg	10/20/92	LJS
Dibromomethane	< 1.0		ug/kg	10/20/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
Dichlorodifluoromethane	< 2.0		ug/kg	10/20/92	LJS
1,1-Dichloroethane	< 1.0		ug/kg	10/20/92	LJS
1,2-Dichloroethane	< 1.0		ug/kg	10/20/92	LJS
1,1-Dichloroethene	< 1.0		ug/kg	10/20/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/kg	10/20/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/kg	10/20/92	LJS
1,2-Dichloropropane	< 1.0		ug/kg	10/20/92	LJS
1,3-Dichloropropane	< 1.0		ug/kg	10/20/92	LJS
2,2-Dichloropropane	< 1.0		ug/kg	10/20/92	LJS
1,1-Dichloropropene	< 1.0		ug/kg	10/20/92	LJS
Ethylbenzene	< 1.0		ug/kg	10/20/92	LJS
Hexachlorobutadiene	< 1.0		ug/kg	10/20/92	LJS
Isopropylbenzene	< 1.0		ug/kg	10/20/92	LJS
p-Isopropyltoluene	< 1.0		ug/kg	10/20/92	LJS
Methylene Chloride	< 1.0		ug/kg	10/20/92	LJS
M-t-butyl-ether	< 1.0		ug/kg	10/20/92	LJS
Naphthalene	< 1.0		ug/kg	10/20/92	LJS
n-Propylbenzene	< 1.0		ug/kg	10/20/92	LJS
Styrene	< 1.0		ug/kg	10/20/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,1,1,2-Tetrachloroethane	< 1.0		ug/kg	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/kg	10/20/92	LJS
Tetrachloroethene	< 1.0		ug/kg	10/20/92	LJS
Toluene	< 1.0		ug/kg	10/20/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,2,4-Trichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/kg	10/20/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/kg	10/20/92	LJS
Trichloroethene	3.3		ug/kg	10/20/92	LJS
Trichlorofluoromethane	< 1.0		ug/kg	10/20/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/kg	10/20/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/kg	10/20/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/kg	10/20/92	LJS
Vinyl Chloride	< 2.0		ug/kg	10/20/92	LJS
o-Xylene	< 1.0		ug/kg	10/20/92	LJS
m/p-Xylene	< 1.0		ug/kg	10/20/92	LJS
Mod. GRO (WDNR)	< 5.0		mg/kg	10/14/92	EMC
TPH Diesel Range Organics	< 10		mg/kg	10/17/92	SEL
TRPH, Soil	57		ppm	10/19/92	CEP

Sample: 03A NMW-6(1) **Collected: 10/08/92**

Test Description	Result	Limit	Units	Analyzed	By
8021 Soil					
Benzene	< 1.0		ug/kg	10/20/92	LJS
Bromobenzene	< 1.0		ug/kg	10/20/92	LJS
Bromochloromethane	< 1.0		ug/kg	10/20/92	LJS
Bromodichloromethane	< 1.0		ug/kg	10/20/92	LJS
Bromoform	< 3.0		ug/kg	10/20/92	LJS
Bromomethane	< 1.0		ug/kg	10/20/92	LJS
n-Butylbenzene	< 1.0		ug/kg	10/20/92	LJS
sec-Butylbenzene	< 1.0		ug/kg	10/20/92	LJS
tert-Butylbenzene	< 1.0		ug/kg	10/20/92	LJS
Carbon tetrachloride	< 1.0		ug/kg	10/20/92	LJS
Chlorobenzene	< 1.0		ug/kg	10/20/92	LJS
Chloroethane	< 2.0		ug/kg	10/20/92	LJS
Chloroform	< 1.0		ug/kg	10/20/92	LJS
Chloromethane	< 1.0		ug/kg	10/20/92	LJS
2-Chlorotoluene	< 1.0		ug/kg	10/20/92	LJS
4-Chlorotoluene	< 1.0		ug/kg	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	10/20/92	LJS
Dibromochloromethane	< 1.0		ug/kg	10/20/92	LJS
1,2-Dibromoethane	< 1.0		ug/kg	10/20/92	LJS
Dibromomethane	< 1.0		ug/kg	10/20/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
Dichlorodifluoromethane	< 2.0		ug/kg	10/20/92	LJS
1,1-Dichloroethane	< 1.0		ug/kg	10/20/92	LJS
1,2-Dichloroethane	< 1.0		ug/kg	10/20/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,1-Dichloroethene	< 1.0		ug/kg	10/20/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/kg	10/20/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/kg	10/20/92	LJS
1,2-Dichloropropane	< 1.0		ug/kg	10/20/92	LJS
1,3-Dichloropropane	< 1.0		ug/kg	10/20/92	LJS
2,2-Dichloropropane	< 1.0		ug/kg	10/20/92	LJS
1,1-Dichloropropene	< 1.0		ug/kg	10/20/92	LJS
Ethylbenzene	< 1.0		ug/kg	10/20/92	LJS
Hexachlorobutadiene	< 1.0		ug/kg	10/20/92	LJS
Isopropylbenzene	< 1.0		ug/kg	10/20/92	LJS
p-Isopropyltoluene	< 1.0		ug/kg	10/20/92	LJS
Methylene Chloride	< 1.0		ug/kg	10/20/92	LJS
M-t-butyl-ether	< 1.0		ug/kg	10/20/92	LJS
Naphthalene	< 1.0		ug/kg	10/20/92	LJS
n-Propylbenzene	< 1.0		ug/kg	10/20/92	LJS
Styrene	< 1.0		ug/kg	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 1.0		ug/kg	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/kg	10/20/92	LJS
Tetrachloroethene	< 1.0		ug/kg	10/20/92	LJS
Toluene	< 1.0		ug/kg	10/20/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,2,4-Trichlorobenzene	< 1.0		ug/kg	10/20/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/kg	10/20/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/kg	10/20/92	LJS
Trichloroethene	< 1.0		ug/kg	10/20/92	LJS
Trichlorofluoromethane	< 1.0		ug/kg	10/20/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/kg	10/20/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/kg	10/20/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/kg	10/20/92	LJS
Vinyl Chloride	< 2.0		ug/kg	10/20/92	LJS
o-Xylene	< 1.0		ug/kg	10/20/92	LJS
m/p-Xylene	< 1.0		ug/kg	10/20/92	LJS
Mod. GRO (WDNR)	< 5.0		mg/kg	10/14/92	EMC
TPH Diesel Range Organics	< 10		mg/kg	10/17/92	SEL
TRPH, Soil	76		ppm	10/19/92	CEP

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

The samples ordered for 8021 were analyzed according to Method 8021 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn: Greg Kirtz
Invoice Number:

Order #: 92-10-086
Date: 10/26/92 10:41
Work ID: 2582.01, Navistar
Date Received: 10/08/92
Date Completed: 10/26/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	FIELD BLK	02	NMW-3(1)

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

Sample: 01A FIELD BLK **Collected: 10/07/92**

Test Description	Result	Limit	Units	Analyzed	By
Mod. GRO (WDNR)	< 5.0		mg/kg	10/16/92	EMC

Sample: 02A NMW-3(1) **Collected: 10/07/92**

Test Description	Result	Limit	Units	Analyzed	By
8021 Soil					
Benzene	< 1.0		ug/kg	10/19/92	LJS
Bromobenzene	< 1.0		ug/kg	10/19/92	LJS
Bromochloromethane	< 1.0		ug/kg	10/19/92	LJS
Bromodichloromethane	< 1.0		ug/kg	10/19/92	LJS
Bromoform	< 3.0		ug/kg	10/19/92	LJS
Bromomethane	< 1.0		ug/kg	10/19/92	LJS
n-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
sec-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
tert-Butylbenzene	< 1.0		ug/kg	10/19/92	LJS
Carbon tetrachloride	< 1.0		ug/kg	10/19/92	LJS
Chlorobenzene	< 1.0		ug/kg	10/19/92	LJS
Chloroethane	< 2.0		ug/kg	10/19/92	LJS
Chloroform	< 1.0		ug/kg	10/19/92	LJS
Chloromethane	< 1.0		ug/kg	10/19/92	LJS
2-Chlorotoluene	< 1.0		ug/kg	10/19/92	LJS
4-Chlorotoluene	< 1.0		ug/kg	10/19/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	10/19/92	LJS
Dibromochloromethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dibromoethane	< 1.0		ug/kg	10/19/92	LJS
Dibromomethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
Dichlorodifluoromethane	< 2.0		ug/kg	10/19/92	LJS
1,1-Dichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/kg	10/19/92	LJS
1,2-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,3-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
2,2-Dichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,1-Dichloropropene	< 1.0		ug/kg	10/19/92	LJS
Ethylbenzene	< 1.0		ug/kg	10/19/92	LJS
Hexachlorobutadiene	< 1.0		ug/kg	10/19/92	LJS
Isopropylbenzene	< 1.0		ug/kg	10/19/92	LJS
p-Isopropyltoluene	< 1.0		ug/kg	10/19/92	LJS
Methylene Chloride	< 1.0		ug/kg	10/19/92	LJS
M-t-butyl-ether	< 1.0		ug/kg	10/19/92	LJS
Naphthalene	< 1.0		ug/kg	10/19/92	LJS
n-Propylbenzene	< 1.0		ug/kg	10/19/92	LJS
Styrene	< 1.0		ug/kg	10/19/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,1,1,2-Tetrachloroethane	< 1.0		ug/kg	10/19/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/kg	10/19/92	LJS
Tetrachloroethene	7.9		ug/kg	10/19/92	LJS
Toluene	< 1.0		ug/kg	10/19/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,2,4-Trichlorobenzene	< 1.0		ug/kg	10/19/92	LJS
1,1,1-Trichloroethane	1.7		ug/kg	10/19/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/kg	10/19/92	LJS
Trichloroethene	4.0		ug/kg	10/19/92	LJS
Trichlorofluoromethane	< 1.0		ug/kg	10/19/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/kg	10/19/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/kg	10/19/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/kg	10/19/92	LJS
Vinyl Chloride	< 2.0		ug/kg	10/19/92	LJS
o-Xylene	< 1.0		ug/kg	10/19/92	LJS
m/p-Xylene	< 1.0		ug/kg	10/19/92	LJS
Mod. GRO (WDNR)	< 5.0		mg/kg	10/13/92	EMC
TPH Diesel Range Organics	< 10		mg/kg	10/19/92	SEL
TRPH, Soil	16		ppm	10/19/92	CEP

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for 8021 were analyzed according to Method 8021 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

All analysis as per approved methods found in one or more of the following:
Standard Methods for the Evaluation of Water and Wastewater, 16th Edition.
Methods for Chemical Analysis for Water and Wastes, Revised March 1983, EPA 600/4-79-020
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition 1986 EPA SW846

Analysis performed and certified by Precision Analytical Laboratory.

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn: G. Kitson
Invoice Number:

Order #: 92-10-076
Date: 10/26/92 10:43
Work ID: 2585.1
Date Received: 10/07/92
Date Completed: 10/26/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	NMW-4(5)		

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

Sample: 01A NMW-4(5) **Collected: 10/05/92**

Test Description	Result	Limit	Units	Analyzed	By
8021 Soil					
Benzene	< 1.0		ug/kg	10/12/92	LJS
Bromobenzene	< 1.0		ug/kg	10/12/92	LJS
Bromochloromethane	< 1.0		ug/kg	10/12/92	LJS
Bromodichloromethane	< 1.0		ug/kg	10/12/92	LJS
Bromoform	< 3.0		ug/kg	10/12/92	LJS
Bromomethane	< 1.0		ug/kg	10/12/92	LJS
n-Butylbenzene	< 1.0		ug/kg	10/12/92	LJS
sec-Butylbenzene	< 1.0		ug/kg	10/12/92	LJS
tert-Butylbenzene	< 1.0		ug/kg	10/12/92	LJS
Carbon tetrachloride	< 1.0		ug/kg	10/12/92	LJS
Chlorobenzene	< 1.0		ug/kg	10/12/92	LJS
Chloroethane	< 2.0		ug/kg	10/12/92	LJS
Chloroform	< 1.0		ug/kg	10/12/92	LJS
Chloromethane	< 1.0		ug/kg	10/12/92	LJS
2-Chlorotoluene	< 1.0		ug/kg	10/12/92	LJS
4-Chlorotoluene	< 1.0		ug/kg	10/12/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	10/12/92	LJS
Dibromochloromethane	< 1.0		ug/kg	10/12/92	LJS
1,2-Dibromoethane	< 1.0		ug/kg	10/12/92	LJS
Dibromomethane	< 1.0		ug/kg	10/12/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/kg	10/12/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/kg	10/12/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/kg	10/12/92	LJS
Dichlorodifluoromethane	< 2.0		ug/kg	10/12/92	LJS
1,1-Dichloroethane	< 1.0		ug/kg	10/12/92	LJS
1,2-Dichloroethane	< 1.0		ug/kg	10/12/92	LJS
1,1-Dichloroethene	< 1.0		ug/kg	10/12/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/kg	10/12/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/kg	10/12/92	LJS
1,2-Dichloropropane	< 1.0		ug/kg	10/12/92	LJS
1,3-Dichloropropane	< 1.0		ug/kg	10/12/92	LJS
2,2-Dichloropropane	< 1.0		ug/kg	10/12/92	LJS
1,1-Dichloropropene	< 1.0		ug/kg	10/12/92	LJS
Ethylbenzene	< 1.0		ug/kg	10/12/92	LJS
Hexachlorobutadiene	< 1.0		ug/kg	10/12/92	LJS
Isopropylbenzene	< 1.0		ug/kg	10/12/92	LJS
p-Isopropyltoluene	< 1.0		ug/kg	10/12/92	LJS
Methylene Chloride	< 1.0		ug/kg	10/12/92	LJS
M-t-butyl-ether	< 1.0		ug/kg	10/12/92	LJS
Naphthalene	< 1.0		ug/kg	10/12/92	LJS
n-Propylbenzene	< 1.0		ug/kg	10/12/92	LJS
Styrene	< 1.0		ug/kg	10/12/92	LJS
1,1,1,2-Tetrachloroethane	< 1.0		ug/kg	10/12/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/kg	10/12/92	LJS
Tetrachloroethene	< 1.0		ug/kg	10/12/92	LJS
Toluene	< 1.0		ug/kg	10/12/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/kg	10/12/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,2,4-Trichlorobenzene	< 1.0		ug/kg	10/12/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/kg	10/12/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/kg	10/12/92	LJS
Trichloroethene	< 1.0		ug/kg	10/12/92	LJS
Trichlorofluoromethane	< 1.0		ug/kg	10/12/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/kg	10/12/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/kg	10/12/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/kg	10/12/92	LJS
Vinyl Chloride	< 2.0		ug/kg	10/12/92	LJS
o-Xylene	< 1.0		ug/kg	10/12/92	LJS
m/p-Xylene	< 1.0		ug/kg	10/12/92	LJS
Dry Weight	88		%	10/13/92	JAH
Mod. GRO (WDNR)	< 5.0		mg/kg	10/13/92	EMC
TPH Diesel Range Organics	< 10		mg/kg	10/17/92	SEL
TRPH, Soil	< 5.0		ppm	10/19/92	CEP

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for 8021 were analyzed according to Method 8021 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

All analysis as per approved methods found in one or more of the following:
Standard Methods for the Evaluation of Water and Wastewater, 16th Edition.
Methods for Chemical Analysis for Water and Wastes, Revised March 1983, EPA 600/4-79-020
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition 1986 EPA SW846

Analysis performed and certified by Precision Analytical Laboratory.

RMT, INC
LABORATORIES

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Schaumburg, IL

Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

No. 043777

Bottles Prepared by:	Date/Time
G. Kitson	10-5-92

Project No.	Client:
2585.01	Navistar

RMT Lab NO.	Yr. 92 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory: 60 ml vials	40 ml glass	250 ml amber	1 gal plastic	MATRIX	Comments:
	10/5	2:24	NMW-4(S)	8	1	6	1			Soil
	10/5		Temp blk	1				1		Tb 10076

Filtered (Yes/No): N N N N
Preserved (Code): F A A A

Code: A - None
B - HNO3
C - H_2SO_4
D - NaOH
E - HCl
F - [illegible]

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① [signature]	10/5/92 3:00 PM	② Shipper Name & #	
Relinquished by (Sig.) ③	Date/Time	Received by (Sig.) ④ Shipper Name & #	Date/Time
Relinquished by (Sig.) ⑤	Date/Time	Received by (Sig.) ⑥ Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal	Present/Absent	Seal	Intact/Not Intact	Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

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Greenville, SC
Schaumburg, IL
Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

NE 043778

Bottles Prepared by:	Date/Time

Project No.	Client:
2585.01	Navistar

RMT Lab NO.	Yr. 92 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory: 500ml amber	60ml glass	60ml glass	125ml plastic	MATRIX	Filtered (Yes/No)	Preserved (Code)	Comments:
												Code: A - None, B - HNO3, C - H_2SO_4, D - NaOH, E - HCl, F - Methanol
	10/6		Temp blk	1			1			N	A	GRO, DRO, TRPH,
	10/6	10:24	Field blk	1			1			N	A	VOC (8021): WI LIST
	10/6	10:09	NMW-1 (2)	8	1	6	1			N	F	
	10/6	3:50	NMW-2 (4)	8	1	6	1			N	A	9210082

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① Gregory J. [illegible]	10/7/92 7:55 AM	② Shipper Name & # [illegible]	10/7/92 7:55 a.m.
Relinquished by (Sig.) ③ [illegible]	Date/Time [illegible]	Received by (Sig.) ④ Shipper Name & # [illegible]	Date/Time
Relinquished by (Sig.) ⑤ [illegible]	Date/Time [illegible]	Received by (Sig.) ⑤ Richard Leahy Shipper Name & #	Date/Time 10/7/92 3:40

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal	Present/Absent	Seal	Intact/Not Intact	Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

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LABORATORIES

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Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

NO 043779

Bottles Prepared by: | Date/Time

Project No.: 2585.01

Client: Navistar

RMT Lab NO.	Yr. 92 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory: 125ml plastic	60ml clear	60ml glass	500ml amber	Filtered (Yes/No)	Preserved (Code)	MATRIX	Comments:
	10/7	—	Temp blk	1	1				N	A		GRO, DRO, TRPH,
	10/7	3:10P	Field blk	1			1		N	A		VOC (8021)
	10/7	2:45P	NMW-3(1)	8		6	1	1	N	F		WI LUST
												9210036

Code: A - None
B - HNO3
C - H_2SO_4
D - NaOH
E - HCl
F - Methanol

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.) Shipper Name & #	Date/Time
① Gregory J. [illegible]	10/7/92 3:45P	② Mario Valentini	10/8/92 [illegible]
Relinquished by (Sig.) ③ [illegible]	Date/Time [illegible]	Received by (Sig.) ④ Richard Lickey Shipper Name & #	Date/Time 10/8/92 1110
Relinquished by (Sig.) ⑤	Date/Time	Received by (Sig.) ⑥ Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal | Present/Absent | Seal | Intact/Not Intact | Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

RMT INC
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...d Ledge, MI
...nville, TN

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Schaumburg, IL

Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

No 043780

Bottles Prepared by:	Date/Time

Project No.	Client:
2585.01	Navistar

RMT Lab NO.	Yr. 92 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory: 125ml plastic	60 ml glass	60 ml glass	1,000 ml amber	Filtered (Yes/No)	Preserved (Code)	MATRIX	Comments:
	10/8	—	Trip blk	1	1							GRO, DRO, TRPH
6113-1	10/8		Field blk	1			1					VOC (8021)
-2	10/8	9:15A	NMW-5 (6)	8		6	1	1				WI LUST
-3	10/8	3:00P	NMW-6 (1)	8		6	1	1				

Code: A - None
B - HNO3
C - H_2SO_4
D - NaOH
E - HCl
F - Methanol

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① Gregory Pat	10/8/92 4:52	② Shipper Name & # Overnite storage	10/12/92 4:52
Relinquished by (Sig.) ③	Date/Time	Received by (Sig.) ④ Richard Lang Shipper Name & #	Date/Time 10/9/92 2 PM
Relinquished by (Sig.) ⑤	Date/Time	Received by (Sig.) ⑥ Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal	Present/Absent	Seal	Intact/Not Intact	Seal #'s

SOIL SAMPLE RESULTS
FROM
MARCH 1993 BORINGS

RMT, INC
LABORATORIES

SAMPLE NARRATIVE
VOLATILE ORGANIC GC/MS ANALYSIS

PROJECT NAME: NAVISTAR
PROJECT NUMBER: 2585.03
SAMPLE NUMBER(S): 1191-006 and 1191-007
ANALYSIS TYPE: WVOATCL
DATE: 04/01/93

Sample numbers 1191-006 and 1191-007 had repeated internal standard recovery failure. The first analysis for each sample is reported. The QC criteria failures are related to the matrix.

RMT INC
LABORATORIES

Organic GC/MS Data Qualifier Sheet

B(n)	Analyte present in the method blank. If the processes that were applied to the sample were applied to the method blank, the value of the analyte in the method blank would likely be "n."
D	Analyte value from a diluted analysis.
E	Analyte concentration exceeds calibration range (see Case Narrative).
H(n)	Analysis performed "n" days past holding time.
J	Estimated concentration of tentatively identified compound (TIC).
NR	Not required.
Q	Qualitative mass spectral evidence of analyte present; concentration is less than the reporting limit.
U	Analyte undetected.
W	Sample received with headspace.

Effective 3/2/92

RMT, INC.
LABORATORIES

Volatile Organic Analysis Results

Report Date :04/01/93

RMT Lab # :1191-003
WO # :1191
Client :NAVISTAR

Field ID :NAV1-S1 2-4'
Project # :02585.03

Matrix (Soil/Water)	Soil		Sampling Date:	03/19/93
Sample wt/vol:	5.0	(g/ml) g		
Level: (Low/Med)	Low		Analysis date:	03/25/93
			Lab file ID:	BI002
% Moisture:	50		Dilution Factor:	1
Column: (Pack/Cap)	Cap			

Concentration Units: ug/kg dry wt.

CAS #	Compound	Conc.	EQL	CODE
	Chloromethane		20	UW
	Bromomethane		20	UW
	Vinyl chloride		20	UW
	Chloroethane		20	UW
	Methylene chloride		20	UW
	1,1-Dichloroethene		20	UW
	1,1-Dichloroethane	9	20	QW
	1,2-Dichloroethene, total		20	UW
	Chloroform		20	UW
	1,2-Dichloroethane		20	UW
	1,1,1-Trichloroethane	100	20	W
	Carbon tetrachloride		20	UW
	Bromodichloromethane		20	UW
	1,2-Dichloropropane		20	UW
	cis-1,3-Dichloropropene		20	UW
	Trichloroethene		20	UW
	Chlorodibromomethane		20	UW
	1,1,2-Trichloroethane		20	UW
	Benzene		20	UW
	trans-1,3-Dichloropropene		20	UW
	Bromoform		20	UW
	Tetrachloroethene		20	UW
	1,1,2,2-Tetrachloroethane		20	UW
	Toluene	7	20	QW
	Chlorobenzene		20	UW
	Ethylbenzene	1	20	QW
	Styrene		20	UW
	Xylene, total	5	20	QW

Mark A. Mentz 4/1/93
Approval Signature

RMT VC
LABORATORIES

Volatile Organic Analysis Results

Report Date :04/01/93

RMT Lab # :1191-004
WO # :1191
Client :NAVISTAR

Field ID :NAV3-S2 6-8'

Project # :02585.03

Matrix (Soil/Water)	Soil		Sampling Date:	03/19/93
Sample wt/vol:	5.0	(g/ml) g		
Level: (Low/Med)	Low		Analysis date:	03/25/93
			Lab file ID:	BI003
% Moisture:	13		Dilution Factor:	1
Column: (Pack/Cap)	Cap			

Concentration Units: ug/kg dry wt.

CAS #	Compound	Conc.	EQL	CODE
	Chloromethane		11	UW
	Bromomethane		11	UW
	Vinyl chloride		11	UW
	Chloroethane		11	UW
	Methylene chloride		11	UW
	1,1-Dichloroethene		11	UW
	1,1-Dichloroethane		11	UW
	1,2-Dichloroethene, total		11	UW
	Chloroform		11	UW
	1,2-Dichloroethane		11	UW
	1,1,1-Trichloroethane		11	UW
	Carbon tetrachloride		11	UW
	Bromodichloromethane		11	UW
	1,2-Dichloropropane		11	UW
	cis-1,3-Dichloropropene		11	UW
	Trichloroethene		11	UW
	Chlorodibromomethane		11	UW
	1,1,2-Trichloroethane		11	UW
	Benzene		11	UW
	trans-1,3-Dichloropropene		11	UW
	Bromoform		11	UW
	Tetrachloroethene		11	UW
	1,1,2,2-Tetrachloroethane		11	UW
	Toluene	1	11	QW
	Chlorobenzene		11	UW
	Ethylbenzene		11	UW
	Styrene		11	UW
	Xylene, total	1	11	QW

Mark L. Maier 4/1/93
Approval Signature

RMT INC
LABORATORIES

Volatile Organic Analysis Results

Report Date :04/01/93

RMT Lab # :1191-005
WO # :1191
Client :NAVISTAR

Field ID :NAV4-S2 6-8'

Project # :02585.03

Matrix (Soil/Water)	Soil		Sampling Date:	03/19/93
Sample wt/vol:	5.0	(g/ml) g		
Level: (Low/Med)	Low		Analysis date:	03/25/93
			Lab file ID:	BI004
% Moisture:	12		Dilution Factor:	1
Column: (Pack/Cap)	Cap			

Concentration Units: ug/kg dry wt.

CAS #	Compound	Conc.	EQL	CODE
	Chloromethane		11	UW
	Bromomethane		11	UW
	Vinyl chloride		11	UW
	Chloroethane		11	UW
	Methylene chloride		11	UW
	1,1-Dichloroethene		11	UW
	1,1-Dichloroethane		11	UW
	1,2-Dichloroethene, total		11	UW
	Chloroform		11	UW
	1,2-Dichloroethane		11	UW
	1,1,1-Trichloroethane		11	UW
	Carbon tetrachloride		11	UW
	Bromodichloromethane		11	UW
	1,2-Dichloropropane		11	UW
	cis-1,3-Dichloropropene		11	UW
	Trichloroethene		11	UW
	Chlorodibromomethane		11	UW
	1,1,2-Trichloroethane		11	UW
	Benzene		11	UW
	trans-1,3-Dichloropropene		11	UW
	Bromoform		11	UW
	Tetrachloroethene		11	UW
	1,1,2,2-Tetrachloroethane		11	UW
	Toluene		11	UW
	Chlorobenzene		11	UW
	Ethylbenzene		11	UW
	Styrene		11	UW
	Xylene, total	1	11	QW

Mark A. Mauk 4/1/93
Approval Signature

RMT INC LABORATORIES

Volatile Organic Analysis Results

Report Date :04/01/93

RMT Lab # :1191-006
WO # :1191
Client :NAVISTAR

Field ID :NAV5-S1 2-4'

Project # :02585.03

Matrix (Soil/Water)	Soil		Sampling Date:	03/20/93
Sample wt/vol:	5.0	(g/ml) g		
Level: (Low/Med)	Low		Analysis date:	03/25/93
			Lab file ID:	BI005
% Moisture:	23		Dilution Factor:	1
Column: (Pack/Cap)	Cap			

Concentration Units: ug/kg dry wt.

CAS #	Compound	Conc.	EQL	CODE
	Chloromethane		13	UW
	Bromomethane		13	UW
	Vinyl chloride		13	UW
	Chloroethane		13	UW
	Methylene chloride		13	UW
	1,1-Dichloroethene		13	UW
	1,1-Dichloroethane		13	UW
	1,2-Dichloroethene, total		13	UW
	Chloroform		13	UW
	1,2-Dichloroethane		13	UW
	1,1,1-Trichloroethane	24	13	W
	Carbon tetrachloride		13	UW
	Bromodichloromethane		13	UW
	1,2-Dichloropropane		13	UW
	cis-1,3-Dichloropropene		13	UW
	Trichloroethene	67	13	W
	Chlorodibromomethane		13	UW
	1,1,2-Trichloroethane		13	UW
	Benzene	3	13	QW
	trans-1,3-Dichloropropene		13	UW
	Bromoform		13	UW
	Tetrachloroethene		13	UW
	1,1,2,2-Tetrachloroethane		13	UW
	Toluene	17	13	W
	Chlorobenzene		13	UW
	Ethylbenzene	2	13	QW
	Styrene		13	UW
	Xylene, total	10	13	QW

Mark G. Mauch 4/6/93
Approval Signature

RMT INC
LABORATORIES

Volatile Organic Analysis Results

Report Date :04/01/93

RMT Lab # :1191-007
WO # :1191
Client :NAVISTAR

Field ID :NAV6B-S1 3-4'

Project # :02585.03

Matrix (Soil/Water)	Soil		Sampling Date:	03/20/93
Sample wt/vol:	5.0	(g/ml) g		
Level: (Low/Med)	Low		Analysis date:	03/25/93
			Lab file ID:	BI006
% Moisture:	14		Dilution Factor:	1
Column: (Pack/Cap)	Cap			

Concentration Units: ug/kg dry wt.

CAS #	Compound	Conc.	EQL	CODE
	Chloromethane		12	UW
	Bromomethane		12	UW
	Vinyl chloride		12	UW
	Chloroethane		12	UW
	Methylene chloride		12	UW
	1,1-Dichloroethene		12	UW
	1,1-Dichloroethane		12	UW
	1,2-Dichloroethene, total		12	UW
	Chloroform		12	UW
	1,2-Dichloroethane		12	UW
	1,1,1-Trichloroethane	3	12	QW
	Carbon tetrachloride		12	UW
	Bromodichloromethane		12	UW
	1,2-Dichloropropane		12	UW
	cis-1,3-Dichloropropene		12	UW
	Trichloroethene	3	12	QW
	Chlorodibromomethane		12	UW
	1,1,2-Trichloroethane		12	UW
	Benzene		12	UW
	trans-1,3-Dichloropropene		12	UW
	Bromoform		12	UW
	Tetrachloroethene		12	UW
	1,1,2,2-Tetrachloroethane		12	UW
	Toluene	2	12	QW
	Chlorobenzene		12	UW
	Ethylbenzene		12	UW
	Styrene		12	UW
	Xylene, total	2	12	QW

Mark A. Miaut 4/1/93
Approval Signature

RMT INC
LABORATORIES

Volatile Organic Analysis Results

Report Date :04/01/93

RMT Lab # :1191-002
WO # :1191
Client :NAVISTAR

Field ID :TRIP BLANK

Project # :02585.03

Matrix (Soil/Water) Water
Sample wt/vol: 5.0 (g/ml) ml
Level: (Low/Med) Low

Sampling Date: 03/19/93
Analysis date: 03/25/93
Lab file ID: BI001
Dilution Factor: 1

Column: (Pack/Cap) Cap

Concentration Units: ug/L

CAS #	Compound	Conc.	EQL	CODE
	Chloromethane		10	U
	Bromomethane		10	U
	Vinyl chloride		10	U
	Chloroethane		10	U
	Methylene chloride		10	U
	1,1-Dichloroethene		10	U
	1,1-Dichloroethane		10	U
	1,2-Dichloroethene, total		10	U
	Chloroform		10	U
	1,2-Dichloroethane		10	U
	1,1,1-Trichloroethane		10	U
	Carbon tetrachloride		10	U
	Bromodichloromethane		10	U
	1,2-Dichloropropane		10	U
	cis-1,3-Dichloropropene		10	U
	Trichloroethene		10	U
	Chlorodibromomethane		10	U
	1,1,2-Trichloroethane		10	U
	Benzene		10	U
	trans-1,3-Dichloropropene		10	U
	Bromoform		10	U
	Tetrachloroethene		10	U
	1,1,2,2-Tetrachloroethane		10	U
	Toluene		10	U
	Chlorobenzene		10	U
	Ethylbenzene		10	U
	Styrene		10	U
	Xylene, total		10	U

Mark A. Mieure 4/1/93
Approval Signature

RMT INC
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Schaumburg, IL

Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

No: 042772

Bottles Prepared by:	Date/Time

Project No.	Client:

RMT Lab NO.	Yr. 93 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory							MATRIX	Comments:
	3/11			1	1								
				2			2						
	3/11	9:15	NAV1-S1 2-4'	1		1						SOIL	
	"	11:00	NAV3-S2 6-8'	1		1						"	
	↓	3:15	NAV 4-S2 6-8'	2		2						"	
	3/20	12:50	NAV 5-S1 2-4'	2		2						"	
	3/20	1:10	NAV 6B-S1 3-4'	1		1						↓	

Filtered (Yes/No)
Preserved (Code)

Code: A - None
B - HNO3
C - H_2SO4
D - NaOH
E - HCl
F - _____

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① Patt A. Qwens	7/24/93 8:30 am	② Shipper Name & #	
Relinquished by (Sig.) ③	Date/Time	Received by (Sig.) ④ Shipper Name & #	Date/Time
Relinquished by (Sig.) ⑤	Date/Time	Received by (Sig.) ⑥ Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal	Present/Absent	Seal	Intact/Not Intact	Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

NAVI S1

Tanks - East - 2-4

Layne Geoscience Inc.
N 4140 Dutchmans Road
Pewaukee, WI 53072
Account Number: AA

ANALYTICAL REPORT

IRONSHORE ANALITYCAL
ENVIRONMENTAL LABORATORIES
10610 W. Venture Dr.
Franklin, WI 53132
(414)427-9339
Fax 427-9309

Test Requested: 8260 Voc (soil)
Project No: Navistar
Sample No: Navi-S1
Lab I.D: CCCC22VA
Report Date: 3-25-93
Received: 3-22-93

Analyte	Amount Det (PPM)	Det. Limit (PPM)	Reg Limit (PPM)	Analyte	Amount Det (PPM)	Det. limit (PPM)	Reg limit (PPM)
Benzene	0.0027	0.0010	/	2,2-Dichloropropane	BDL	0.0010	/
Bromobenzene	BDL	0.0010	/	1,1-Dichloropropene	BDL	0.0010	/
Bromochloromethane	BDL	0.0010	/	cis-1,3-Dichloropropene	BDL	0.0010	/
Bromodichloromethane	BDL	0.0010	/	trans-1,3-Dichloropropene	BDL	0.0010	/
Bromoform	BDL	0.0010	/	Ethylbenzene	0.0088	0.0010	/
Bromomethane	BDL	0.0010	/	Hexachlorobutadiene	BDL	0.0010	/
n-Butylbenzene	BDL	0.0010	/	Isopropylbenzene	BDL	0.0010	/
sec-Butylbenzene	BDL	0.0010	/	p-Isopropyltoluene	BDL	0.0010	/
tert-Butylbenzene	BDL	0.0010	/	Methyl-t-butyl ether	BDL	0.0010	/
Carbon Tetrachloride	BDL	0.0010	/	Methylene Chloride	BDL	0.0010	/
Chlorobenzene	BDL	0.0010	/	Naphalene	0.038	0.0010	/
Chlorodibromethane	BDL	0.0010	/	n-Propylbenzene	BDL	0.0010	/
Chloroethane	BDL	0.0150	/	Styrene	BDL	0.0010	/
Chloromethane	BDL	0.0010	/	1,1,1,2-tetrachloroethane	BDL	0.0010	/
2-Chlorotoluene	BDL	0.0010	/	1,1,2,2-tetrachloroethane	BDL	0.0010	/
4-Chlorotoluene	BDL	0.0010	/	Tetrachloroethene	BDL	0.0010	1
1,2-Dibromo-3-Chloropropane	BDL	0.0010	(#)	Toluene	0.0144	0.0010	/
1,2-Dibromoethane	BDL	0.0010	(#)	1,2,3-Trichlorobenzene	BDL	0.0010	/
Dibromomethane	BDL	0.0010	/	1,2,4-Trichlorobenzene	BDL	0.0010	/
1,2-Dichlorobenzene	BDL	0.0010	/	1,1,1-Trichloroethane	(0.369)	0.0010	/
1,3-Dichlorobenzene	BDL	0.0010	/	1,1,2-Trichloroethene	BDL	0.0010	/
1,4-Dichlorobenzene	BDL	0.0010	/	Trichloroethene	(0.0027)	0.0010	/
Dichlorodifluoromethane	BDL	0.0010	/	Trichlorofluoromethane	0.0024	0.0010	/
1,1-Dichloroethane	0.032	0.0010	/	1,2,3-Trichloropropane	BDL	0.0010	/
1,2-Dichloroethane	BDL	0.0010	/	Trichloromethane	BDL	0.0010	/
1,1-Dichloroethene	BDL	0.0010	/	1,3,5-Trimethylbenzene	BDL	0.0010	/
cis-1,2-Dichloroethene	BDL	0.0010	/	1,2,4-Trimethylbenzene	0.0085	0.0010	/
trans-1,2-Dichloroethene	BDL	0.0010	/	Xylene(total)	0.0044	0.0010	/
1,2-Dichloropropane	BDL	0.0010	/	Vinyl Chloride	BDL	0.0010	/
1,3-Dichloropropane	BDL	0.0010	/	# Det. Limit = Reg Limit			

Comments:

Lab Director
Richard Krawczynski

OFC CCCC22VA

G.W.
TLA 200 ppb
TLC 5 ppb.

West Fence Line 2-

NAV3-S2

Layne Geoscience Inc.
N 4140 Doplainville Road
Pewaukee, WI 53072
Account Number: AA

ANALYTICAL REPORT

IRONSHORE ANALYTICAL
ENVIRONMENTAL LABORATORIES
10610 W Venture Dr.
Franklin, WI 53132
(414)427-9009
Fax 427-8309

Test Requested: 8260 Voc (soil)
Project No: Navistar
Sample No: Nav 3-S2
Lab I.D: CCCC22VB
Report Date: 3-25-93
Recieved: 3-22-93

Analyte	Amount Det (PPM)	Det. Limit (PPM)	Req. Limit (PPM)	Analyte	Amount Det. (PPM)	Det. limit (PPM)	Req. limit (PPM)
Benzene	0.0028	0.0010	/	2,2-Dichloropropane	BDL	0.0010	/
Bromobenzene	BDL	0.0010	/	1,1-Dichloropropane	BDL	0.0010	/
Bromochloromethane	BDL	0.0010	/	cis-1,3-Dichloropropene	BDL	0.0010	/
Bromodichloromethane	BDL	0.0010	/	trans-1,3-Dichloropropene	BDL	0.0010	/
Bromoform	BDL	0.0010	/	Ethylbenzene	0.0108	0.0010	/
Bromomethane	BDL	0.0010	/	Hexachlorobutadiene	BDL	0.0010	/
n-Butylbenzene	BDL	0.0010	/	Isopropylbenzene	BDL	0.0010	/
sec-Butylbenzene	BDL	0.0010	/	p-Isopropyltoluene	BDL	0.0010	/
tert-Butylbenzene	BDL	0.0010	/	Methyl-t-butyl ether	BDL	0.0010	/
Carbon Tetrachloride	BDL	0.0010	/	Methylene Chloride	BDL	0.0010	/
Chlorobenzene	BDL	0.0010	/	Naphthalene	BDL	0.0010	/
Chlorodibromethane	BDL	0.0010	/	n-Propylbenzene	BDL	0.0010	/
Chloroethane	BDL	0.0150	/	Styrene	BDL	0.0010	/
Chloromethane	BDL	0.0010	/	1,1,1,2-tetrachloroethane	BDL	0.0010	/
2-Chlorotoluene	BDL	0.0010	/	1,1,2,2-tetrachloroethane	BDL	0.0010	/
4-Chlorotoluene	BDL	0.0010	/	Tetrachoroethane	BDL	0.0010	/
1,2-Dibromo-3-Chloropropane	BDL	0.0010	(#)	Toluene	0.0151	0.0010	/
1,2-Dibromoethane	BDL	0.0010	(#)	1,2,3-Trichlorobenzene	BDL	0.0010	/
Dibromomethane	BDL	0.0010	/	1,2,4-Trichlorobenzene	BDL	0.0010	/
1,2-Dichlorobenzene	BDL	0.0010	/	1,1,1-Trichloroethane	(0.0141)	0.0010	/
1,2-Dichlorobenzene	BDL	0.0010	/	1,1,2-Trichloroethene	BDL	0.0010	/
1,4-Dichlorobenzene	BDL	0.0010	/	Trichloroethene	BDL	0.0010	/
Dichlorodifluoromethane	BDL	0.0010	/	Trichlorofluoromethane	BDL	0.0010	/
1,1-Dichloroethane	BDL	0.0010	/	1,2,3-Trichloropropane	BDL	0.0010	/
1,2-Dichloroethane	BDL	0.0010	/	Trichloromethane	BDL	0.0010	/
1,1Dichloroethene	BDL	0.0010	/	1,3,5-Trimethylbenzene	BDL	0.0010	/
cis-1,2-Dichloroethene	BDL	0.0010	/	1,2,4-Trimethylbenzene	BDL	0.0010	/
trans-1,2-Dichloroethene	BDL	0.0010	/	Xylene(total)	BDL	0.0010	/
1,2-Dichloropropane	BDL	0.0010	/	Vinyl Chloride	BDL	0.0010	/
1,3-Dichloropropane	BDL	0.0010	/	# Det. Limit = Req Limit			

Comments:

Lab Director
Richard Kawczynski

RK

DFC CCCC22VB

NAV4-S2

Refuse Pit. 2-4

Layne Geoscience Inc.
N.4140 Duplainville Road
Pewaukee, WI. 53072
Account Number: AA

ANALYTICAL REPORT

IRONSHORE ANALITYCAL
ENVIRONMENTAL LABORATORIES
10510 W. Ventura Dr.
Franklin, Wi. 53132
(414)-427-9029
Fax 427-9309

Test Requested: 8260-Voc (soil)
Project No.: Navistar
Sample No.: Nav 4-S2
Lab I.D.: CCCCZZVC
Report Date: 3-25-93
Recieved: 3-22-93

Analyte	Amount Det (PPM)	Det Limit (PPM)	Reg Limit (PPM)	Analyte	Amount Det. (PPM)	Det limit (PPM)	Reg. limit (PPM)
Benzene	BDL	0.0010	/	2,2-Dichloropropane	BDL	0.0010	/
Bromobenzene	BDL	0.0010	/	1,1-Dichloropropene	BDL	0.0010	/
Bromochloromethane	BDL	0.0010	/	cis-1,3-Dichloropropene	BDL	0.0010	/
Bromodichloromethane	BDL	0.0010	/	trans-1,3-Dichloropropene	BDL	0.0010	/
Bromoform	BDL	0.0010	/	Ethylbenzene	0.0205	0.0010	/
Bromomethane	BDL	0.0010	/	Hexachlorobutadiene	BDL	0.0010	/
n-Butylbenzene	BDL	0.0010	/	Isopropylbenzene	BDL	0.0010	/
sec-Butylbenzene	BDL	0.0010	/	p-Isopropyltoluene	BDL	0.0010	/
tert-Butylbenzene	BDL	0.0010	/	Methyl-t-butyl ether	BDL	0.0010	/
Carbon Tetrachloride	BDL	0.0010	/	Methylene Chloride	BDL	0.0010	/
Chlorobenzene	BDL	0.0010	/	Naphthalene	BDL	0.0010	/
Chlorodibromomethane	BDL	0.0010	/	n-Propylbenzene	BDL	0.0010	/
Chloroethane	BDL	0.0150	/	Styrene	BDL	0.0010	/
Chloromethane	BDL	0.0010	/	1,1,1,2-tetrachloroethane	BDL	0.0010	/
2-Chlorotoluene	BDL	0.0010	/	1,1,2,2-tetrachloroethane	BDL	0.0010	/
4-Chlorotoluene	BDL	0.0010	/	Tetrachloroethene	BDL	0.0010	1
1,2-Dibromo-3-Chloropropane	BDL	0.0010	(#)	Toluene	0.0171	0.0010	/
1,2-Dibromoethane	BDL	0.0010	(#)	1,2,3-Trichlorobenzene	BDL	0.0010	/
Dibromomethane	BDL	0.0010	/	1,2,4-Trichlorobenzene	BDL	0.0010	/
1,2-Dichlorobenzene	BDL	0.0010	/	1,1,1-Trichloroethane	0.0182	0.0010	/
1,3-Dichlorobenzene	BDL	0.0010	/	1,1,2-Trichloroethane	BDL	0.0010	/
1,4-Dichlorobenzene	BDL	0.0010	/	Trichloroethene	BDL	0.0010	/
Dichlorodifluoromethane	BDL	0.0010	/	Trichlorofluoromethane	BDL	0.0010	/
1,1-Dichloroethane	BDL	0.0010	/	1,2,3-Trichloropropane	BDL	0.0010	/
1,2-Dichloroethane	BDL	0.0010	/	Trichloromethane	BDL	0.0010	/
1,1Dichloroethene	BDL	0.0010	/	1,3,5-Trimethylbenzene	0.021	0.0010	/
cis-1,2-Dichloroethene	BDL	0.0010	/	1,2,4-Trimethylbenzene	BDL	0.0010	/
trans-1,2-Dichloroethene	BDL	0.0010	/	Xylene(total)	0.0075	0.0010	/
1,2-Dichloropropane	BDL	0.0010	/	Vinyl Chloride	BDL	0.0010	/
1,3-Dichloropropane	BDL	0.0010	/	# Det. Limit = Reg Limit			

Comments:

Lab Director
Richard Kawczynski

RK

DEC CCCCZZVC

KAOS-S1

Layne Geoscience Inc.
N 4140 Duplainville Road
Pewaukee, WI 53072
Account Number: AA

ANALYTICAL REPORT

IRONSHORE ANALYTICAL
ENVIRONMENTAL LABORATORIES
10610 W. Venture Dr.
Franklin, WI 53132
(414)-427-9339
Fax 427-9309

Test Requested: 8260 Voc (soil)
Project No: Newstar
Sample No: New S-S1
Lab I.D: CCCCZZV0

Report Date: 3-25-93
Recieved: 3-22-93

Analyte	Amount Det (PPM)	Det. Limit (PPM)	Reg. Limit (PPM)	Analyte	Amount Det (PPM)	Det. limit (PPM)	Reg. limit (PPM)
Benzene	0.0211	0.0010	/	2,2-Dichloropropane	BDL	0.0010	/
Bromobenzene	BDL	0.0010	/	1,1-Dichloropropane	BDL	0.0010	/
Bromochloromethane	BDL	0.0010	/	cis-1,3-Dichloropropane	BDL	0.0010	/
Bromodichloromethane	BDL	0.0010	/	trans-1,3-Dichloropropane	BDL	0.0010	/
Bromoform	BDL	0.0010	/	Ethylbenzene	0.0151	0.0010	/
Bromomethane	BDL	0.0010	/	Hexachlorobutadiene	BDL	0.0010	/
n-Butylbenzene	BDL	0.0010	/	Isopropylbenzene	BDL	0.0010	/
sec-Butylbenzene	BDL	0.0010	/	p-Isopropyltoluene	BDL	0.0010	/
tert-Butylbenzene	BDL	0.0010	/	Methyl-t-butyl ether	BDL	0.0010	/
Carbon Tetrachloride	BDL	0.0010	/	Methylene Chloride	BDL	0.0010	/
Chlorobenzene	BDL	0.0010	/	Naphthalene	BDL	0.0010	/
Chlorodibromethane	BDL	0.0010	/	n-Propylbenzene	BDL	0.0010	/
Chloroethane	BDL	0.0150	/	Styrene	BDL	0.0010	/
Chloromethane	BDL	0.0010	/	1,1,1,2-tetrachloroethane	BDL	0.0010	/
2-Chlorotoluene	BDL	0.0010	/	1,1,2,2-tetrachloroethene	BDL	0.0010	/
4-Chlorotoluene	BDL	0.0010	/	Tetrachloroethene	BDL	0.0010	/
1,2-Dibromo-3-Chloropropane	BDL	0.0010	(#)	Toluene	0.03	0.0010	/
1,2-Dibromoethane	BDL	0.0010	(#)	1,2,3-Trichlorobenzene	BDL	0.0010	/
Dibromomethane	BDL	0.0010	/	1,2,4-Trichlorobenzene	BDL	0.0010	/
1,2-Dichlorobenzene	BDL	0.0010	/	1,1,1-Trichloroethane	0.203	0.0010	/
1,3-Dichlorobenzene	BDL	0.0010	/	1,1,2-Trichloroethane	BDL	0.0010	/
1,4-Dichlorobenzene	BDL	0.0010	/	Trichloroethene	0.096	0.0010	/
Dichlorodifluoromethane	BDL	0.0010	/	Trichlorofluoromethane	0.0197	0.0010	/
1,1-Dichloroethane	BDL	0.0010	/	1,2,3-Trichloropropane	BDL	0.0010	/
1,2-Dichloroethene	BDL	0.0010	/	Trichloromethane	BDL	0.0010	/
1,1-Dichloroethene	BDL	0.0010	/	1,3,5,-Trimethylbenzene	0.0073	0.0010	/
cis-1,2-Dichloroethene	BDL	0.0010	/	1,2,4,-Trimethylbenzene	BDL	0.0010	/
trans-1,2-Dichloroethene	BDL	0.0010	/	Xylene(total)	0.012	0.0010	/
1,2-Dichloropropane	BDL	0.0010	/	Vinyl Chloride	BDL	0.0010	/
1,3-Dichloropropene	BDL	0.0010	/	# Det. Limit = Reg Limit			

Comments:

Lab Director
Richard Kawczynski

OFC: CCCCZZV0

trans-1,2-Dichloroethene	BDL	0.0010	/	Xylene(total)	0.0051	0.0010	/
1,2-Dichloropropane	BDL	0.0010	/	Vinyl Chloride	BDL	0.0010	/
1,3-Dichloropropene	BDL	0.0010	/	# Det. Limit = Reg Limit			

Comments:

Lab Director
Richard Kawczynski

OFC: CCCCZZV0

MAR 26 '93 13:04

TOTAL P.26
PAGE.006

03-26-1993 02:20PM FROM TO 6919279 P.06

29P. 9077

Inside old west core room 2-4'

NAVB-S1

Layne Geosciences Inc.
N 8140 Dupleinville Road
Pewaukee, WI 53072
Account Number: AA

ANALYTICAL REPORT

IRONSHORE ANALYTICAL
ENVIRONMENTAL LABORATORIES
10810 W. Venture Dr
Franklin, WI 53132
(414)427-2939
Fax 427-2009

Test Requested: 8260-Voc (soil)

Project No: Newsletter
Sample No: Nav B-S1
Lab I.D: CCCC2ZVE

Report Date: 3-25-93
Received: 3-22-93

Analyte	Amount Det (PPM)	Det Limit (PPM)	Reg Limit (PPM)	Analyte	Amount Det. (PPM)	Det limit (PPM)	Reg. limit (PPM)
Benzene	0.0048	0.0010	/	2,2-Dichloropropane	BDL	0.0010	/
Bromobenzene	BDL	0.0010	/	1,1-Dichloropropene	BDL	0.0010	/
Bromochloromethane	BDL	0.0010	/	cis-1,3-Dichloropropene	BDL	0.0010	/
Bromodichloromethane	BDL	0.0010	/	trans-1,3-Dichloropropene	BDL	0.0010	/
Bromoform	BDL	0.0010	/	Ethylbenzene	0.011	0.0010	/
Bromomethane	BDL	0.0010	/	Hexachlorobutadiene	BDL	0.0010	/
n-Butylbenzene	BDL	0.0010	/	Isopropylbenzene	BDL	0.0010	/
sec-Butylbenzene	BDL	0.0010	/	p-Isopropyltoluene	BDL	0.0010	/
tert-Butylbenzene	BDL	0.0010	/	Methyl t-butyl ether	BDL	0.0010	/
Carbon Tetrachloride	BDL	0.0010	/	Methylene Chloride	BDL	0.0010	/
Chlorobenzene	BDL	0.0010	/	Naphthalene	BDL	0.0010	/
Chlorodibromomethane	BDL	0.0010	/	n-Propylbenzene	BDL	0.0010	/
Chloroethane	BDL	0.0150	/	Styrene	BDL	0.0010	/
Chloroform	BDL	0.0010	/	1,1,1,2-Tetrachloroethane	BDL	0.0010	/
2-Chlorotoluene	BDL	0.0010	/	1,1,2,2-Tetrachloroethane	BDL	0.0010	/
4-Chlorotoluene	BDL	0.0010	/	Tetrachloroethene	BDL	0.0010	/
1,2-Dibromo-3-Chloropropane	BDL	0.0010	(9)	Toluene	0.0171	0.0010	/
1,2-Dibromoethane	BDL	0.0010	(4)	1,2,3-Trichlorobenzene	BDL	0.0010	/
Dibromomethane	BDL	0.0010	/	1,2,4-Trichlorobenzene	BDL	0.0010	/
1,2-Dichlorobenzene	BDL	0.0010	/	1,1,1-Trichloroethane	BDL	0.0010	/
1,3-Dichlorobenzene	BDL	0.0010	/	1,1,2-Trichloroethane	BDL	0.0010	/
1,4-Dichlorobenzene	BDL	0.0010	/	Trichloroethene	BDL	0.0010	/
Dichlorodifluoromethane	BDL	0.0010	/	Trichlorofluoromethane	BDL	0.0010	/
1,1-Dichloroethane	BDL	0.0010	/	1,2,3-Trichloropropane	BDL	0.0010	/
1,2-Dichloroethene	BDL	0.0010	/	Trichloromethane	BDL	0.0010	/
1,1-Dichloroethene	BDL	0.0010	/	1,3,5-Trimethylbenzene	0.0054	0.0010	/
cis-1,2-Dichloroethene	BDL	0.0010	/	1,2,4-Trimethylbenzene	BDL	0.0010	/
trans-1,2-Dichloroethene	BDL	0.0010	/	Xylenes(total)	0.0051	0.0010	/
1,2-Dichloropropane	BDL	0.0010	/	Vinyl Chloride	BDL	0.0010	/
1,3-Dichloropropane	BDL	0.0010	/	# Det. Limit = Reg Limit			

Comments:

Lab Director
Richard Kwarczynski

DEC CCCC2ZVE

TOTAL P.06

SOIL SAMPLE RESULTS
FROM
APRIL 1993 BORINGS

RMT
LABORATORIES

SAMPLE NARRATIVE
VOLATILE ORGANIC GC ANALYSIS

PROJECT NAME: NAVISTAR
PROJECT NUMBER: 2585.04
SAMPLE NUMBER(S): 1349-002
ANALYSIS TYPE: 8021-
DATE: 04/28/93

The detection limit for 1,3-dichloropropane was raised for sample number 1349-002 due to coelution with tetrachloroethene on the detector used to quantitate 1,3-dichloropropane.

RMT, Inc., 744 Heartland Trail, P. O. Box 8923, Madison, WI 53708-8923, Phone: 608-831-4444, Fax: 608-831-7530

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-002
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-1(04)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	11	2.0	ug/kg dry wt
34418	Chloromethane	5.3	1.0	ug/kg dry wt
39175	Vinyl chloride	5.3	1.0	ug/kg dry wt
34311	Chloroethane	5.3	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	5.3	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	5.3	1.0	ug/kg dry wt
34423	Methylene chloride	5.3	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	5.3	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	5.3	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	5.3	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	5.3	1.0	ug/kg dry wt
32106	Chloroform	5.3	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	5.3	1.0	ug/kg dry wt
32102	Carbon tetrachloride	5.3	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	5.3	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	5.3	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	5.3	1.0	ug/kg dry wt
78124	Benzene	5.3	1.0	ug/kg dry wt
39180	Trichloroethene	5.3	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	5.3	1.0	ug/kg dry wt
32101	Bromodichloromethane	5.3	1.0	ug/kg dry wt
78131	Toluene	5.3	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	5.3	1.0	ug/kg dry wt
34475	Tetrachloroethene	62	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	81 C	1.0	ug/kg dry wt
34306	Chlorodibromomethane	11	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	5.3	1.0	ug/kg dry wt
34301	Chlorobenzene	5.3	1.0	ug/kg dry wt
78113	Ethylbenzene	5.3	1.0	ug/kg dry wt
81551	Xylene, total	16	3.0	ug/kg dry wt
77223	Isopropylbenzene	5.3	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	11	2.0	ug/kg dry wt
77224	n-Propylbenzene	5.3	1.0	ug/kg dry wt
81555	Bromobenzene	5.3	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	5.3	1.0	ug/kg dry wt
77275	2-Chlorotoluene	5.3	1.0	ug/kg dry wt
77277	4-Chlorotoluene	5.3	1.0	ug/kg dry wt

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-002
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-1(04)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	5.3	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	5.3	1.0	ug/kg dry wt
77350	sec-Butylbenzene	5.3	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	5.3	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	5.3	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	5.3	1.0	ug/kg dry wt
77342	n-Butylbenzene	5.3	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	5.3	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	5.3	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	5.3	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	5.3	1.0	ug/kg dry wt
34696	Naphthalene	53	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	5.3	1.0	ug/kg dry wt

Mark A. Moritz 4/29/93
Approval Signature

744 Heartland Trail,P.O.Box 8923, Madison, WI 53708-8923. (608)831-4444

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-003
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-1(06)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	<2.3	2.0	ug/kg dry wt
34418	Chloromethane	1.1	1.0	ug/kg dry wt
39175	Vinyl chloride	1.1	1.0	ug/kg dry wt
34311	Chloroethane	1.1	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	1.1	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	1.1	1.0	ug/kg dry wt
34423	Methylene chloride	1.1	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	1.1	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	1.1	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	1.1	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	1.1	1.0	ug/kg dry wt
32106	Chloroform	1.1	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	<1.1	1.0	ug/kg dry wt
32102	Carbon tetrachloride	1.1	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	1.1	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	1.1	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	1.1	1.0	ug/kg dry wt
78124	Benzene	1.1	1.0	ug/kg dry wt
39180	Trichloroethene	<1.1	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	<1.1	1.0	ug/kg dry wt
32101	Bromodichloromethane	<1.1	1.0	ug/kg dry wt
78131	Toluene	<1.1	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	<1.1	1.0	ug/kg dry wt
34475	Tetrachloroethene	<2.3	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	<1.1	1.0	ug/kg dry wt
34306	Chlorodibromomethane	<2.3	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	<1.1	1.0	ug/kg dry wt
34301	Chlorobenzene	1.1	1.0	ug/kg dry wt
78113	Ethylbenzene	<1.1	1.0	ug/kg dry wt
81551	Xylene, total	<3.4	3.0	ug/kg dry wt
77223	Isopropylbenzene	<1.1	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	<2.3	2.0	ug/kg dry wt
77224	n-Propylbenzene	1.1	1.0	ug/kg dry wt
81555	Bromobenzene	<1.1	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	1.1	1.0	ug/kg dry wt
77275	2-Chlorotoluene	<1.1	1.0	ug/kg dry wt
77277	4-Chlorotoluene	<1.1	1.0	ug/kg dry wt

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-003
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-1(06)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	1.1	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	1.1	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.1	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	1.1	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	1.1	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	1.1	1.0	ug/kg dry wt
77342	n-Butylbenzene	1.1	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	1.1	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	1.1	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	1.1	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	1.1	1.0	ug/kg dry wt
34696	Naphthalene	11	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	1.1	1.0	ug/kg dry wt

Mark D. Mientz 4/29/93
Approval Signature

744 Heartland Trail,P.O.Box 8923, Madison, WI 53708-8923. (608)831-4444

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-004
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-2A(04)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	2.4	2.0	ug/kg dry wt
34418	Chloromethane	<1.2	1.0	ug/kg dry wt
39175	Vinyl chloride	<1.2	1.0	ug/kg dry wt
34311	Chloroethane	<1.2	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	<1.2	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	<1.2	1.0	ug/kg dry wt
34423	Methylene chloride	<1.2	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	<1.2	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	<1.2	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	<1.2	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	<1.2	1.0	ug/kg dry wt
32106	Chloroform	<1.2	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	<1.2	1.0	ug/kg dry wt
32102	Carbon tetrachloride	<1.2	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	<1.2	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	<1.2	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	<1.2	1.0	ug/kg dry wt
78124	Benzene	<1.2	1.0	ug/kg dry wt
39180	Trichloroethene	<1.2	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	<1.2	1.0	ug/kg dry wt
32101	Bromodichloromethane	<1.2	1.0	ug/kg dry wt
78131	Toluene	<1.2	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	<1.2	1.0	ug/kg dry wt
34475	Tetrachloroethene	<2.4	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	<1.2	1.0	ug/kg dry wt
34306	Chlorodibromomethane	<2.4	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	<1.2	1.0	ug/kg dry wt
34301	Chlorobenzene	<1.2	1.0	ug/kg dry wt
78113	Ethylbenzene	<1.2	1.0	ug/kg dry wt
81551	Xylene, total	<3.6	3.0	ug/kg dry wt
77223	Isopropylbenzene	<1.2	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	<2.4	2.0	ug/kg dry wt
77224	n-Propylbenzene	<1.2	1.0	ug/kg dry wt
81555	Bromobenzene	<1.2	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	<1.2	1.0	ug/kg dry wt
77275	2-Chlorotoluene	<1.2	1.0	ug/kg dry wt
77277	4-Chlorotoluene	<1.2	1.0	ug/kg dry wt

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-004
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-2A(04)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	1.2	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	1.2	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.2	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	1.2	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	1.2	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	1.2	1.0	ug/kg dry wt
77342	n-Butylbenzene	1.2	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	1.2	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	1.2	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	1.2	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	1.2	1.0	ug/kg dry wt
34696	Naphthalene	12	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	1.2	1.0	ug/kg dry wt

Mark A. Mauk 4/29/93
Approval Signature

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RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-005
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-2A(08)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	2.3	2.0	ug/kg dry wt
34418	Chloromethane	<1.2	1.0	ug/kg dry wt
39175	Vinyl chloride	<1.2	1.0	ug/kg dry wt
34311	Chloroethane	1.2	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	<1.2	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	<1.2	1.0	ug/kg dry wt
34423	Methylene chloride	1.2	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	<1.2	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	1.2	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	<1.2	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	<1.2	1.0	ug/kg dry wt
32106	Chloroform	1.2	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	<1.2	1.0	ug/kg dry wt
32102	Carbon tetrachloride	1.2	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	<1.2	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	<1.2	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	<1.2	1.0	ug/kg dry wt
78124	Benzene	<1.2	1.0	ug/kg dry wt
39180	Trichloroethene	<1.2	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	<1.2	1.0	ug/kg dry wt
32101	Bromodichloromethane	<1.2	1.0	ug/kg dry wt
78131	Toluene	<1.2	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	1.2	1.0	ug/kg dry wt
34475	Tetrachloroethene	2.3	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	<1.2	1.0	ug/kg dry wt
34306	Chlorodibromomethane	2.3	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	1.2	1.0	ug/kg dry wt
34301	Chlorobenzene	<1.2	1.0	ug/kg dry wt
78113	Ethylbenzene	<1.2	1.0	ug/kg dry wt
81551	Xylene, total	3.5	3.0	ug/kg dry wt
77223	Isopropylbenzene	<1.2	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	<2.3	2.0	ug/kg dry wt
77224	n-Propylbenzene	<1.2	1.0	ug/kg dry wt
81555	Bromobenzene	<1.2	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	<1.2	1.0	ug/kg dry wt
77275	2-Chlorotoluene	1.2	1.0	ug/kg dry wt
77277	4-Chlorotoluene	<1.2	1.0	ug/kg dry wt

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-005
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-2A(08)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	1.2	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	1.2	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.2	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	1.2	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	1.2	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	1.2	1.0	ug/kg dry wt
77342	n-Butylbenzene	1.2	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	1.2	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	1.2	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	1.2	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	1.2	1.0	ug/kg dry wt
34696	Naphthalene	12	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	1.2	1.0	ug/kg dry wt

Mark A Mentz 4/29/93
Approval Signature

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RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-006
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-3(10)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	<2.3	2.0	ug/kg dry wt
34418	Chloromethane	<1.1	1.0	ug/kg dry wt
39175	Vinyl chloride	<1.1	1.0	ug/kg dry wt
34311	Chloroethane	<1.1	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	<1.1	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	<1.1	1.0	ug/kg dry wt
34423	Methylene chloride	<1.1	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	<1.1	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	<1.1	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	<1.1	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	<1.1	1.0	ug/kg dry wt
32106	Chloroform	<1.1	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	<1.1	1.0	ug/kg dry wt
32102	Carbon tetrachloride	<1.1	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	<1.1	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	<1.1	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	<1.1	1.0	ug/kg dry wt
78124	Benzene	<1.1	1.0	ug/kg dry wt
39180	Trichloroethene	<1.1	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	<1.1	1.0	ug/kg dry wt
32101	Bromodichloromethane	<1.1	1.0	ug/kg dry wt
78131	Toluene	<1.1	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	<1.1	1.0	ug/kg dry wt
34475	Tetrachloroethene	<2.3	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	<1.1	1.0	ug/kg dry wt
34306	Chlorodibromomethane	<2.3	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	<1.1	1.0	ug/kg dry wt
34301	Chlorobenzene	<1.1	1.0	ug/kg dry wt
78113	Ethylbenzene	<1.1	1.0	ug/kg dry wt
81551	Xylene, total	<3.4	3.0	ug/kg dry wt
77223	Isopropylbenzene	<1.1	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	<2.3	2.0	ug/kg dry wt
77224	n-Propylbenzene	<1.1	1.0	ug/kg dry wt
81555	Bromobenzene	<1.1	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	<1.1	1.0	ug/kg dry wt
77275	2-Chlorotoluene	<1.1	1.0	ug/kg dry wt
77277	4-Chlorotoluene	<1.1	1.0	ug/kg dry wt

RMT LABORATORIES

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CLIENT: NAVISTAR
SAMPLE #: 1349-006
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-3(10)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	1.1	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	1.1	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.1	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	1.1	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	1.1	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	1.1	1.0	ug/kg dry wt
77342	n-Butylbenzene	1.1	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	1.1	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	1.1	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	1.1	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	1.1	1.0	ug/kg dry wt
34696	Naphthalene	11	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	1.1	1.0	ug/kg dry wt

Mark A. Mauk 4/29/93
Approval Signature

744 Heartland Trail,P.O.Box 8923, Madison, WI 53708-8923. (608)831-4444

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-007
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-3(12)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/24/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	<2.2	2.0	ug/kg dry wt
34418	Chloromethane	<1.1	1.0	ug/kg dry wt
39175	Vinyl chloride	<1.1	1.0	ug/kg dry wt
34311	Chloroethane	<1.1	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	<1.1	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	<1.1	1.0	ug/kg dry wt
34423	Methylene chloride	1.1	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	<1.1	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	<1.1	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	<1.1	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	<1.1	1.0	ug/kg dry wt
32106	Chloroform	1.1	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	<1.1	1.0	ug/kg dry wt
32102	Carbon tetrachloride	<1.1	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	<1.1	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	<1.1	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	<1.1	1.0	ug/kg dry wt
78124	Benzene	<1.1	1.0	ug/kg dry wt
39180	Trichloroethene	<1.1	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	<1.1	1.0	ug/kg dry wt
32101	Bromodichloromethane	<1.1	1.0	ug/kg dry wt
78131	Toluene	<1.1	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	<1.1	1.0	ug/kg dry wt
34475	Tetrachloroethene	<2.2	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	<1.1	1.0	ug/kg dry wt
34306	Chlorodibromomethane	<2.2	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	<1.1	1.0	ug/kg dry wt
34301	Chlorobenzene	1.1	1.0	ug/kg dry wt
78113	Ethylbenzene	<1.1	1.0	ug/kg dry wt
81551	Xylene, total	<3.3	3.0	ug/kg dry wt
77223	Isopropylbenzene	<1.1	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	<2.2	2.0	ug/kg dry wt
77224	n-Propylbenzene	1.1	1.0	ug/kg dry wt
81555	Bromobenzene	1.1	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	<1.1	1.0	ug/kg dry wt
77275	2-Chlorotoluene	1.1	1.0	ug/kg dry wt
77277	4-Chlorotoluene	<1.1	1.0	ug/kg dry wt

RMT INC
LABORATORIES

PAGE: 2

CLIENT: NAVISTAR
SAMPLE #: 1349-007
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-3(12)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/24/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	1.1	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	1.1	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.1	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	1.1	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	1.1	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	1.1	1.0	ug/kg dry wt
77342	n-Butylbenzene	1.1	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	1.1	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	1.1	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	1.1	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	1.1	1.0	ug/kg dry wt
34696	Naphthalene	11	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	1.1	1.0	ug/kg dry wt

Mark A. Mainz 4/29/93
Approval Signature

744 Heartland Trail,P.O.Box 8923, Madison, WI 53708-8923. (608)831-4444

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-008
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-4(04)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	2.6	2.0	ug/kg dry wt
34418	Chloromethane	1.3	1.0	ug/kg dry wt
39175	Vinyl chloride	1.3	1.0	ug/kg dry wt
34311	Chloroethane	1.3	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	1.3	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	1.3	1.0	ug/kg dry wt
34423	Methylene chloride	1.3	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	1.3	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	1.3	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	1.3	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	1.3	1.0	ug/kg dry wt
32106	Chloroform	1.3	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	1.3	1.0	ug/kg dry wt
32102	Carbon tetrachloride	1.3	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	1.3	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	1.3	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	1.3	1.0	ug/kg dry wt
78124	Benzene	1.3	1.0	ug/kg dry wt
39180	Trichloroethene	1.3	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	1.3	1.0	ug/kg dry wt
32101	Bromodichloromethane	1.3	1.0	ug/kg dry wt
78131	Toluene	1.3	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	1.3	1.0	ug/kg dry wt
34475	Tetrachloroethene	2.6	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	1.3	1.0	ug/kg dry wt
34306	Chlorodibromomethane	2.6	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	1.3	1.0	ug/kg dry wt
34301	Chlorobenzene	1.3	1.0	ug/kg dry wt
78113	Ethylbenzene	1.3	1.0	ug/kg dry wt
81551	Xylene, total	12	3.0	ug/kg dry wt
77223	Isopropylbenzene	1.3	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	2.6	2.0	ug/kg dry wt
77224	n-Propylbenzene	1.3	1.0	ug/kg dry wt
81555	Bromobenzene	1.3	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	1.3	1.0	ug/kg dry wt
77275	2-Chlorotoluene	1.3	1.0	ug/kg dry wt
77277	4-Chlorotoluene	1.3	1.0	ug/kg dry wt

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-008
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-4(04)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	1.3	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	13	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.3	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	1.3	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	1.3	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	1.3	1.0	ug/kg dry wt
77342	n-Butylbenzene	14	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	1.3	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	1.3	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	1.3	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	1.3	1.0	ug/kg dry wt
34696	Naphthalene	13	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	1.3	1.0	ug/kg dry wt

Mark A. Mierz 4/29/93
Approval Signature

744 Heartland Trail,P.O.Box 8923, Madison, WI 53708-8923. (608)831-4444

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-009
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-4(12)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	<2.2 W	2.0	ug/kg dry wt
34418	Chloromethane	1.1 W	1.0	ug/kg dry wt
39175	Vinyl chloride	<1.1 W	1.0	ug/kg dry wt
34311	Chloroethane	<1.1 W	1.0	ug/kg dry wt
34488	Fluorotrichloromethane	1.1 W	1.0	ug/kg dry wt
34501	1,1-Dichloroethene	<1.1 W	1.0	ug/kg dry wt
34423	Methylene chloride	<1.1 W	1.0	ug/kg dry wt
34546	trans-1,2-Dichloroethene	1.1 W	1.0	ug/kg dry wt
34496	1,1-Dichloroethane	<1.1 W	1.0	ug/kg dry wt
77170	2,2-Dichloropropane	1.1 W	1.0	ug/kg dry wt
77093	cis-1,2-Dichloroethene	<1.1 W	1.0	ug/kg dry wt
32106	Chloroform	1.1 W	1.0	ug/kg dry wt
34506	1,1,1-Trichloroethane	<1.1 W	1.0	ug/kg dry wt
32102	Carbon tetrachloride	<1.1 W	1.0	ug/kg dry wt
78032	Methyl-tert-butyl-ether	<1.1 W	1.0	ug/kg dry wt
81577	Di-Isopropyl ether	1.1 W	1.0	ug/kg dry wt
32103	1,2-Dichloroethane	1.1 W	1.0	ug/kg dry wt
78124	Benzene	1.1 W	1.0	ug/kg dry wt
39180	Trichloroethene	1.7 W	1.0	ug/kg dry wt
34541	1,2-Dichloropropane	<1.1 W	1.0	ug/kg dry wt
32101	Bromodichloromethane	<1.1 W	1.0	ug/kg dry wt
78131	Toluene	<1.1 W	1.0	ug/kg dry wt
34511	1,1,2-Trichloroethane	<1.1 W	1.0	ug/kg dry wt
34475	Tetrachloroethene	<2.2 W	2.0	ug/kg dry wt
77173	1,3-Dichloropropane	<1.1 W	1.0	ug/kg dry wt
34306	Chlorodibromomethane	2.2 W	2.0	ug/kg dry wt
77651	1,2-Dibromoethane	<1.1 W	1.0	ug/kg dry wt
34301	Chlorobenzene	<1.1 W	1.0	ug/kg dry wt
78113	Ethylbenzene	<1.1 W	1.0	ug/kg dry wt
81551	Xylene, total	<3.4 W	3.0	ug/kg dry wt
77223	Isopropylbenzene	<1.1 W	1.0	ug/kg dry wt
34516	1,1,2,2-Tetrachloroethane	<2.2 W	2.0	ug/kg dry wt
77224	n-Propylbenzene	<1.1 W	1.0	ug/kg dry wt
81555	Bromobenzene	1.1 W	1.0	ug/kg dry wt
77226	1,3,5-Trimethylbenzene	<1.1 W	1.0	ug/kg dry wt
77275	2-Chlorotoluene	<1.1 W	1.0	ug/kg dry wt
77277	4-Chlorotoluene	<1.1 W	1.0	ug/kg dry wt

RMT LABORATORIES

PAGE: 2

CLIENT: NAVISTAR
SAMPLE #: 1349-009
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: WCB-4(12)
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : UNPRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/23/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	<1.1 W	1.0	ug/kg dry wt
77222	1,2,4-Trimethylbenzene	<1.1 W	1.0	ug/kg dry wt
77350	sec-Butylbenzene	1.1 W	1.0	ug/kg dry wt
77356	p-Isopropyltoluene	<1.1 W	1.0	ug/kg dry wt
34566	1,3-Dichlorobenzene	<1.1 W	1.0	ug/kg dry wt
34571	1,4-Dichlorobenzene	<1.1 W	1.0	ug/kg dry wt
77342	n-Butylbenzene	<1.1 W	1.0	ug/kg dry wt
34536	1,2-Dichlorobenzene	<1.1 W	1.0	ug/kg dry wt
38437	1,2-Dibromo-3-chloropropane	<1.1 W	1.0	ug/kg dry wt
34551	1,2,4-Trichlorobenzene	<1.1 W	1.0	ug/kg dry wt
34391	Hexachlorobutadiene	<1.1 W	1.0	ug/kg dry wt
34696	Naphthalene	<11 W	10	ug/kg dry wt
77613	1,2,3-Trichlorobenzene	<1.1 W	1.0	ug/kg dry wt

Mark A. Mienty 4/29/93
Approval Signature

744 Heartland Trail,P.O.Box 8923, Madison, WI 53708-8923. (608)831-4444

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-010
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: TRIP BLANK
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : PRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/24/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
34668	Dichlorodifluoromethane	<2.0	2.0	ug/L
34418	Chloromethane	<1.0	1.0	ug/L
39175	Vinyl chloride	1.0	1.0	ug/L
34311	Chloroethane	<1.0	1.0	ug/L
34488	Fluorotrichloromethane	1.0	1.0	ug/L
34501	1,1-Dichloroethene	<1.0	1.0	ug/L
34423	Methylene chloride	<1.0	1.0	ug/L
34546	trans-1,2-Dichloroethene	<1.0	1.0	ug/L
34496	1,1-Dichloroethane	<1.0	1.0	ug/L
77170	2,2-Dichloropropane	<1.0	1.0	ug/L
77093	cis-1,2-Dichloroethene	<1.0	1.0	ug/L
32106	Chloroform	<1.0	1.0	ug/L
34506	1,1,1-Trichloroethane	<1.0	1.0	ug/L
32102	Carbon tetrachloride	<1.0	1.0	ug/L
78032	Methyl-tert-butyl-ether	<1.0	1.0	ug/L
81577	Di-Isopropyl ether	<1.0	1.0	ug/L
32103	1,2-Dichloroethane	<1.0	1.0	ug/L
78124	Benzene	<1.0	1.0	ug/L
39180	Trichloroethene	<1.0	1.0	ug/L
34541	1,2-Dichloropropane	<1.0	1.0	ug/L
32101	Bromodichloromethane	<1.0	1.0	ug/L
78131	Toluene	<1.0	1.0	ug/L
34511	1,1,2-Trichloroethane	<1.0	1.0	ug/L
34475	Tetrachloroethene	<2.0	2.0	ug/L
77173	1,3-Dichloropropane	<1.0	1.0	ug/L
34306	Chlorodibromomethane	<2.0	2.0	ug/L
77651	1,2-Dibromoethane	1.0	1.0	ug/L
34301	Chlorobenzene	<1.0	1.0	ug/L
78113	Ethylbenzene	<1.0	1.0	ug/L
81551	Xylene, total	<3.0	3.0	ug/L
77223	Isopropylbenzene	<1.0	1.0	ug/L
34516	1,1,2,2-Tetrachloroethane	<2.0	2.0	ug/L
77224	n-Propylbenzene	<1.0	1.0	ug/L
81555	Bromobenzene	<1.0	1.0	ug/L
77226	1,3,5-Trimethylbenzene	1.0	1.0	ug/L
77275	2-Chlorotoluene	1.0	1.0	ug/L
77277	4-Chlorotoluene	<1.0	1.0	ug/L

RMT LABORATORIES

CLIENT: NAVISTAR
SAMPLE #: 1349-010
PROJECT #: 02585.03
WORK ORDER #: 1349
STATION ID: TRIP BLANK
SAMPLE COLLECTOR: GJK
METHOD: 8021
pH : PRESERVED

REPORT DATE: 04/28/93
COLLECTION DATE: 04/14/93
EXTRACTION DATE:
ANALYSIS DATE: 04/24/93
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
77353	tert-Butylbenzene	<1.0	1.0	ug/L
77222	1,2,4-Trimethylbenzene	1.0	1.0	ug/L
77350	sec-Butylbenzene	1.0	1.0	ug/L
77356	p-Isopropyltoluene	1.0	1.0	ug/L
34566	1,3-Dichlorobenzene	<1.0	1.0	ug/L
34571	1,4-Dichlorobenzene	<1.0	1.0	ug/L
77342	n-Butylbenzene	<1.0	1.0	ug/L
34536	1,2-Dichlorobenzene	<1.0	1.0	ug/L
38437	1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L
34551	1,2,4-Trichlorobenzene	<1.0	1.0	ug/L
34391	Hexachlorobutadiene	<1.0	1.0	ug/L
34696	Naphthalene	10	10	ug/L
77613	1,2,3-Trichlorobenzene	<1.0	1.0	ug/L

Mark A. Mieritz 4/29/93
Approval Signature

RMT LABORATORIES

LUST Data Qualifier Sheet

A	Sample odor present.
B(n)	Analyte present in the method blank. If the processes that were applied to the sample were applied to the method blank, the value of the analyte in the method blank would likely be "n."
C	Elevated detection limit (see Case Narrative).
DP	Unidentified but detected peaks.
E	Analyte concentration exceeds calibration range (see Case Narrative).
F	Repeated surrogate failure (see Case Narrative).
H(n)	Analysis performed "n" days past holding time.
L	Detects in trip blank.
M	Methanol leakage.
R	Relative percent difference high (see Case Narrative).
T	Retention time variance; analyte identification not confirmed.
V	Heavy hydrocarbon present.
W	Sample received with headspace.
X	Significant peaks outside the chromatographic window not included in quantitation scheme.
Y	Significant peaks within the chromatographic window.
Z	Elevation in chromatographic baseline not included in quantitation scheme.

Effective 6/19/92

RMT, Inc., 744 Heartland Trail, P. O. Box 8923, Madison, WI 53708-8923, Phone: 608-831-4444, Fax: 608-831-7530

RMT LABORATORIES

MATRIX SPIKE DATA

SAMPLE # 1349-009MS
analyst: KM
Analysis Date: 04/23/93
Instrument: HP5892
Detector: ELCD

METHOD 8021
page 1

Component Name	RAW AMOUNT	Time [min]	Area [uV*sec]	sample amount	spike amount	percent recovery
Dichlordifluoromethane	18.865	8.05	1444564		20	94%
Chloromethane	16.534	9.73	779044		20	83%
Vinyl chloride	15.996	10.45	1711922		20	80%
Bromomethane	17.050	13.49	1109126		20	85%
Chloroethane	16.747	14.15	1877868		20	84%
Flourotrichloromethane	18.388	15.62	3512068		20	92%
1,1-Dichloroethene	18.123	19.06	2403026		20	91%
Methylene chloride	18.027	21.59	3032016		20	90%
trans-1,2-Dichloroethene	18.257	22.70	2514404		20	91%
1,1-dichloroethane	18.669	24.55	2955764		20	93%
2,2-dichloropropane	17.155	26.56	2052166		20	86%
cis-1,2-dichloroethene	18.211	26.82	2437803		20	91%
Chloroform	18.833	27.36	3668444		20	94%
Bromochlormethane	18.099	27.98	2065486		20	90%
1,1,1-Trichloroethane	18.843	28.64	3174261		20	94%
1,1-Dichloropropene	17.715	29.15	1908290		20	89%
Carbon Tetrachloride	18.304	29.45	3724646		20	92%
1,2-Dichlorethane	17.681	30.18	2513005		20	88%
1,1-Dichloropropane*	18.482	31.47	2633340		20	92%
Trichloroethane	22.157	32.09	3442498	1.5	20	103%
1,2-Dichloropropane	18.469	32.75	2640626		20	92%
Bromodichloromethane	18.117	33.56	2611621		20	91%
Dibromomethane	17.617	33.79	1789782		20	88%
2-Chloroethylvinyl ether	16.949	34.56	979956		20	85%
cis-1,3-Dichloropropene	16.537	35.33	2353222		20	83%
trans-1,3-dichloropropene	18.487	36.99	2433837		20	92%
1,1,2-trichloroethane	18.636	37.52	3077970		20	93%
1,3-DCP/TTRCHLR	35.831	38.38	4845916		40	90%
Chlorodibbromethane	17.249	39.27	2033497		20	86%
1,2-Dibromethane	16.520	39.94	1544848		20	83%
Chlorobenzene	18.039	41.27	1138685		20	90%
1,1,1,2-Tetrachloroethane	18.274	41.40	3371055		20	91%
Bromoform	16.802	44.64	1623667		20	84%
1,1,2,2-Tetrachloroethane	13.954	45.12	2153089		20	70%
Bromofluorobenzene*	15.834	45.34	734628		20	79%
1,2,3-trichloropropane	17.915	45.64	2589108		20	90%
Bromobenzene	15.615	46.04	678462		20	78%
2-Chlorotoluene	16.625	46.46	1003000		20	83%
4-Chlorotoluene	15.482	46.61	973852		20	77%
1,3-dichlorobenzene	16.113	49.24	1501544		20	81%
1,4-dichlorobenzezne	16.442	49.64	1590143		20	82%
1,2-Dichlorobenzene	16.554	50.99	1660879		20	83%
1,2-Dibromo-3-Chloropropane	16.262	53.93	1166780		20	81%
1,2,4-Trichlorobenze	14.074	57.04	1023911		20	70%
Hexachlorobutadiene	15.016	57.46	2483653		20	75%
1,2,3-Trichlorobenze	13.934	58.95	1035328		20	70%

*=surrogate
1,3DCP/TTRCHLR=1,3 Dichloropropane/Tetrachloroethane

RMT LABORATORIES

MATRIX SPIKE DUPLICATE DATA

SAMPLE #: 1349-009MSD
analyst: KM
Analysis Date: 04/23/93
Instrument: HP5892
Detector: ELCD

METHOD 8021
page 2

Component Name	RAW AMOUNT	Time [min]	Area [uV*sec]	spike amount	percent recovery	RPD
Dichlorodifluoromethane	19.049	8.05	1458660	20	95%	1%
Chloromethane	18.338	9.72	870278	20	92%	10%
Vinyl chloride	16.469	10.45	1766988	20	82%	3%
Bromomethane	17.915	13.47	1167916	20	90%	5%
Chloroethane	17.232	14.13	1935800	20	86%	3%
Flourotrichloromethane	19.073	15.61	3643376	20	95%	4%
1,1-Dichloroethene	18.250	19.05	2419499	20	91%	1%
Methylene chloride	18.156	21.59	3053518	20	91%	1%
trans-1,2-Dichloroethene	18.394	22.69	2533062	20	92%	1%
1,1-dichloroethane	18.786	24.54	2973626	20	94%	1%
2,2-dichloropropane	17.330	26.55	2072403	20	87%	1%
cis-1,2-dichloroethene	18.309	26.82	2450712	20	92%	1%
Chloroform	19.538	27.35	3798423	20	98%	4%
Bromochlormethane	18.763	27.98	2139313	20	94%	4%
1,1,1-Trichloroethane	19.150	28.63	3224429	20	96%	2%
1,1-Dichloropropene	18.040	29.14	1943733	20	90%	2%
Carbon Tetrachloride	18.915	29.44	3844888	20	95%	3%
1,2-Dichlorethane	17.745	30.18	2521896	20	89%	0%
1,1-Dichloropropane	19.666	31.47	2797494	20	98%	6%
Trichloroethane	22.141	32.08	3440039	20	103%	0%
1,2-Dichloropropane	18.678	32.75	2669585	20	93%	1%
Bromodichloromethane	18.478	33.56	2661350	20	92%	2%
Dibromomethane	16.682	33.78	1696480	20	83%	5%
2-Chloroethylvinyl ether	19.463	34.56	1132021	20	97%	14%
cis-1,3-Dichloropropene	17.228	35.32	2450920	20	86%	4%
trans-1,3-dichloropropene	19.211	36.99	2529112	20	96%	4%
1,1,2-trichloroethane	19.293	37.51	3182817	20	96%	3%
1,3-DCP/TTRCHLR	37.041	38.37	5004001	40	93%	3%
Chlorodibbromethane	16.396	39.27	1935515	20	82%	5%
1,2-Dibromethane	13.645	39.93	1267550	20	68%	19%
Chlorobenzene	18.467	41.27	1166692	20	92%	2%
1,1,1,2-Tetrachloroethane	18.224	41.40	3361821	20	91%	0%
Bromoform	16.206	44.64	1567106	20	81%	4%
1,1,2,2-Tetrachloroethane	14.817	45.11	2282474	20	74%	6%
Bromofluorobenzene	15.127	45.33	700713	20	76%	5%
1,2,3-trichloropropane	19.378	45.64	2795696	20	97%	8%
Bromobenzene	14.375	46.04	624640	20	72%	8%
2-Chlorotoluene	16.609	46.45	1002014	20	83%	0%
4-Chlorotoluene	15.593	46.61	981398	20	78%	1%
1,3-dichlorobenzene	16.490	49.24	1537846	20	82%	2%
1,4-dichlorobenzezne	16.707	49.64	1616451	20	84%	2%
1,2-Dichlorobenzene	16.908	50.99	1696866	20	85%	2%
1,2-Dibromo-3-Chloropropane	18.219	53.93	1311813	20	91%	11%
1,2,4-Trichlorobenze	14.813	57.04	1078511	20	74%	5%
Hexachlorobutadiene	15.515	57.46	2564862	20	78%	3%
1,2,3-Trichlorobenze	14.583	58.95	1085276	20	73%	5%

*=surrogate
1,3DCP/TTRCHLR=1,3 Dichloropropane/Tetrachloroethane

RMT LABORATORIES

MATRIX SPIKE DATA

SAMPLE #: 1349-009MS
ANALYST KM
Analysis Date: 04/23/93
Instrument: HP5892
Detector: PID

METHOD 8021
page 1

Component Name	RAW AMOUNT	Time [min]	Area [uV*sec]	sample amount	spike amount	percent recovery
Methyl-tert-butyl ether	17.625	22.28	270627		20	88%
trans-1,2-Dichloroethene	17.037	22.69	384100		20	85%
Diisopropyl ether	17.432	24.13	280995		20	87%
Benzene	16.948	30.12	434782		20	85%
1,4-Diflourobenzene*	17.083	31.08	174449		20	35%
Trichloroethene	21.640	32.08	347800	1.87	20	100%
cis-1,3-Dichloropropene	16.492	35.32	99908		20	82%
Toluene	16.766	36.29	383150		20	84%
t-1,2-Dichloropropene	15.729	36.98	145394		20	79%
Tetrachloroethene	16.303	38.39	192058		20	82%
Chlorobenzene	16.458	41.26	431151		20	82%
Ethylbenzene	15.447	41.37	330726		20	77%
M,P-Xylenes	32.889	41.61	806776		40	82%
O-Xylene	16.908	43.14	359703		20	85%
Styrene	15.287	43.31	374085		20	76%
Isopropylbenzene	16.279	44.34	293495		20	81%
4Bromofluorobenzene*	15.797	45.33	352483		20	79%
N-Propylbenzene	15.851	45.75	315362		20	79%
Bromobenzene	15.738	46.03	368316		20	79%
135-Trimethylbenzene	16.077	46.60	364537		20	80%
tert-Butylbenzene	16.126	47.55	266142		20	81%
124-Trimethylbenzene	15.556	47.70	288332		20	78%
sec-Butylbenzene	15.686	48.30	268318		20	78%
p-Isopropyltoluene	14.876	48.79	223614		20	74%
1,3-Dichlorobenzene	15.186	49.23	327601		20	76%
1,4-Dichlorobenzene	15.552	49.63	317298		20	78%
N-Butylbenzene	14.686	50.27	222309		20	73%
1,2-Dichlorobenzene	15.439	50.98	284807		20	77%
Naphthalene	12.939	58.06	191967		20	65%

*=surrogate

RMT, Inc., 744 Heartland Trail, P. O. Box 8923, Madison, WI 53708-8923, Phone: 608-831-4444, Fax: 608-831-7530

RMT LABORATORIES

MATRIX SPIKE DUPLICATE DATA

SAMPLE # 1349-009MSD
analyst KM
Analysis Date 04/23/93
Instrument HP5892
Detector PID

METHOD 8021
page 2

Component Name	RAW AMOUNT	Time [min]	Area [uV*sec]	spike amount	percent recovery	RPD
Methyl-tert-butyl ether	18.372	22.28	282426	20	92%	4%
trans-1,2-Dichloroethene	17.557	22.69	396066	20	88%	3%
Diisopropyl ether	18.185	24.13	293485	20	91%	4%
Benzene	17.413	30.11	446894	20	87%	3%
1,4-Diflourobenzene*	18.272	31.08	186940	20	91%	6%
Trichloroethene	21.758	32.07	349744	20	100%	1%
cis-1,3-Dichloropropene	16.970	35.31	102913	20	65%	3%
Toluene	17.328	36.29	396160	20	87%	3%
t-1,2-Dichloropropene	16.963	36.98	157544	20	85%	7%
Tetrachloroethene	17.272	38.38	203570	20	86%	6%
Chlorobenzene	17.354	41.26	455397	20	87%	5%
Ethylbenzene	15.418	41.36	330069	20	77%	0%
M,P-Xylenes	33.406	41.61	819749	40	84%	2%
O-Xylene	16.852	43.14	358465	20	84%	0%
Styrene	16.423	43.30	402508	20	82%	7%
Isopropylbenzene	16.717	44.34	301668	20	84%	3%
4Bromofluorobenzene*	17.124	45.32	383060	20	86%	8%
N-Propylbenzene	16.271	45.74	324073	20	81%	3%
Bromobenzene	16.478	46.03	385966	20	82%	5%
135-Trimethylbenzene	16.396	46.60	372088	20	82%	2%
tert-Butylbenzene	15.978	47.55	263625	20	80%	1%
124-Trimethylbenzene	16.824	47.70	312076	20	84%	8%
sec-Butylbenzene	16.035	48.30	274525	20	80%	2%
p-Isopropylbenzene	15.618	48.79	234856	20	78%	5%
1,3-Dichlorobenzene	15.742	49.23	340132	20	79%	4%
1,4-Dichlorobenzene	15.748	49.63	321532	20	79%	1%
N-Butylbenzene	15.140	50.26	229419	20	76%	3%
1,2-Dichlorobenzene	15.945	50.98	294522	20	80%	4%
Naphthalene	14.855	58.06	222446	20	74%	26%

*=surrogate

APPENDIX H

LABORATORY DATA SHEETS FOR GROUNDWATER SAMPLES

ROUND 1

GROUNDWATER DATA

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn: Al MacKenzie
Invoice Number:

Order #: 92-10-153
Date: 10/28/92 12:55
Work ID: 2585.02
Date Received: 10/14/92
Date Completed: 10/28/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	MW-12	03	MW-15
02	MW-11	04	MW-16

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

Sample: 01A MW-12 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 50		#	ug/l	10/27/92	LJS
Bromobenzene	< 50		#	ug/l	10/27/92	LJS
Bromochloromethane	< 50		#	ug/l	10/27/92	LJS
Bromodichloromethane	< 50		#	ug/l	10/27/92	LJS
Bromoform	< 50		#	ug/l	10/27/92	LJS
Bromomethane	< 50		#	ug/l	10/27/92	LJS
n-Butylbenzene	< 50		#	ug/l	10/27/92	LJS
sec-Butylbenzene	< 50		#	ug/l	10/27/92	LJS
tert-Butylbenzene	< 50		#	ug/l	10/27/92	LJS
Carbon tetrachloride	< 50		#	ug/l	10/27/92	LJS
Chlorobenzene	< 50		#	ug/l	10/27/92	LJS
Chloroethane	< 50		#	ug/l	10/27/92	LJS
Chloroform	< 50		#	ug/l	10/27/92	LJS
Chloromethane	< 50		#	ug/l	10/27/92	LJS
2-Chlorotoluene	< 50		#	ug/l	10/27/92	LJS
4-Chlorotoluene	< 50		#	ug/l	10/27/92	LJS
1,2-Dibromo-3-chloropropane	< 50		#	ug/l	10/27/92	LJS
Dibromochloromethane	< 50		#	ug/l	10/27/92	LJS
1,2-Dibromoethane	< 50		#	ug/l	10/27/92	LJS
Dibromomethane	< 50		#	ug/l	10/27/92	LJS
1,2-Dichlorobenzene	< 50		#	ug/l	10/27/92	LJS
1,3-Dichlorobenzene	< 50		#	ug/l	10/27/92	LJS
1,4-Dichlorobenzene	< 50		#	ug/l	10/27/92	LJS
Dichlorodifluoromethane	< 50		#	ug/l	10/27/92	LJS
1,1-Dichloroethane	< 50		#	ug/l	10/27/92	LJS
1,2-Dichloroethane	< 50		#	ug/l	10/27/92	LJS
1,1-Dichloroethene	140		#	ug/l	10/27/92	LJS
cis-1,2-Dichloroethene	1300		#	ug/l	10/27/92	LJS
trans-1,2-Dichloroethene	< 50		#	ug/l	10/27/92	LJS
1,2-Dichloropropane	< 50		#	ug/l	10/27/92	LJS
1,3-Dichloropropane	< 50		#	ug/l	10/27/92	LJS
2,2-Dichloropropane	< 50		#	ug/l	10/27/92	LJS
1,1-Dichloropropene	< 50		#	ug/l	10/27/92	LJS
Ethylbenzene	< 50		#	ug/l	10/27/92	LJS
Hexachlorobutadiene	< 50		#	ug/l	10/27/92	LJS
Isopropylbenzene	< 50		#	ug/l	10/27/92	LJS
p-Isopropyltoluene	< 50		#	ug/l	10/27/92	LJS
Methylene Chloride	B(5.5)140		#	ug/l	10/27/92	LJS
M-t-butyl-ether	< 50		#	ug/l	10/27/92	LJS
Naphthalene	< 50		#	ug/l	10/27/92	LJS
n-Propylbenzene	< 50		#	ug/l	10/27/92	LJS
Styrene	< 50		#	ug/l	10/27/92	LJS
1,1,1,2-Tetrachloroethane	< 50		#	ug/l	10/27/92	LJS
1,1,2,2-Tetrachloroethane	< 50		#	ug/l	10/27/92	LJS
Tetrachloroethene	< 50		#	ug/l	10/27/92	LJS
Toluene	< 50		#	ug/l	10/27/92	LJS
1,2,3-Trichlorobenzene	< 50		#	ug/l	10/27/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
1,2,4-Trichlorobenzene	< 50		#	ug/l	10/27/92	LJS
1,1,1-Trichloroethane	310		#	ug/l	10/27/92	LJS
1,1,2-Trichloroethane	< 50		#	ug/l	10/27/92	LJS
Trichloroethene	1100		#	ug/l	10/27/92	LJS
Trichlorofluoromethane	< 50		#	ug/l	10/27/92	LJS
1,2,3-Trichloropropane	< 50		#	ug/l	10/27/92	LJS
1,2,4-Trimethylbenzene	< 50		#	ug/l	10/27/92	LJS
1,3,5-Trimethylbenzene	< 50		#	ug/l	10/27/92	LJS
Vinyl Chloride	< 50		#	ug/l	10/27/92	LJS
o-Xylene	< 50		#	ug/l	10/27/92	LJS
m/p-Xylene	< 100		#	ug/l	10/27/92	LJS
Mod. GRO (WDNR)	1.0			mg/l	10/16/92	SEL

Sample: 02A MW-11 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	290		#	ug/l	10/20/92	LJS
Bromobenzene	< 5.0		#	ug/l	10/20/92	LJS
Bromochloromethane	< 5.0		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 5.0		#	ug/l	10/20/92	LJS
Bromoform	< 5.0		#	ug/l	10/20/92	LJS
Bromomethane	< 5.0		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 5.0		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 5.0		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 5.0		#	ug/l	10/20/92	LJS
Chlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
Chloroethane	< 5.0		#	ug/l	10/20/92	LJS
Chloroform	< 5.0		#	ug/l	10/20/92	LJS
Chloromethane	< 5.0		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 5.0		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 5.0		#	ug/l	10/20/92	LJS
Dibromomethane	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 5.0		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	22		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 5.0		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	67		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	280		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 5.0		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 5.0		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 5.0		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 5.0		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Ethylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 5.0		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 5.0		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 5.0		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8) 17		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 5.0		#	ug/l	10/20/92	LJS
Naphthalene	12		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Styrene	< 5.0		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 5.0		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 5.0		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 5.0		#	ug/l	10/20/92	LJS
Toluene	< 5.0		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	230		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 5.0		#	ug/l	10/20/92	LJS
Trichloroethene	560		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 5.0		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 5.0		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 5.0		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 5.0		#	ug/l	10/20/92	LJS
o-Xylene	38		#	ug/l	10/20/92	LJS
m/p-Xylene	< 10		#	ug/l	10/20/92	LJS
Mod. GRO (WDNR)	1.2			mg/l	10/16/92	SEL

Sample: 03A MW-15 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 10		#	ug/l	10/20/92	LJS
Bromobenzene	< 10		#	ug/l	10/20/92	LJS
Bromochloromethane	< 10		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 10		#	ug/l	10/20/92	LJS
Bromoform	< 10		#	ug/l	10/20/92	LJS
Bromomethane	< 10		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 10		#	ug/l	10/20/92	LJS
Chlorobenzene	< 10		#	ug/l	10/20/92	LJS
Chloroethane	< 10		#	ug/l	10/20/92	LJS
Chloroform	< 10		#	ug/l	10/20/92	LJS
Chloromethane	< 10		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 10		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 10		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 10		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 10		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 10		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Dibromomethane	< 10		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	28		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	120		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	300		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 10		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 10		#	ug/l	10/20/92	LJS
Ethylbenzene	< 10		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 10		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 10		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 10		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8) 28		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 10		#	ug/l	10/20/92	LJS
Naphthalene	< 10		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 10		#	ug/l	10/20/92	LJS
Styrene	< 10		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 10		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 10		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 10		#	ug/l	10/20/92	LJS
Toluene	< 10		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	420		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 10		#	ug/l	10/20/92	LJS
Trichloroethene	1100		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 10		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 10		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 10		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 10		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 10		#	ug/l	10/20/92	LJS
o-Xylene	< 10		#	ug/l	10/20/92	LJS
m/p-Xylene	< 20		#	ug/l	10/20/92	LJS
Mod. GRO (WDNR)	0.83			mg/l	10/16/92	SEL

Sample: 04A MW-16 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 5.0		#	ug/l	10/20/92	LJS
Bromobenzene	< 5.0		#	ug/l	10/20/92	LJS
Bromochloromethane	< 5.0		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 5.0		#	ug/l	10/20/92	LJS
Bromoform	< 5.0		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Bromomethane	< 5.0		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 5.0		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 5.0		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 5.0		#	ug/l	10/20/92	LJS
Chlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
Chloroethane	< 5.0		#	ug/l	10/20/92	LJS
Chloroform	< 5.0		#	ug/l	10/20/92	LJS
Chloromethane	< 5.0		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 5.0		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 5.0		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 5.0		#	ug/l	10/20/92	LJS
Dibromomethane	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 5.0		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 5.0		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	31		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	7.7		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 5.0		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 5.0		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 5.0		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 5.0		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 5.0		#	ug/l	10/20/92	LJS
Ethylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 5.0		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 5.0		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 5.0		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8) 15		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 5.0		#	ug/l	10/20/92	LJS
Naphthalene	< 5.0		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 5.0		#	ug/l	10/20/92	LJS
Styrene	< 5.0		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 5.0		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 5.0		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 5.0		#	ug/l	10/20/92	LJS
Toluene	< 5.0		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 5.0		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	120		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 5.0		#	ug/l	10/20/92	LJS
Trichloroethene	350		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 5.0		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 5.0		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 5.0		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 5.0		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Vinyl Chloride	< 5.0		#	ug/l	10/20/92	LJS
o-Xylene	< 5.0		#	ug/l	10/20/92	LJS
m/p-Xylene	< 10		#	ug/l	10/20/92	LJS
Mod. GRO (WDNR)	0.22			mg/l	10/16/92	SEL

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

Elevated detection limit due to sample concentration.

B - Analyte found in the associated method blank.

The samples ordered for 8260 were analyzed according to Method 8260 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn:
Invoice Number:

Order #: 92-10-168
Date: 11/02/92 15:37
Work ID: 2585.02
Date Received: 10/15/92
Date Completed: 11/02/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	TRIP BLANK	06	MW-6
02	MW-17	07	MW-19
03	MW-22	08	MW-13
04	MW-2	09	MW-18
05	MW-21	10	MW-20

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

Sample: 01A TRIP BLANK Collected: 10/14/92

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/21/92	LJS
Bromobenzene	< 1.0		ug/l	10/21/92	LJS
Bromochloromethane	< 1.0		ug/l	10/21/92	LJS
Bromodichloromethane	< 1.0		ug/l	10/21/92	LJS
Bromoform	< 1.0		ug/l	10/21/92	LJS
Bromomethane	< 1.0		ug/l	10/21/92	LJS
n-Butylbenzene	< 1.0		ug/l	10/21/92	LJS
sec-Butylbenzene	< 1.0		ug/l	10/21/92	LJS
tert-Butylbenzene	< 1.0		ug/l	10/21/92	LJS
Carbon tetrachloride	< 1.0		ug/l	10/21/92	LJS
Chlorobenzene	< 1.0		ug/l	10/21/92	LJS
Chloroethane	< 1.0		ug/l	10/21/92	LJS
Chloroform	< 1.0		ug/l	10/21/92	LJS
Chloromethane	< 1.0		ug/l	10/21/92	LJS
2-Chlorotoluene	< 1.0		ug/l	10/21/92	LJS
4-Chlorotoluene	< 1.0		ug/l	10/21/92	LJS
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/21/92	LJS
Dibromochloromethane	< 1.0		ug/l	10/21/92	LJS
1,2-Dibromoethane	< 1.0		ug/l	10/21/92	LJS
Dibromomethane	< 1.0		ug/l	10/21/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/l	10/21/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/l	10/21/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/l	10/21/92	LJS
Dichlorodifluoromethane	< 1.0		ug/l	10/21/92	LJS
1,1-Dichloroethane	< 1.0		ug/l	10/21/92	LJS
1,2-Dichloroethane	< 1.0		ug/l	10/21/92	LJS
1,1-Dichloroethene	< 1.0		ug/l	10/21/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/l	10/21/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/l	10/21/92	LJS
1,2-Dichloropropane	< 1.0		ug/l	10/21/92	LJS
1,3-Dichloropropane	< 1.0		ug/l	10/21/92	LJS
2,2-Dichloropropane	< 1.0		ug/l	10/21/92	LJS
1,1-Dichloropropene	< 1.0		ug/l	10/21/92	LJS
Ethylbenzene	< 1.0		ug/l	10/21/92	LJS
Hexachlorobutadiene	< 1.0		ug/l	10/21/92	LJS
Isopropylbenzene	< 1.0		ug/l	10/21/92	LJS
p-Isopropyltoluene	< 1.0		ug/l	10/21/92	LJS
Methylene Chloride	B(2.9)	2.0	ug/l	10/21/92	LJS
M-t-butyl-ether	< 1.0		ug/l	10/21/92	LJS
Naphthalene	< 1.0		ug/l	10/21/92	LJS
n-Propylbenzene	< 1.0		ug/l	10/21/92	LJS
Styrene	< 1.0		ug/l	10/21/92	LJS
1,1,1,2-Tetrachloroethane	< 1.0		ug/l	10/21/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/l	10/21/92	LJS
Tetrachloroethene	< 1.0		ug/l	10/21/92	LJS
Toluene	< 1.0		ug/l	10/21/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/l	10/21/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,2,4-Trichlorobenzene	< 1.0		ug/l	10/21/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/l	10/21/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/l	10/21/92	LJS
Trichloroethene	< 1.0		ug/l	10/21/92	LJS
Trichlorofluoromethane	< 1.0		ug/l	10/21/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/l	10/21/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/l	10/21/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/l	10/21/92	LJS
Vinyl Chloride	< 1.0		ug/l	10/21/92	LJS
o-Xylene	< 1.0		ug/l	10/21/92	LJS
m/p-Xylene	< 2.0		ug/l	10/21/92	LJS
Mod. GRO (WDNR)	< 0.10		mg/l	10/20/92	EMC

Sample: 02A MW-17 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 50		#	ug/l	10/20/92	LJS
Bromobenzene	< 50		#	ug/l	10/20/92	LJS
Bromochloromethane	< 50		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 50		#	ug/l	10/20/92	LJS
Bromoform	< 50		#	ug/l	10/20/92	LJS
Bromomethane	< 50		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 50		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 50		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 50		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 50		#	ug/l	10/20/92	LJS
Chlorobenzene	< 50		#	ug/l	10/20/92	LJS
Chloroethane	< 50		#	ug/l	10/20/92	LJS
Chloroform	< 50		#	ug/l	10/20/92	LJS
Chloromethane	< 50		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 50		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 50		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 50		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 50		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 50		#	ug/l	10/20/92	LJS
Dibromomethane	< 50		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 50		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 50		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 50		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 50		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	96		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 50		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	600		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	< 50		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 50		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 50		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 50		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 50		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 50		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Ethylbenzene	< 50		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 50		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 50		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 50		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8)350		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 50		#	ug/l	10/20/92	LJS
Naphthalene	< 50		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 50		#	ug/l	10/20/92	LJS
Styrene	< 50		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 50		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 50		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 50		#	ug/l	10/20/92	LJS
Toluene	< 50		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 50		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 50		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	2000		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 50		#	ug/l	10/20/92	LJS
Trichloroethene	5400		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 50		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 50		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 50		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 50		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 50		#	ug/l	10/20/92	LJS
o-Xylene	< 50		#	ug/l	10/20/92	LJS
m/p-Xylene	< 100		#	ug/l	10/20/92	LJS
Mod. GRO (WDNR)	0.62			mg/l	10/20/92	EMC

Sample: 03A MW-22 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 100		#	ug/l	10/30/92	LJS
Bromobenzene	< 100		#	ug/l	10/30/92	LJS
Bromochloromethane	< 100		#	ug/l	10/30/92	LJS
Bromodichloromethane	< 100		#	ug/l	10/30/92	LJS
Bromoform	< 100		#	ug/l	10/30/92	LJS
Bromomethane	< 100		#	ug/l	10/30/92	LJS
n-Butylbenzene	< 100		#	ug/l	10/30/92	LJS
sec-Butylbenzene	< 100		#	ug/l	10/30/92	LJS
tert-Butylbenzene	< 100		#	ug/l	10/30/92	LJS
Carbon tetrachloride	< 100		#	ug/l	10/30/92	LJS
Chlorobenzene	< 100		#	ug/l	10/30/92	LJS
Chloroethane	< 100		#	ug/l	10/30/92	LJS
Chloroform	< 100		#	ug/l	10/30/92	LJS
Chloromethane	< 100		#	ug/l	10/30/92	LJS
2-Chlorotoluene	< 100		#	ug/l	10/30/92	LJS
4-Chlorotoluene	< 100		#	ug/l	10/30/92	LJS
1,2-Dibromo-3-chloropropane	< 100		#	ug/l	10/30/92	LJS
Dibromochloromethane	< 100		#	ug/l	10/30/92	LJS
1,2-Dibromoethane	< 100		#	ug/l	10/30/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Dibromomethane	< 100		#	ug/l	10/30/92	LJS
1,2-Dichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,3-Dichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,4-Dichlorobenzene	< 100		#	ug/l	10/30/92	LJS
Dichlorodifluoromethane	< 100		#	ug/l	10/30/92	LJS
1,1-Dichloroethane	< 100		#	ug/l	10/30/92	LJS
1,2-Dichloroethane	< 100		#	ug/l	10/30/92	LJS
1,1-Dichloroethene	< 100		#	ug/l	10/30/92	LJS
cis-1,2-Dichloroethene	< 100		#	ug/l	10/30/92	LJS
trans-1,2-Dichloroethene	J 55		#	ug/l	10/30/92	LJS
1,2-Dichloropropane	< 100		#	ug/l	10/30/92	LJS
1,3-Dichloropropane	< 100		#	ug/l	10/30/92	LJS
2,2-Dichloropropane	< 100		#	ug/l	10/30/92	LJS
1,1-Dichloropropene	< 100		#	ug/l	10/30/92	LJS
Ethylbenzene	< 100		#	ug/l	10/30/92	LJS
Hexachlorobutadiene	< 100		#	ug/l	10/30/92	LJS
Isopropylbenzene	< 100		#	ug/l	10/30/92	LJS
p-Isopropyltoluene	< 100		#	ug/l	10/30/92	LJS
Methylene Chloride	B(11) 220		#	ug/l	10/30/92	LJS
M-t-butyl-ether	< 100		#	ug/l	10/30/92	LJS
Naphthalene	< 100		#	ug/l	10/30/92	LJS
n-Propylbenzene	< 100		#	ug/l	10/30/92	LJS
Styrene	< 100		#	ug/l	10/30/92	LJS
1,1,1,2-Tetrachloroethane	< 100		#	ug/l	10/30/92	LJS
1,1,2,2-Tetrachloroethane	< 100		#	ug/l	10/30/92	LJS
Tetrachloroethene	< 100		#	ug/l	10/30/92	LJS
Toluene	< 100		#	ug/l	10/30/92	LJS
1,2,3-Trichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,2,4-Trichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,1,1-Trichloroethane	440		#	ug/l	10/30/92	LJS
1,1,2-Trichloroethane	< 100		#	ug/l	10/30/92	LJS
Trichloroethene	2700		#	ug/l	10/30/92	LJS
Trichlorofluoromethane	< 100		#	ug/l	10/30/92	LJS
1,2,3-Trichloropropane	< 100		#	ug/l	10/30/92	LJS
1,2,4-Trimethylbenzene	< 100		#	ug/l	10/30/92	LJS
1,3,5-Trimethylbenzene	< 100		#	ug/l	10/30/92	LJS
Vinyl Chloride	< 100		#	ug/l	10/30/92	LJS
o-Xylene	< 100		#	ug/l	10/30/92	LJS
m/p-Xylene	< 200		#	ug/l	10/30/92	LJS
Mod. GRO (WDNR)	0.34			mg/l	10/20/92	EMC

Sample: 04A MW-2 **Collected: 10/14/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/27/92	LJS
Bromobenzene	< 1.0		ug/l	10/27/92	LJS
Bromochloromethane	< 1.0		ug/l	10/27/92	LJS
Bromodichloromethane	< 1.0		ug/l	10/27/92	LJS
Bromoform	< 1.0		ug/l	10/27/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
Bromomethane	< 1.0		ug/l	10/27/92	LJS
n-Butylbenzene	< 1.0		ug/l	10/27/92	LJS
sec-Butylbenzene	< 1.0		ug/l	10/27/92	LJS
tert-Butylbenzene	< 1.0		ug/l	10/27/92	LJS
Carbon tetrachloride	< 1.0		ug/l	10/27/92	LJS
Chlorobenzene	< 1.0		ug/l	10/27/92	LJS
Chloroethane	< 1.0		ug/l	10/27/92	LJS
Chloroform	< 1.0		ug/l	10/27/92	LJS
Chloromethane	< 1.0		ug/l	10/27/92	LJS
2-Chlorotoluene	< 1.0		ug/l	10/27/92	LJS
4-Chlorotoluene	< 1.0		ug/l	10/27/92	LJS
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/27/92	LJS
Dibromochloromethane	< 1.0		ug/l	10/27/92	LJS
1,2-Dibromoethane	< 1.0		ug/l	10/27/92	LJS
Dibromomethane	< 1.0		ug/l	10/27/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/l	10/27/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/l	10/27/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/l	10/27/92	LJS
Dichlorodifluoromethane	< 1.0		ug/l	10/27/92	LJS
1,1-Dichloroethane	< 1.0		ug/l	10/27/92	LJS
1,2-Dichloroethane	< 1.0		ug/l	10/27/92	LJS
1,1-Dichloroethene	< 1.0		ug/l	10/27/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/l	10/27/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/l	10/27/92	LJS
1,2-Dichloropropane	< 1.0		ug/l	10/27/92	LJS
1,3-Dichloropropane	< 1.0		ug/l	10/27/92	LJS
2,2-Dichloropropane	< 1.0		ug/l	10/27/92	LJS
1,1-Dichloropropene	< 1.0		ug/l	10/27/92	LJS
Ethylbenzene	< 1.0		ug/l	10/27/92	LJS
Hexachlorobutadiene	< 1.0		ug/l	10/27/92	LJS
Isopropylbenzene	< 1.0		ug/l	10/27/92	LJS
p-Isopropyltoluene	< 1.0		ug/l	10/27/92	LJS
Methylene Chloride	B(5.5)	1.8	ug/l	10/27/92	LJS
M-t-butyl-ether	< 1.0		ug/l	10/27/92	LJS
Naphthalene	< 1.0		ug/l	10/27/92	LJS
n-Propylbenzene	< 1.0		ug/l	10/27/92	LJS
Styrene	< 1.0		ug/l	10/27/92	LJS
1,1,1,2-Tetrachloroethane	< 1.0		ug/l	10/27/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/l	10/27/92	LJS
Tetrachloroethene	< 1.0		ug/l	10/27/92	LJS
Toluene	< 1.0		ug/l	10/27/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/l	10/27/92	LJS
1,2,4-Trichlorobenzene	< 1.0		ug/l	10/27/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/l	10/27/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/l	10/27/92	LJS
Trichloroethene	< 1.0		ug/l	10/27/92	LJS
Trichlorofluoromethane	< 1.0		ug/l	10/27/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/l	10/27/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/l	10/27/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/l	10/27/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Vinyl Chloride	< 1.0			ug/l	10/27/92	LJS
o-Xylene	< 1.0			ug/l	10/27/92	LJS
m/p-Xylene	< 2.0			ug/l	10/27/92	LJS
Mod. GRO (WDNR)	< 0.10			mg/l	10/20/92	EMC

Sample: 05A MW-21 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	110		#	ug/l	10/30/92	LJS
Bromobenzene	< 50		#	ug/l	10/30/92	LJS
Bromochloromethane	< 50		#	ug/l	10/30/92	LJS
Bromodichloromethane	< 50		#	ug/l	10/30/92	LJS
Bromoform	< 50		#	ug/l	10/30/92	LJS
Bromomethane	< 50		#	ug/l	10/30/92	LJS
n-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
sec-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
tert-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
Carbon tetrachloride	< 50		#	ug/l	10/30/92	LJS
Chlorobenzene	< 50		#	ug/l	10/30/92	LJS
Chloroethane	< 50		#	ug/l	10/30/92	LJS
Chloroform	< 50		#	ug/l	10/30/92	LJS
Chloromethane	< 50		#	ug/l	10/30/92	LJS
2-Chlorotoluene	< 50		#	ug/l	10/30/92	LJS
4-Chlorotoluene	< 50		#	ug/l	10/30/92	LJS
1,2-Dibromo-3-chloropropane	< 50		#	ug/l	10/30/92	LJS
Dibromochloromethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dibromoethane	< 50		#	ug/l	10/30/92	LJS
Dibromomethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,3-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,4-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
Dichlorodifluoromethane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloroethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dichloroethane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
cis-1,2-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
trans-1,2-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
1,2-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
1,3-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
2,2-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloropropene	< 50		#	ug/l	10/30/92	LJS
Ethylbenzene	< 50		#	ug/l	10/30/92	LJS
Hexachlorobutadiene	< 50		#	ug/l	10/30/92	LJS
Isopropylbenzene	< 50		#	ug/l	10/30/92	LJS
p-Isopropyltoluene	< 50		#	ug/l	10/30/92	LJS
Methylene Chloride	B(11) 120		#	ug/l	10/30/92	LJS
M-t-butyl-ether	< 50		#	ug/l	10/30/92	LJS
Naphthalene	< 50		#	ug/l	10/30/92	LJS
n-Propylbenzene	< 50		#	ug/l	10/30/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Styrene	< 50		#	ug/l	10/30/92	LJS
1,1,1,2-Tetrachloroethane	< 50		#	ug/l	10/30/92	LJS
1,1,2,2-Tetrachloroethane	< 50		#	ug/l	10/30/92	LJS
Tetrachloroethene	< 50		#	ug/l	10/30/92	LJS
Toluene	< 50		#	ug/l	10/30/92	LJS
1,2,3-Trichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,2,4-Trichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,1,1-Trichloroethane	< 50		#	ug/l	10/30/92	LJS
1,1,2-Trichloroethane	< 50		#	ug/l	10/30/92	LJS
Trichloroethene	J 42		#	ug/l	10/30/92	LJS
Trichlorofluoromethane	< 50		#	ug/l	10/30/92	LJS
1,2,3-Trichloropropane	< 50		#	ug/l	10/30/92	LJS
1,2,4-Trimethylbenzene	< 50		#	ug/l	10/30/92	LJS
1,3,5-Trimethylbenzene	< 50		#	ug/l	10/30/92	LJS
Vinyl Chloride	< 50		#	ug/l	10/30/92	LJS
o-Xylene	< 50		#	ug/l	10/30/92	LJS
m/p-Xylene	< 100		#	ug/l	10/30/92	LJS
Mod. GRO (WDNR)	0.13			mg/l	10/20/92	EMC

Sample: 06A MW-6 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 10		#	ug/l	10/27/92	LJS
Bromobenzene	< 10		#	ug/l	10/27/92	LJS
Bromochloromethane	< 10		#	ug/l	10/27/92	LJS
Bromodichloromethane	< 10		#	ug/l	10/27/92	LJS
Bromoform	< 10		#	ug/l	10/27/92	LJS
Bromomethane	< 10		#	ug/l	10/27/92	LJS
n-Butylbenzene	< 10		#	ug/l	10/27/92	LJS
sec-Butylbenzene	< 10		#	ug/l	10/27/92	LJS
tert-Butylbenzene	< 10		#	ug/l	10/27/92	LJS
Carbon tetrachloride	< 10		#	ug/l	10/27/92	LJS
Chlorobenzene	< 10		#	ug/l	10/27/92	LJS
Chloroethane	< 10		#	ug/l	10/27/92	LJS
Chloroform	< 10		#	ug/l	10/27/92	LJS
Chloromethane	B (4.0)37		#	ug/l	10/27/92	LJS
2-Chlorotoluene	< 10		#	ug/l	10/27/92	LJS
4-Chlorotoluene	< 10		#	ug/l	10/27/92	LJS
1,2-Dibromo-3-chloropropane	< 10		#	ug/l	10/27/92	LJS
Dibromochloromethane	< 10		#	ug/l	10/27/92	LJS
1,2-Dibromoethane	< 10		#	ug/l	10/27/92	LJS
Dibromomethane	< 10		#	ug/l	10/27/92	LJS
1,2-Dichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,3-Dichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,4-Dichlorobenzene	< 10		#	ug/l	10/27/92	LJS
Dichlorodifluoromethane	< 10		#	ug/l	10/27/92	LJS
1,1-Dichloroethane	< 10		#	ug/l	10/27/92	LJS
1,2-Dichloroethane	< 10		#	ug/l	10/27/92	LJS
1,1-Dichloroethene	20		#	ug/l	10/27/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
cis-1,2-Dichloroethene	490		#	ug/l	10/27/92	LJS
trans-1,2-Dichloroethene	< 10		#	ug/l	10/27/92	LJS
1,2-Dichloropropane	< 10		#	ug/l	10/27/92	LJS
1,3-Dichloropropane	< 10		#	ug/l	10/27/92	LJS
2,2-Dichloropropane	< 10		#	ug/l	10/27/92	LJS
1,1-Dichloropropene	< 10		#	ug/l	10/27/92	LJS
Ethylbenzene	< 10		#	ug/l	10/27/92	LJS
Hexachlorobutadiene	< 10		#	ug/l	10/27/92	LJS
Isopropylbenzene	< 10		#	ug/l	10/27/92	LJS
p-Isopropyltoluene	< 10		#	ug/l	10/27/92	LJS
Methylene Chloride	B (5.5)31		#	ug/l	10/27/92	LJS
M-t-butyl-ether	< 10		#	ug/l	10/27/92	LJS
Naphthalene	< 10		#	ug/l	10/27/92	LJS
n-Propylbenzene	< 10		#	ug/l	10/27/92	LJS
Styrene	< 10		#	ug/l	10/27/92	LJS
1,1,1,2-Tetrachloroethane	< 10		#	ug/l	10/27/92	LJS
1,1,2,2-Tetrachloroethane	< 10		#	ug/l	10/27/92	LJS
Tetrachloroethene	< 10		#	ug/l	10/27/92	LJS
Toluene	< 10		#	ug/l	10/27/92	LJS
1,2,3-Trichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,2,4-Trichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,1,1-Trichloroethane	65		#	ug/l	10/27/92	LJS
1,1,2-Trichloroethane	< 10		#	ug/l	10/27/92	LJS
Trichloroethene	81		#	ug/l	10/27/92	LJS
Trichlorofluoromethane	< 10		#	ug/l	10/27/92	LJS
1,2,3-Trichloropropane	< 10		#	ug/l	10/27/92	LJS
1,2,4-Trimethylbenzene	< 10		#	ug/l	10/27/92	LJS
1,3,5-Trimethylbenzene	< 10		#	ug/l	10/27/92	LJS
Vinyl Chloride	< 10		#	ug/l	10/27/92	LJS
o-Xylene	< 10		#	ug/l	10/27/92	LJS
m/p-Xylene	< 20		#	ug/l	10/27/92	LJS
Mod. GRO (WDNR)	0.25			mg/l	10/20/92	EMC

Sample: 07A MW-19 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 50		#	ug/l	10/30/92	LJS
Bromobenzene	< 50		#	ug/l	10/30/92	LJS
Bromochloromethane	< 50		#	ug/l	10/30/92	LJS
Bromodichloromethane	< 50		#	ug/l	10/30/92	LJS
Bromoform	< 50		#	ug/l	10/30/92	LJS
Bromomethane	< 50		#	ug/l	10/30/92	LJS
n-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
sec-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
tert-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
Carbon tetrachloride	< 50		#	ug/l	10/30/92	LJS
Chlorobenzene	< 50		#	ug/l	10/30/92	LJS
Chloroethane	< 50		#	ug/l	10/30/92	LJS
Chloroform	< 50		#	ug/l	10/30/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Chloromethane	< 50		#	ug/l	10/30/92	LJS
2-Chlorotoluene	< 50		#	ug/l	10/30/92	LJS
4-Chlorotoluene	< 50		#	ug/l	10/30/92	LJS
1,2-Dibromo-3-chloropropane	< 50		#	ug/l	10/30/92	LJS
Dibromochloromethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dibromoethane	< 50		#	ug/l	10/30/92	LJS
Dibromomethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,3-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,4-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
Dichlorodifluoromethane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloroethane	J 17		#	ug/l	10/30/92	LJS
1,2-Dichloroethane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
cis-1,2-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
trans-1,2-Dichloroethene	J 16		#	ug/l	10/30/92	LJS
1,2-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
1,3-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
2,2-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloropropene	< 50		#	ug/l	10/30/92	LJS
Ethylbenzene	< 50		#	ug/l	10/30/92	LJS
Hexachlorobutadiene	< 50		#	ug/l	10/30/92	LJS
Isopropylbenzene	< 50		#	ug/l	10/30/92	LJS
p-Isopropyltoluene	< 50		#	ug/l	10/30/92	LJS
Methylene Chloride	B(11) 100		#	ug/l	10/30/92	LJS
M-t-butyl-ether	< 50		#	ug/l	10/30/92	LJS
Naphthalene	< 50		#	ug/l	10/30/92	LJS
n-Propylbenzene	< 50		#	ug/l	10/30/92	LJS
Styrene	< 50		#	ug/l	10/30/92	LJS
1,1,1,2-Tetrachloroethane	< 50		#	ug/l	10/30/92	LJS
1,1,2,2-Tetrachloroethane	< 50		#	ug/l	10/30/92	LJS
Tetrachloroethene	< 50		#	ug/l	10/30/92	LJS
Toluene	< 50		#	ug/l	10/30/92	LJS
1,2,3-Trichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,2,4-Trichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,1,1-Trichloroethane	120		#	ug/l	10/30/92	LJS
1,1,2-Trichloroethane	< 50		#	ug/l	10/30/92	LJS
Trichloroethene	720		#	ug/l	10/30/92	LJS
Trichlorofluoromethane	< 50		#	ug/l	10/30/92	LJS
1,2,3-Trichloropropane	< 50		#	ug/l	10/30/92	LJS
1,2,4-Trimethylbenzene	< 50		#	ug/l	10/30/92	LJS
1,3,5-Trimethylbenzene	< 50		#	ug/l	10/30/92	LJS
Vinyl Chloride	< 50		#	ug/l	10/30/92	LJS
o-Xylene	< 50		#	ug/l	10/30/92	LJS
m/p-Xylene	< 100		#	ug/l	10/30/92	LJS
Mod. GRO (WDNR)	0.25			mg/l	10/20/92	EMC

Sample: 08A MW-13 **Collected: 10/14/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					

Test Description	Result	Limit		Units	Analyzed	By
Benzene	< 100		#	ug/l	10/30/92	LJS
Bromobenzene	< 100		#	ug/l	10/30/92	LJS
Bromochloromethane	< 100		#	ug/l	10/30/92	LJS
Bromodichloromethane	< 100		#	ug/l	10/30/92	LJS
Bromoform	< 100		#	ug/l	10/30/92	LJS
Bromomethane	< 100		#	ug/l	10/30/92	LJS
n-Butylbenzene	< 100		#	ug/l	10/30/92	LJS
sec-Butylbenzene	< 100		#	ug/l	10/30/92	LJS
tert-Butylbenzene	< 100		#	ug/l	10/30/92	LJS
Carbon tetrachloride	< 100		#	ug/l	10/30/92	LJS
Chlorobenzene	< 100		#	ug/l	10/30/92	LJS
Chloroethane	< 100		#	ug/l	10/30/92	LJS
Chloroform	< 100		#	ug/l	10/30/92	LJS
Chloromethane	< 100		#	ug/l	10/30/92	LJS
2-Chlorotoluene	< 100		#	ug/l	10/30/92	LJS
4-Chlorotoluene	< 100		#	ug/l	10/30/92	LJS
1,2-Dibromo-3-chloropropane	< 100		#	ug/l	10/30/92	LJS
Dibromochloromethane	< 100		#	ug/l	10/30/92	LJS
1,2-Dibromoethane	< 100		#	ug/l	10/30/92	LJS
Dibromomethane	< 100		#	ug/l	10/30/92	LJS
1,2-Dichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,3-Dichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,4-Dichlorobenzene	< 100		#	ug/l	10/30/92	LJS
Dichlorodifluoromethane	< 100		#	ug/l	10/30/92	LJS
1,1-Dichloroethane	< 100		#	ug/l	10/30/92	LJS
1,2-Dichloroethane	< 100		#	ug/l	10/30/92	LJS
1,1-Dichloroethene	< 100		#	ug/l	10/30/92	LJS
cis-1,2-Dichloroethene	< 100		#	ug/l	10/30/92	LJS
trans-1,2-Dichloroethene	J 58		#	ug/l	10/30/92	LJS
1,2-Dichloropropane	< 100		#	ug/l	10/30/92	LJS
1,3-Dichloropropane	< 100		#	ug/l	10/30/92	LJS
2,2-Dichloropropane	< 100		#	ug/l	10/30/92	LJS
1,1-Dichloropropene	< 100		#	ug/l	10/30/92	LJS
Ethylbenzene	< 100		#	ug/l	10/30/92	LJS
Hexachlorobutadiene	< 100		#	ug/l	10/30/92	LJS
Isopropylbenzene	< 100		#	ug/l	10/30/92	LJS
p-Isopropyltoluene	< 100		#	ug/l	10/30/92	LJS
Methylene Chloride	B(11) 240		#	ug/l	10/30/92	LJS
M-t-butyl-ether	< 100		#	ug/l	10/30/92	LJS
Naphthalene	< 100		#	ug/l	10/30/92	LJS
n-Propylbenzene	< 100		#	ug/l	10/30/92	LJS
Styrene	< 100		#	ug/l	10/30/92	LJS
1,1,1,2-Tetrachloroethane	< 100		#	ug/l	10/30/92	LJS
1,1,2,2-Tetrachloroethane	< 100		#	ug/l	10/30/92	LJS
Tetrachloroethene	< 100		#	ug/l	10/30/92	LJS
Toluene	< 100		#	ug/l	10/30/92	LJS
1,2,3-Trichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,2,4-Trichlorobenzene	< 100		#	ug/l	10/30/92	LJS
1,1,1-Trichloroethane	300		#	ug/l	10/30/92	LJS
1,1,2-Trichloroethane	< 100		#	ug/l	10/30/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Trichloroethene	1100		#	ug/l	10/30/92	LJS
Trichlorofluoromethane	< 100		#	ug/l	10/30/92	LJS
1,2,3-Trichloropropane	< 100		#	ug/l	10/30/92	LJS
1,2,4-Trimethylbenzene	< 100		#	ug/l	10/30/92	LJS
1,3,5-Trimethylbenzene	< 100		#	ug/l	10/30/92	LJS
Vinyl Chloride	< 100		#	ug/l	10/30/92	LJS
o-Xylene	< 100		#	ug/l	10/30/92	LJS
m/p-Xylene	< 200		#	ug/l	10/30/92	LJS
Mod. GRO (WDNR)	0.51			mg/l	10/20/92	EMC

Sample: 09A MW-18 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	28		#	ug/l	10/27/92	LJS
Bromobenzene	< 10		#	ug/l	10/27/92	LJS
Bromochloromethane	< 10		#	ug/l	10/27/92	LJS
Bromodichloromethane	< 10		#	ug/l	10/27/92	LJS
Bromoform	< 10		#	ug/l	10/27/92	LJS
Bromomethane	< 10		#	ug/l	10/27/92	LJS
n-Butylbenzene	< 10		#	ug/l	10/27/92	LJS
sec-Butylbenzene	< 10		#	ug/l	10/27/92	LJS
tert-Butylbenzene	< 10		#	ug/l	10/27/92	LJS
Carbon tetrachloride	< 10		#	ug/l	10/27/92	LJS
Chlorobenzene	< 10		#	ug/l	10/27/92	LJS
Chloroethane	< 10		#	ug/l	10/27/92	LJS
Chloroform	< 10		#	ug/l	10/27/92	LJS
Chloromethane	< 10		#	ug/l	10/27/92	LJS
2-Chlorotoluene	< 10		#	ug/l	10/27/92	LJS
4-Chlorotoluene	< 10		#	ug/l	10/27/92	LJS
1,2-Dibromo-3-chloropropane	< 10		#	ug/l	10/27/92	LJS
Dibromochloromethane	< 10		#	ug/l	10/27/92	LJS
1,2-Dibromoethane	< 10		#	ug/l	10/27/92	LJS
Dibromomethane	< 10		#	ug/l	10/27/92	LJS
1,2-Dichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,3-Dichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,4-Dichlorobenzene	< 10		#	ug/l	10/27/92	LJS
Dichlorodifluoromethane	< 10		#	ug/l	10/27/92	LJS
1,1-Dichloroethane	14		#	ug/l	10/27/92	LJS
1,2-Dichloroethane	< 10		#	ug/l	10/27/92	LJS
1,1-Dichloroethene	22		#	ug/l	10/27/92	LJS
cis-1,2-Dichloroethene	230		#	ug/l	10/27/92	LJS
trans-1,2-Dichloroethene	< 10		#	ug/l	10/27/92	LJS
1,2-Dichloropropane	< 10		#	ug/l	10/27/92	LJS
1,3-Dichloropropane	< 10		#	ug/l	10/27/92	LJS
2,2-Dichloropropane	< 10		#	ug/l	10/27/92	LJS
1,1-Dichloropropene	< 10		#	ug/l	10/27/92	LJS
Ethylbenzene	< 10		#	ug/l	10/27/92	LJS
Hexachlorobutadiene	< 10		#	ug/l	10/27/92	LJS
Isopropylbenzene	< 10		#	ug/l	10/27/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
p-Isopropyltoluene	< 10		#	ug/l	10/27/92	LJS
Methylene Chloride	B(5.5) 42		#	ug/l	10/27/92	LJS
M-t-butyl-ether	< 10		#	ug/l	10/27/92	LJS
Naphthalene	< 10		#	ug/l	10/27/92	LJS
n-Propylbenzene	< 10		#	ug/l	10/27/92	LJS
Styrene	< 10		#	ug/l	10/27/92	LJS
1,1,1,2-Tetrachloroethane	< 10		#	ug/l	10/27/92	LJS
1,1,2,2-Tetrachloroethane	< 10		#	ug/l	10/27/92	LJS
Tetrachloroethene	< 10		#	ug/l	10/27/92	LJS
Toluene	< 10		#	ug/l	10/27/92	LJS
1,2,3-Trichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,2,4-Trichlorobenzene	< 10		#	ug/l	10/27/92	LJS
1,1,1-Trichloroethane	69		#	ug/l	10/27/92	LJS
1,1,2-Trichloroethane	< 10		#	ug/l	10/27/92	LJS
Trichloroethene	380		#	ug/l	10/27/92	LJS
Trichlorofluoromethane	< 10		#	ug/l	10/27/92	LJS
1,2,3-Trichloropropane	< 10		#	ug/l	10/27/92	LJS
1,2,4-Trimethylbenzene	< 10		#	ug/l	10/27/92	LJS
1,3,5-Trimethylbenzene	< 10		#	ug/l	10/27/92	LJS
Vinyl Chloride	< 10		#	ug/l	10/27/92	LJS
o-Xylene	< 10		#	ug/l	10/27/92	LJS
m/p-Xylene	< 20		#	ug/l	10/27/92	LJS
Mod. GRO (WDNR)	0.30			mg/l	10/20/92	EMC

Sample: 10A MW-20 **Collected: 10/14/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 50		#	ug/l	10/30/92	LJS
Bromobenzene	< 50		#	ug/l	10/30/92	LJS
Bromochloromethane	< 50		#	ug/l	10/30/92	LJS
Bromodichloromethane	< 50		#	ug/l	10/30/92	LJS
Bromoform	< 50		#	ug/l	10/30/92	LJS
Bromomethane	< 50		#	ug/l	10/30/92	LJS
n-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
sec-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
tert-Butylbenzene	< 50		#	ug/l	10/30/92	LJS
Carbon tetrachloride	< 50		#	ug/l	10/30/92	LJS
Chlorobenzene	< 50		#	ug/l	10/30/92	LJS
Chloroethane	< 50		#	ug/l	10/30/92	LJS
Chloroform	< 50		#	ug/l	10/30/92	LJS
Chloromethane	< 50		#	ug/l	10/30/92	LJS
2-Chlorotoluene	< 50		#	ug/l	10/30/92	LJS
4-Chlorotoluene	< 50		#	ug/l	10/30/92	LJS
1,2-Dibromo-3-chloropropane	< 50		#	ug/l	10/30/92	LJS
Dibromochloromethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dibromoethane	< 50		#	ug/l	10/30/92	LJS
Dibromomethane	< 50		#	ug/l	10/30/92	LJS
1,2-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,3-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
1,4-Dichlorobenzene	< 50		#	ug/l	10/30/92	LJS
Dichlorodifluoromethane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloroethane	J 14		#	ug/l	10/30/92	LJS
1,2-Dichloroethane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
cis-1,2-Dichloroethene	< 50		#	ug/l	10/30/92	LJS
trans-1,2-Dichloroethene	J 19		#	ug/l	10/30/92	LJS
1,2-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
1,3-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
2,2-Dichloropropane	< 50		#	ug/l	10/30/92	LJS
1,1-Dichloropropene	< 50		#	ug/l	10/30/92	LJS
Ethylbenzene	< 50		#	ug/l	10/30/92	LJS
Hexachlorobutadiene	< 50		#	ug/l	10/30/92	LJS
Isopropylbenzene	< 50		#	ug/l	10/30/92	LJS
p-Isopropyltoluene	< 50		#	ug/l	10/30/92	LJS
Methylene Chloride	B(11) 110		#	ug/l	10/30/92	LJS
M-t-butyl-ether	< 50		#	ug/l	10/30/92	LJS
Naphthalene	< 50		#	ug/l	10/30/92	LJS
n-Propylbenzene	< 50		#	ug/l	10/30/92	LJS
Styrene	< 50		#	ug/l	10/30/92	LJS
1,1,1,2-Tetrachloroethane	< 50		#	ug/l	10/30/92	LJS
1,1,2,2-Tetrachloroethane	< 50		#	ug/l	10/30/92	LJS
Tetrachloroethene	< 50		#	ug/l	10/30/92	LJS
Toluene	< 50		#	ug/l	10/30/92	LJS
1,2,3-Trichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,2,4-Trichlorobenzene	< 50		#	ug/l	10/30/92	LJS
1,1,1-Trichloroethane	< 50		#	ug/l	10/30/92	LJS
1,1,2-Trichloroethane	150		#	ug/l	10/30/92	LJS
Trichloroethene	630		#	ug/l	10/30/92	LJS
Trichlorofluoromethane	< 50		#	ug/l	10/30/92	LJS
1,2,3-Trichloropropane	< 50		#	ug/l	10/30/92	LJS
1,2,4-Trimethylbenzene	< 50		#	ug/l	10/30/92	LJS
1,3,5-Trimethylbenzene	< 50		#	ug/l	10/30/92	LJS
Vinyl Chloride	< 50		#	ug/l	10/30/92	LJS
o-Xylene	< 50		#	ug/l	10/30/92	LJS
m/p-Xylene	< 100		#	ug/l	10/30/92	LJS
Mod. GRO (WDNR)	0.33			mg/l	10/20/92	EMC

Elevated detection limit due to sample concentration.

B - Analyte found in the associated method blank.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for 8260 were analyzed according to Method 8260 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

J - Analyte positively identified below the quantitation limit.

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708
Attn: Al MacKenzie
Invoice Number: 5756

Order #: 92-10-152
Date: 10/21/92 13:57
Work ID: 2585.02
Date Received: 10/14/92
Date Completed: 10/21/92
Client Code: RMT

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	TRIP BLANK
02	NMW-4
03	NMW-3
04	NMW-1
05	NMW-2
06	NMW-6
07	NMW-5
08	DUP 1
09	FIELD BLANK

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

Sample: 01A TRIP BLANK **Collected: 10/13/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/20/92	LJS
Bromobenzene	< 1.0		ug/l	10/20/92	LJS
Bromochloromethane	< 1.0		ug/l	10/20/92	LJS
Bromodichloromethane	< 1.0		ug/l	10/20/92	LJS
Bromoform	< 1.0		ug/l	10/20/92	LJS
Bromomethane	< 1.0		ug/l	10/20/92	LJS
n-Butylbenzene	< 1.0		ug/l	10/20/92	LJS
sec-Butylbenzene	< 1.0		ug/l	10/20/92	LJS
tert-Butylbenzene	< 1.0		ug/l	10/20/92	LJS
Carbon tetrachloride	< 1.0		ug/l	10/20/92	LJS
Chlorobenzene	< 1.0		ug/l	10/20/92	LJS
Chloroethane	< 1.0		ug/l	10/20/92	LJS
Chloroform	< 1.0		ug/l	10/20/92	LJS
Chloromethane	< 1.0		ug/l	10/20/92	LJS
2-Chlorotoluene	< 1.0		ug/l	10/20/92	LJS
4-Chlorotoluene	< 1.0		ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/20/92	LJS
Dibromochloromethane	< 1.0		ug/l	10/20/92	LJS
1,2-Dibromoethane	< 1.0		ug/l	10/20/92	LJS
Dibromomethane	< 1.0		ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 1.0		ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 1.0		ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 1.0		ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 1.0		ug/l	10/20/92	LJS
1,1-Dichloroethane	< 1.0		ug/l	10/20/92	LJS
1,2-Dichloroethane	< 1.0		ug/l	10/20/92	LJS
1,1-Dichloroethene	< 1.0		ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	< 1.0		ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 1.0		ug/l	10/20/92	LJS
1,2-Dichloropropane	< 1.0		ug/l	10/20/92	LJS
1,3-Dichloropropane	< 1.0		ug/l	10/20/92	LJS
2,2-Dichloropropane	< 1.0		ug/l	10/20/92	LJS
1,1-Dichloropropene	< 1.0		ug/l	10/20/92	LJS
Ethylbenzene	< 1.0		ug/l	10/20/92	LJS
Hexachlorobutadiene	< 1.0		ug/l	10/20/92	LJS
Isopropylbenzene	< 1.0		ug/l	10/20/92	LJS
p-Isopropyltoluene	< 1.0		ug/l	10/20/92	LJS
Methylene Chloride	B(2.8)2.4		ug/l	10/20/92	LJS
M-t-butyl-ether	< 1.0		ug/l	10/20/92	LJS
Naphthalene	< 1.0		ug/l	10/20/92	LJS
n-Propylbenzene	< 1.0		ug/l	10/20/92	LJS
Styrene	< 1.0		ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 1.0		ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 1.0		ug/l	10/20/92	LJS
Tetrachloroethene	< 1.0		ug/l	10/20/92	LJS
Toluene	< 1.0		ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 1.0		ug/l	10/20/92	LJS

Test Description	Result	Limit	Units	Analyzed	By
1,2,4-Trichlorobenzene	< 1.0		ug/l	10/20/92	LJS
1,1,1-Trichloroethane	< 1.0		ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 1.0		ug/l	10/20/92	LJS
Trichloroethene	< 1.0		ug/l	10/20/92	LJS
Trichlorofluoromethane	< 1.0		ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 1.0		ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 1.0		ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 1.0		ug/l	10/20/92	LJS
Vinyl Chloride	< 1.0		ug/l	10/20/92	LJS
o-Xylene	< 1.0		ug/l	10/20/92	LJS
m/p-Xylene	< 2.0		ug/l	10/20/92	LJS

Sample: 02A NMW-4 **Collected: 10/13/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/19/92	JJB
Bromobenzene	< 1.0		ug/l	10/19/92	JJB
Bromochloromethane	< 1.0		ug/l	10/19/92	JJB
Bromodichloromethane	< 1.0		ug/l	10/19/92	JJB
Bromoform	< 1.0		ug/l	10/19/92	JJB
Bromomethane	< 1.0		ug/l	10/19/92	JJB
n-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
sec-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
tert-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
Carbon tetrachloride	< 1.0		ug/l	10/19/92	JJB
Chlorobenzene	< 1.0		ug/l	10/19/92	JJB
Chloroethane	< 1.0		ug/l	10/19/92	JJB
Chloroform	< 1.0		ug/l	10/19/92	JJB
Chloromethane	< 1.0		ug/l	10/19/92	JJB
2-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
4-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/19/92	JJB
Dibromochloromethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromoethane	< 1.0		ug/l	10/19/92	JJB
Dibromomethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,3-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,4-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
Dichlorodifluoromethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dichloroethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethene	< 1.0		ug/l	10/19/92	JJB
cis-1,2-Dichloroethene	3.0		ug/l	10/19/92	JJB
trans-1,2-Dichloroethene	< 1.0		ug/l	10/19/92	JJB
1,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,3-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
2,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloropropene	< 1.0		ug/l	10/19/92	JJB
Ethylbenzene	< 1.0		ug/l	10/19/92	JJB

Test Description	Result	Limit	Units	Analyzed	By
Hexachlorobutadiene	< 1.0		ug/l	10/19/92	JJB
Isopropylbenzene	< 1.0		ug/l	10/19/92	JJB
p-Isopropyltoluene	< 1.0		ug/l	10/19/92	JJB
Methylene Chloride	B(2.9)1.5		ug/l	10/19/92	JJB
M-t-butyl-ether	< 1.0		ug/l	10/19/92	JJB
Naphthalene	< 1.0		ug/l	10/19/92	JJB
n-Propylbenzene	< 1.0		ug/l	10/19/92	JJB
Styrene	< 1.0		ug/l	10/19/92	JJB
1,1,1,2-Tetrachloroethane	< 1.0		ug/l	10/19/92	JJB
1,1,2,2-Tetrachloroethane	< 1.0		ug/l	10/19/92	JJB
Tetrachloroethene	< 1.0		ug/l	10/19/92	JJB
Toluene	4.4		ug/l	10/19/92	JJB
1,2,3-Trichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,2,4-Trichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,1,1-Trichloroethane	< 1.0		ug/l	10/19/92	JJB
1,1,2-Trichloroethane	< 1.0		ug/l	10/19/92	JJB
Trichloroethene	22		ug/l	10/19/92	JJB
Trichlorofluoromethane	< 1.0		ug/l	10/19/92	JJB
1,2,3-Trichloropropane	< 1.0		ug/l	10/19/92	JJB
1,2,4-Trimethylbenzene	< 1.0		ug/l	10/19/92	JJB
1,3,5-Trimethylbenzene	< 1.0		ug/l	10/19/92	JJB
Vinyl Chloride	< 1.0		ug/l	10/19/92	JJB
o-Xylene	< 1.0		ug/l	10/19/92	JJB
m/p-Xylene	< 2.0		ug/l	10/19/92	JJB
Mod. DRO (WDNR)	< 0.10		mg/l	10/16/92	SEL
Mod. GRO (WDNR)	< 0.10		mg/l	10/15/92	EMC
TRPH, Water	< 0.10		ppm	10/19/92	CEP

Sample: 03A NMW-3 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 10		#	ug/l	10/20/92	LJS
Bromobenzene	< 10		#	ug/l	10/20/92	LJS
Bromochloromethane	< 10		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 10		#	ug/l	10/20/92	LJS
Bromoform	< 10		#	ug/l	10/20/92	LJS
Bromomethane	< 10		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 10		#	ug/l	10/20/92	LJS
Chlorobenzene	< 10		#	ug/l	10/20/92	LJS
Chloroethane	< 10		#	ug/l	10/20/92	LJS
Chloroform	< 10		#	ug/l	10/20/92	LJS
Chloromethane	< 10		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 10		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 10		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 10		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 10		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
1,2-Dibromoethane	< 10		#	ug/l	10/20/92	LJS
Dibromomethane	< 10		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	< 10		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	11		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	< 10		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 10		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 10		#	ug/l	10/20/92	LJS
Ethylbenzene	< 10		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 10		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 10		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 10		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8) 30		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 10		#	ug/l	10/20/92	LJS
Naphthalene	< 10		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 10		#	ug/l	10/20/92	LJS
Styrene	< 10		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 10		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 10		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 10		#	ug/l	10/20/92	LJS
Toluene	< 10		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	200		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 10		#	ug/l	10/20/92	LJS
Trichloroethene	220		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 10		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 10		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 10		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 10		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 10		#	ug/l	10/20/92	LJS
o-Xylene	< 10		#	ug/l	10/20/92	LJS
m/p-Xylene	< 20		#	ug/l	10/20/92	LJS
Mod. DRO (WDNR)	< 0.10			mg/l	10/16/92	SEL
Mod. GRO (WDNR)	0.14			mg/l	10/15/92	EMC
TRPH, Water	< 0.10			ppm	10/19/92	CEP

Sample: 04A NMW-1 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 25		#	ug/l	10/20/92	LJS
Bromobenzene	< 25		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Bromochloromethane	< 25		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 25		#	ug/l	10/20/92	LJS
Bromoform	< 25		#	ug/l	10/20/92	LJS
Bromomethane	< 25		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 25		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 25		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 25		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 25		#	ug/l	10/20/92	LJS
Chlorobenzene	< 25		#	ug/l	10/20/92	LJS
Chloroethane	< 25		#	ug/l	10/20/92	LJS
Chloroform	< 25		#	ug/l	10/20/92	LJS
Chloromethane	< 25		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 25		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 25		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 25		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 25		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 25		#	ug/l	10/20/92	LJS
Dibromomethane	< 25		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 25		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 25		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 25		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 25		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	< 25		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 25		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	< 25		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	< 25		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 25		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 25		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 25		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 25		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 25		#	ug/l	10/20/92	LJS
Ethylbenzene	< 25		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 25		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 25		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 25		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8) 67		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 25		#	ug/l	10/20/92	LJS
Naphthalene	< 25		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 25		#	ug/l	10/20/92	LJS
Styrene	< 25		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 25		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 25		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 25		#	ug/l	10/20/92	LJS
Toluene	< 25		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 25		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 25		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	560		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 25		#	ug/l	10/20/92	LJS
Trichloroethene	750		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 25		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
1,2,3-Trichloropropane	< 25		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 25		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 25		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 25		#	ug/l	10/20/92	LJS
o-Xylene	< 25		#	ug/l	10/20/92	LJS
m/p-Xylene	< 50		#	ug/l	10/20/92	LJS
Mod. DRO (WDNR)	< 0.10			mg/l	10/17/92	SEL
Mod. GRO (WDNR)	0.53			mg/l	10/15/92	EMC
TRPH, Water	< 0.10			ppm	10/19/92	CEP

Sample: 05A NMW-2 **Collected: 10/13/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/19/92	JJB
Bromobenzene	< 1.0		ug/l	10/19/92	JJB
Bromochloromethane	< 1.0		ug/l	10/19/92	JJB
Bromodichloromethane	< 1.0		ug/l	10/19/92	JJB
Bromoform	< 1.0		ug/l	10/19/92	JJB
Bromomethane	< 1.0		ug/l	10/19/92	JJB
n-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
sec-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
tert-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
Carbon tetrachloride	< 1.0		ug/l	10/19/92	JJB
Chlorobenzene	< 1.0		ug/l	10/19/92	JJB
Chloroethane	< 1.0		ug/l	10/19/92	JJB
Chloroform	< 1.0		ug/l	10/19/92	JJB
Chloromethane	< 1.0		ug/l	10/19/92	JJB
2-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
4-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/19/92	JJB
Dibromochloromethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromoethane	< 1.0		ug/l	10/19/92	JJB
Dibromomethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,3-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,4-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
Dichlorodifluoromethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethane	3.9		ug/l	10/19/92	JJB
1,2-Dichloroethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethene	5.2		ug/l	10/19/92	JJB
cis-1,2-Dichloroethene	35		ug/l	10/19/92	JJB
trans-1,2-Dichloroethene	12		ug/l	10/19/92	JJB
1,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,3-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
2,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloropropene	< 1.0		ug/l	10/19/92	JJB
Ethylbenzene	< 1.0		ug/l	10/19/92	JJB
Hexachlorobutadiene	< 1.0		ug/l	10/19/92	JJB
Isopropylbenzene	< 1.0		ug/l	10/19/92	JJB

Test Description	Result	Limit		Units	Analyzed	By
p-Isopropyltoluene	< 1.0			ug/l	10/19/92	JJB
Methylene Chloride	B(2.9)2.1			ug/l	10/19/92	JJB
M-t-butyl-ether	< 1.0			ug/l	10/19/92	JJB
Naphthalene	< 1.0			ug/l	10/19/92	JJB
n-Propylbenzene	< 1.0			ug/l	10/19/92	JJB
Styrene	< 1.0			ug/l	10/19/92	JJB
1,1,1,2-Tetrachloroethane	< 1.0			ug/l	10/19/92	JJB
1,1,2,2-Tetrachloroethane	< 1.0			ug/l	10/19/92	JJB
Tetrachloroethene	< 1.0			ug/l	10/19/92	JJB
Toluene	2.5			ug/l	10/19/92	JJB
1,2,3-Trichlorobenzene	< 1.0			ug/l	10/19/92	JJB
1,2,4-Trichlorobenzene	< 1.0			ug/l	10/19/92	JJB
1,1,1-Trichloroethane	35			ug/l	10/19/92	JJB
1,1,2-Trichloroethane	< 1.0			ug/l	10/19/92	JJB
Trichloroethene	E 110			ug/l	10/19/92	JJB
Trichlorofluoromethane	< 1.0			ug/l	10/19/92	JJB
1,2,3-Trichloropropane	< 1.0			ug/l	10/19/92	JJB
1,2,4-Trimethylbenzene	< 1.0			ug/l	10/19/92	JJB
1,3,5-Trimethylbenzene	< 1.0			ug/l	10/19/92	JJB
Vinyl Chloride	< 1.0			ug/l	10/19/92	JJB
o-Xylene	< 1.0			ug/l	10/19/92	JJB
m/p-Xylene	< 2.0			ug/l	10/19/92	JJB
Mod. DRO (WDNR)	< 0.10			mg/l	10/17/92	SEL
Mod. GRO (WDNR)	< 0.10			mg/l	10/15/92	EMC
TRPH, Water	< 0.10			ppm	10/19/92	CEP

Sample: 06A NMW-6 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 100		#	ug/l	10/20/92	LJS
Bromobenzene	< 100		#	ug/l	10/20/92	LJS
Bromochloromethane	< 100		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 100		#	ug/l	10/20/92	LJS
Bromoform	< 100		#	ug/l	10/20/92	LJS
Bromomethane	< 100		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 100		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 100		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 100		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 100		#	ug/l	10/20/92	LJS
Chlorobenzene	< 100		#	ug/l	10/20/92	LJS
Chloroethane	< 100		#	ug/l	10/20/92	LJS
Chloroform	< 100		#	ug/l	10/20/92	LJS
Chloromethane	< 100		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 100		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 100		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 100		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 100		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 100		#	ug/l	10/20/92	LJS
Dibromomethane	< 100		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
1,2-Dichlorobenzene	< 100		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 100		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 100		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 100		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	120		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 100		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	580		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	< 100		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 100		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 100		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 100		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 100		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 100		#	ug/l	10/20/92	LJS
Ethylbenzene	< 100		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 100		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 100		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 100		#	ug/l	10/20/92	LJS
Methylene Chloride	BJ2.8	2.5	#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 100		#	ug/l	10/20/92	LJS
Naphthalene	< 100		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 100		#	ug/l	10/20/92	LJS
Styrene	< 100		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 100		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 100		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 100		#	ug/l	10/20/92	LJS
Toluene	< 100		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 100		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 100		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	2300		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 100		#	ug/l	10/20/92	LJS
Trichloroethene	7900		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 100		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 100		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 100		#	ug/l	10/20/92	LJS
1,3,5-Trimethylbenzene	< 100		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 100		#	ug/l	10/20/92	LJS
o-Xylene	< 100		#	ug/l	10/20/92	LJS
m/p-Xylene	< 200		#	ug/l	10/20/92	LJS
Mod. DRO (WDNR)	3.8			mg/l	10/17/92	SEL
Mod. GRO (WDNR)	4.3			mg/l	10/16/92	EMC
TRPH, Water	2.5			ppm	10/19/92	CEP

Sample: 07A NMW-5 **Collected: 10/13/92**

Test Description	Result	Limit		Units	Analyzed	By
8260 Water-Low level						
Benzene	< 10		#	ug/l	10/20/92	LJS
Bromobenzene	< 10		#	ug/l	10/20/92	LJS
Bromochloromethane	< 10		#	ug/l	10/20/92	LJS
Bromodichloromethane	< 10		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
Bromoform	< 10		#	ug/l	10/20/92	LJS
Bromomethane	< 10		#	ug/l	10/20/92	LJS
n-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
sec-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
tert-Butylbenzene	< 10		#	ug/l	10/20/92	LJS
Carbon tetrachloride	< 10		#	ug/l	10/20/92	LJS
Chlorobenzene	< 10		#	ug/l	10/20/92	LJS
Chloroethane	< 10		#	ug/l	10/20/92	LJS
Chloroform	< 10		#	ug/l	10/20/92	LJS
Chloromethane	< 10		#	ug/l	10/20/92	LJS
2-Chlorotoluene	< 10		#	ug/l	10/20/92	LJS
4-Chlorotoluene	< 10		#	ug/l	10/20/92	LJS
1,2-Dibromo-3-chloropropane	< 10		#	ug/l	10/20/92	LJS
Dibromochloromethane	< 10		#	ug/l	10/20/92	LJS
1,2-Dibromoethane	< 10		#	ug/l	10/20/92	LJS
Dibromomethane	< 10		#	ug/l	10/20/92	LJS
1,2-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,3-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,4-Dichlorobenzene	< 10		#	ug/l	10/20/92	LJS
Dichlorodifluoromethane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloroethane	25		#	ug/l	10/20/92	LJS
1,2-Dichloroethane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloroethene	86		#	ug/l	10/20/92	LJS
cis-1,2-Dichloroethene	< 10		#	ug/l	10/20/92	LJS
trans-1,2-Dichloroethene	< 10		#	ug/l	10/20/92	LJS
1,2-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
1,3-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
2,2-Dichloropropane	< 10		#	ug/l	10/20/92	LJS
1,1-Dichloropropene	< 10		#	ug/l	10/20/92	LJS
Ethylbenzene	< 10		#	ug/l	10/20/92	LJS
Hexachlorobutadiene	< 10		#	ug/l	10/20/92	LJS
Isopropylbenzene	< 10		#	ug/l	10/20/92	LJS
p-Isopropyltoluene	< 10		#	ug/l	10/20/92	LJS
Methylene Chloride	B(2.8) 26		#	ug/l	10/20/92	LJS
M-t-butyl-ether	< 10		#	ug/l	10/20/92	LJS
Naphthalene	< 10		#	ug/l	10/20/92	LJS
n-Propylbenzene	< 10		#	ug/l	10/20/92	LJS
Styrene	< 10		#	ug/l	10/20/92	LJS
1,1,1,2-Tetrachloroethane	< 10		#	ug/l	10/20/92	LJS
1,1,2,2-Tetrachloroethane	< 10		#	ug/l	10/20/92	LJS
Tetrachloroethene	< 10		#	ug/l	10/20/92	LJS
Toluene	< 10		#	ug/l	10/20/92	LJS
1,2,3-Trichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,2,4-Trichlorobenzene	< 10		#	ug/l	10/20/92	LJS
1,1,1-Trichloroethane	370		#	ug/l	10/20/92	LJS
1,1,2-Trichloroethane	< 10		#	ug/l	10/20/92	LJS
Trichloroethene	910		#	ug/l	10/20/92	LJS
Trichlorofluoromethane	< 10		#	ug/l	10/20/92	LJS
1,2,3-Trichloropropane	< 10		#	ug/l	10/20/92	LJS
1,2,4-Trimethylbenzene	< 10		#	ug/l	10/20/92	LJS

Test Description	Result	Limit		Units	Analyzed	By
1,3,5-Trimethylbenzene	< 10		#	ug/l	10/20/92	LJS
Vinyl Chloride	< 10		#	ug/l	10/20/92	LJS
o-Xylene	< 10		#	ug/l	10/20/92	LJS
m/p-Xylene	< 20		#	ug/l	10/20/92	LJS
Mod. DRO (WDNR)	4.2			mg/l	10/17/92	SEL
Mod. GRO (WDNR)	1.7			mg/l	10/16/92	EMC
TRPH, Water	2.4			ppm	10/19/92	CEP

Sample: 08A DUP 1 **Collected: 10/13/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/19/92	JJB
Bromobenzene	< 1.0		ug/l	10/19/92	JJB
Bromochloromethane	< 1.0		ug/l	10/19/92	JJB
Bromodichloromethane	< 1.0		ug/l	10/19/92	JJB
Bromoform	< 1.0		ug/l	10/19/92	JJB
Bromomethane	< 1.0		ug/l	10/19/92	JJB
n-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
sec-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
tert-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
Carbon tetrachloride	< 1.0		ug/l	10/19/92	JJB
Chlorobenzene	< 1.0		ug/l	10/19/92	JJB
Chloroethane	< 1.0		ug/l	10/19/92	JJB
Chloroform	< 1.0		ug/l	10/19/92	JJB
Chloromethane	3.1		ug/l	10/19/92	JJB
2-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
4-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/19/92	JJB
Dibromochloromethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromoethane	< 1.0		ug/l	10/19/92	JJB
Dibromomethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,3-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,4-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
Dichlorodifluoromethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethane	3.8		ug/l	10/19/92	JJB
1,2-Dichloroethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethene	5.4		ug/l	10/19/92	JJB
cis-1,2-Dichloroethene	34		ug/l	10/19/92	JJB
trans-1,2-Dichloroethene	12		ug/l	10/19/92	JJB
1,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,3-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
2,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloropropene	< 1.0		ug/l	10/19/92	JJB
Ethylbenzene	< 1.0		ug/l	10/19/92	JJB
Hexachlorobutadiene	< 1.0		ug/l	10/19/92	JJB
Isopropylbenzene	< 1.0		ug/l	10/19/92	JJB
p-Isopropyltoluene	< 1.0		ug/l	10/19/92	JJB
Methylene Chloride	B(2.9)2.9		ug/l	10/19/92	JJB

Test Description	Result	Limit	Units	Analyzed	By
M-t-butyl-ether	< 1.0		ug/l	10/19/92	JJB
Naphthalene	< 1.0		ug/l	10/19/92	JJB
n-Propylbenzene	< 1.0		ug/l	10/19/92	JJB
Styrene	< 1.0		ug/l	10/19/92	JJB
1,1,1,2-Tetrachloroethane	< 1.0		ug/l	10/19/92	JJB
1,1,2,2-Tetrachloroethane	< 1.0		ug/l	10/19/92	JJB
Tetrachloroethene	< 1.0		ug/l	10/19/92	JJB
Toluene	2.3		ug/l	10/19/92	JJB
1,2,3-Trichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,2,4-Trichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,1,1-Trichloroethane	34		ug/l	10/19/92	JJB
1,1,2-Trichloroethane	< 1.0		ug/l	10/19/92	JJB
Trichloroethene	E 110		ug/l	10/19/92	JJB
Trichlorofluoromethane	< 1.0		ug/l	10/19/92	JJB
1,2,3-Trichloropropane	< 1.0		ug/l	10/19/92	JJB
1,2,4-Trimethylbenzene	< 1.0		ug/l	10/19/92	JJB
1,3,5-Trimethylbenzene	< 1.0		ug/l	10/19/92	JJB
Vinyl Chloride	< 1.0		ug/l	10/19/92	JJB
o-Xylene	< 1.0		ug/l	10/19/92	JJB
m/p-Xylene	< 2.0		ug/l	10/19/92	JJB
Mod. DRO (WDNR)	< 0.10		mg/l	10/17/92	SEL
Mod. GRO (WDNR)	< 0.10		mg/l	10/16/92	EMC
TRPH, Water	< 0.10		ppm	10/19/92	CEP

Sample: 09A FIELD BLANK **Collected: 10/14/92**

Test Description	Result	Limit	Units	Analyzed	By
8260 Water-Low level					
Benzene	< 1.0		ug/l	10/19/92	JJB
Bromobenzene	< 1.0		ug/l	10/19/92	JJB
Bromochloromethane	< 1.0		ug/l	10/19/92	JJB
Bromodichloromethane	< 1.0		ug/l	10/19/92	JJB
Bromoform	< 1.0		ug/l	10/19/92	JJB
Bromomethane	< 1.0		ug/l	10/19/92	JJB
n-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
sec-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
tert-Butylbenzene	< 1.0		ug/l	10/19/92	JJB
Carbon tetrachloride	< 1.0		ug/l	10/19/92	JJB
Chlorobenzene	< 1.0		ug/l	10/19/92	JJB
Chloroethane	< 1.0		ug/l	10/19/92	JJB
Chloroform	< 1.0		ug/l	10/19/92	JJB
Chloromethane	< 1.0		ug/l	10/19/92	JJB
2-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
4-Chlorotoluene	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromo-3-chloropropane	< 1.0		ug/l	10/19/92	JJB
Dibromochloromethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dibromoethane	< 1.0		ug/l	10/19/92	JJB
Dibromomethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,3-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB

Test Description	Result	Limit	Units	Analyzed	By
1,4-Dichlorobenzene	< 1.0		ug/l	10/19/92	JJB
Dichlorodifluoromethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethane	< 1.0		ug/l	10/19/92	JJB
1,2-Dichloroethane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloroethene	< 1.0		ug/l	10/19/92	JJB
cis-1,2-Dichloroethene	< 1.0		ug/l	10/19/92	JJB
trans-1,2-Dichloroethene	< 1.0		ug/l	10/19/92	JJB
1,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,3-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
2,2-Dichloropropane	< 1.0		ug/l	10/19/92	JJB
1,1-Dichloropropene	< 1.0		ug/l	10/19/92	JJB
Ethylbenzene	< 1.0		ug/l	10/19/92	JJB
Hexachlorobutadiene	< 1.0		ug/l	10/19/92	JJB
Isopropylbenzene	< 1.0		ug/l	10/19/92	JJB
p-Isopropyltoluene	< 1.0		ug/l	10/19/92	JJB
Methylene Chloride	B(2.9)2.0		ug/l	10/19/92	JJB
M-t-butyl-ether	< 1.0		ug/l	10/19/92	JJB
Naphthalene	< 1.0		ug/l	10/19/92	JJB
n-Propylbenzene	< 1.0		ug/l	10/19/92	JJB
Styrene	< 1.0		ug/l	10/19/92	JJB
1,1,1,2-Tetrachloroethane	< 1.0		ug/l	10/19/92	JJB
1,1,2,2-Tetrachloroethane	< 1.0		ug/l	10/19/92	JJB
Tetrachloroethene	< 1.0		ug/l	10/19/92	JJB
Toluene	< 1.0		ug/l	10/19/92	JJB
1,2,3-Trichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,2,4-Trichlorobenzene	< 1.0		ug/l	10/19/92	JJB
1,1,1-Trichloroethane	< 1.0		ug/l	10/19/92	JJB
1,1,2-Trichloroethane	< 1.0		ug/l	10/19/92	JJB
Trichloroethene	< 1.0		ug/l	10/19/92	JJB
Trichlorofluoromethane	< 1.0		ug/l	10/19/92	JJB
1,2,3-Trichloropropane	< 1.0		ug/l	10/19/92	JJB
1,2,4-Trimethylbenzene	< 1.0		ug/l	10/19/92	JJB
1,3,5-Trimethylbenzene	< 1.0		ug/l	10/19/92	JJB
Vinyl Chloride	< 1.0		ug/l	10/19/92	JJB
o-Xylene	< 1.0		ug/l	10/19/92	JJB
m/p-Xylene	< 2.0		ug/l	10/19/92	JJB
Mod. DRO (WDNR)	< 0.10		mg/l	10/17/92	SEL
Mod. GRO (WDNR)	< 0.10		mg/l	10/16/92	EMC
TRPH, Water	< 0.10		ppm	10/19/92	CEP

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

The extraction qc for the DRO samples exhibited recoveries that were just outside our normal criteria. The samples were not re-extracted due to hold-time considerations; however, the values reported should not be affected significantly.

Elevated detection limit due to sample concentration.

B - Analyte found in the associated method blank.

J - Analyte positively identified below the quantitation limit.

E - Estimated value, analyte is above the calibration range.

The samples ordered for 8260 were analyzed according to Method 8260 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

RMT INC
LABORATORIES

Madison, WI 53717
744 Heartland Trail
Phone (608) 831-4444
FAX (608) 831-7530

Santa Monica, CA
Atlanta, GA
Baton Rouge, LA
Troy, MI

d Ledge, MI
Nashville, TN

Greenville, SC
Schaumburg, IL

Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

No: 041498

Bottles Prepared by:	Date/Time

Project No.	Client:

Container Inventory | Filtered (Yes/No) | Preserved (Code) | MATRIX

Code: A - None
B - HNO3
C - H_2SO4
D - NaOH
E - HCl
F - _____

RMT Lab NO.	Yr. 92 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory	Filtered (Yes/No)	Preserved (Code)	MATRIX	Comments:
	10/13			3	3				Parameters: VOCs 8021
	10/13			2	2				MGRO, MDRO, MTRPH
-2	10/13	8:42A	NMW-4	8	6	1	1		Quick turnaround
-3	10/13	9:40A	NMW-3	8	6	1	1		" "
-4	10/13	10:30A	NMW-1	8	6	1	1		" "
-5	10/13	11:15A	NMW-2	8	6	1	1		" "
-6	10/13	12:55P	NMW-6	10	6	2	2		" "
-7	10/13	2:00P	NMW-5	10	6	2	2		" "
-8	10/13	—	Dup 1	8	6	1	1		" "
-9	10/14	—	Field Blank	2	6	1	1		" "
									WI LUST

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① Gregory J. [illegible]	10/12/92 8:15	② Shipper Name & # [illegible]	10/14/92 8:15
③ Relinquished by (Sig.) [illegible]	10/14/92 4:30 pm	④ Received by (Sig.) [illegible] Shipper Name & #	10/14/92 4:30 pm
⑤ Relinquished by (Sig.)	Date/Time	⑥ Received by (Sig.) Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp _____
Receipt pH _____ _____ _____

Custody Seal _____ Present/Absent Seal _____ Intact/Not Intact

Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

RMT, INC
LABORATORIES

Madison, WI 53717
744 Heartland Trail
Phone (608) 831-4444
FAX (608) 831-7530

Santa Monica, CA
Atlanta, GA
Baton Rouge, LA
Troy, MI

[illegible]d Ledge, MI
[illegible]ville, TN

Greenville, SC
Schaumburg, IL

Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

H2 041499

Bottles Prepared by:	Date/Time

Project No.	Client:
2585.02	Navistar

RMT Lab NO.	Yr. 92 Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory: 40ml glass	N E					MATRIX	Comments:
[illegible]-1	10/13	2:35P	MW-12	6	6							Regular turnaround
-2	10/13	3:00P	MW-11	6	6							" "
-3	10/13	3:20P	MW-15	6	6							" "
-4	10/13	4:00P	MW-16	6	6							" "
												Parameters: VOCs
												~~8021 8062~~ MGRO
												WI LUST

Filtered (Yes/No)
Preserved (Code)

Code: A - None
B - HNO3
C - H_2SO_4
D - NaOH
E - HCl
F - ____

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① Gregory [illegible]	10/14/92 8:15 AM	② Shipper Name & # [illegible]	10/14/92 8:15
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
③ [illegible]go Westphal	10/14/92 4 30 PM	④ Richard [illegible] Shipper Name & #	10/14/92 430 pm
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
⑤		⑥ Shipper Name & #	

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal	Present/Absent	Seal	Intact/Not Intact	Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

RMT, INC.
LABORATORIES

Madison, WI 53717
744 Heartland Trail
Phone (608) 831-4444
FAX (608) 831-7530

Santa Monica, CA
Atlanta, GA
Baton Rouge, LA
Troy, MI

[illegible] Ledge, MI
[illegible]ville, TN

Greenville, SC
Schaumburg, IL

Dublin, OH
Waukesha, WI

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

RMT No. 043781

Bottles Prepared by:	Date/Time

Project No.	Client:
2585.02	Navistar

Container Inventory: 125 mL P | 40 mL V

Filtered (Yes/No): N N
Preserved (Code): A E

Code: A - None, B - HNO_3, C - H_2SO_4, D - NaOH, E - HCl, F - ____

RMT Lab NO.	Yr. 12 Date	Time	Sample Station ID	Total Number Of Containers	125 mL P	40 mL V	Filtered	Preserved				MATRIX	Comments:
[illegible]	10/14	—	Temp Blk	1	1								parameters: VOCs
[illegible]-1	10/14	—	Trip Blk	2		2							(8062) & MGRO
-2	10/14	8:55 A	MW-17	6		6							regular turnaround
-3	10/14	9:15 A	MW-22	6		6							" "
-4	10/14	9:40 A	MW-2	6		6							" "
-5	10/14	10:15 A	MW-21	6		6							" "
-6	10/14	11:10 A	MW-6	6		6							" "
-7	10/14	11:50 A	MW-19	6		6							" "
-8	10/14	12:15 P	MW-13	6		6							" "
-9	10/14	1:15 P	MW-18	6		6							" "
-10	10/14	2:55 P	MW-20	6		6							" "

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① [signature]	10/15/12 9:20 A	② Shipper Name & # [signature] UPS	9:25
Relinquished by (Sig.) ③	Date/Time	Received by (Sig.) ④ Shipper Name & #	Date/Time
Relinquished by (Sig.) ⑤	Date/Time	Received by (Sig.) ⑥ Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

Custody Seal	Present/Absent	Seal	Intact/Not Intact	Seal #'s

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER SUBMITTER

ROUND 2

GROUNDWATER DATA

PRECISION ANALYTICAL LABORATORY
205 WEST GALENA
MILWAUKEE, WI 53212
(414) 272-5222

Analytical Report

ATTN:
CLIENT: RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708

WORK ID: 2585.02 Navistar

RECEIVED DATE: 12/18/92
REPORTED DATE: 01/05/93

PAL ORDER #: 9212208

SAMPLE DESCRIPTION	LAB ID	DATE COLLECTED
TRIP BLANK	01A	12/18/92
NMW-1	02A	12/18/92
NMW-2	03A	12/18/92
CREEK	04A	12/18/92

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Sample ID: **TRIP BLANK**		Lab ID: 9212208-01A		Collected: 12/18/92			
8260 Water							8260
			ug/l	12/22/92		JJB	
Benzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromodichloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromoform	BQL	5.0	ug/l	12/22/92		JJB	
Bromomethane	BQL	5.0	ug/l	12/22/92		JJB	
n-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
sec-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
tert-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Carbon tetrachloride	BQL	5.0	ug/l	12/22/92		JJB	
Chlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Chloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Chloroform	BQL	5.0	ug/l	12/22/92		JJB	
Chloromethane	BQL	5.0	ug/l	12/22/92		JJB	
2-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
4-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromoethane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromomethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
cis-1,2-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
2,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloropropene	BQL	5.0	ug/l	12/22/92		JJB	
Ethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Hexachlorobutadiene	BQL	5.0	ug/l	12/22/92		JJB	
Isopropylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Isopropyltoluene	BQL	5.0	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Methylene Chloride	(5.0) 18	5.0	ug/l	12/22/92		JJB	
M-t-butyl-ether	BQL	5.0	ug/l	12/22/92		JJB	
Naphthalene	BQL	5.0	ug/l	12/22/92		JJB	
n-Propylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Styrene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Tetrachloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Toluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Trichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Trichlorofluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
'.2,4-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
.,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Vinyl Chloride	BQL	5.0	ug/l	12/22/92		JJB	
o-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
m/p-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
Mod. GRO (WDNR)	BQL	0.10	mg/l	02/22/92		SEL	Wis Mod. DNR

Sample ID: **NMW-1** Lab ID: 9212208-02A Collected: 12/18/92

8260 Water							8260
			ug/l	12/29/93		JJB	
Benzene	BQL	50	ug/l	12/29/93		JJB	
Bromobenzene	BQL	50	ug/l	12/29/93		JJB	
Bromochloromethane	BQL	50	ug/l	12/29/93		JJB	
Bromodichloromethane	BQL	50	ug/l	12/29/93		JJB	
Bromoform	BQL	50	ug/l	12/29/93		JJB	
Bromomethane	BQL	50	ug/l	12/29/93		JJB	
n-Butylbenzene	BQL	50	ug/l	12/29/93		JJB	
sec-Butylbenzene	BQL	50	ug/l	12/29/93		JJB	
tert-Butylbenzene	BQL	50	ug/l	12/29/93		JJB	
Carbon tetrachloride	BQL	50	ug/l	12/29/93		JJB	
Chlorobenzene	BQL	50	ug/l	12/29/93		JJB	
Chloroethane	BQL	50	ug/l	12/29/93		JJB	
.nloroform	BQL	50	ug/l	12/29/93		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Chloromethane	BQL	50	ug/l	12/29/93		JJB	
2-Chlorotoluene	BQL	50	ug/l	12/29/93		JJB	
4-Chlorotoluene	BQL	50	ug/l	12/29/93		JJB	
1,2-Dibromo-3-chloropropane	BQL	50	ug/l	12/29/93		JJB	
Dibromochloromethane	BQL	50	ug/l	12/29/93		JJB	
1,2-Dibromoethane	BQL	50	ug/l	12/29/93		JJB	
Dibromomethane	BQL	50	ug/l	12/29/93		JJB	
1,2-Dichlorobenzene	BQL	50	ug/l	12/29/93		JJB	
1,3-Dichlorobenzene	BQL	50	ug/l	12/29/93		JJB	
1,4-Dichlorobenzene	BQL	50	ug/l	12/29/93		JJB	
Dichlorodifluoromethane	BQL	50	ug/l	12/29/93		JJB	
1,1-Dichloroethane	J 11	50	ug/l	12/29/93		JJB	
1,2-Dichloroethane	BQL	50	ug/l	12/29/93		JJB	
1,1-Dichloroethene	160	50	ug/l	12/29/93		JJB	
cis-1,2-Dichloroethene	BQL	50	ug/l	12/29/93		JJB	
trans-1,2-Dichloroethene	BQL	50	ug/l	12/29/93		JJB	
1,2-Dichloropropane	BQL	50	ug/l	12/29/93		JJB	
,3-Dichloropropane	BQL	50	ug/l	12/29/93		JJB	
2,2-Dichloropropane	BQL	50	ug/l	12/29/93		JJB	
1,1-Dichloropropene	BQL	50	ug/l	12/29/93		JJB	
Ethylbenzene	BQL	50	ug/l	12/29/93		JJB	
Hexachlorobutadiene	BQL	50	ug/l	12/29/93		JJB	
Isopropylbenzene	BQL	50	ug/l	12/29/93		JJB	
p-Isopropyltoluene	BQL	50	ug/l	12/29/93		JJB	
Methylene Chloride	(190) 100	50	ug/l	12/29/93		JJB	
M-t-butyl-ether	BQL	50	ug/l	12/29/93		JJB	
Naphthalene	BQL	50	ug/l	12/29/93		JJB	
n-Propylbenzene	BQL	50	ug/l	12/29/93		JJB	
Styrene	BQL	50	ug/l	12/29/93		JJB	
1,1,1,2-Tetrachloroethane	BQL	50	ug/l	12/29/93		JJB	
1,1,2,2-Tetrachloroethane	BQL	50	ug/l	12/29/93		JJB	
Tetrachloroethene	BQL	50	ug/l	12/29/93		JJB	
Toluene	BQL	50	ug/l	12/29/93		JJB	
1,2,3-Trichlorobenzene	BQL	50	ug/l	12/29/93		JJB	
1,2,4-Trichlorobenzene	BQL	50	ug/l	12/29/93		JJB	
1,1,1-Trichloroethane	620	50	ug/l	12/29/93		JJB	
1,1,2-Trichloroethane	BQL	50	ug/l	12/29/93		JJB	
Trichloroethene	980	50	ug/l	12/29/93		JJB	
Trichlorofluoromethane	BQL	50	ug/l	12/29/93		JJB	
,2,3-Trichloropropane	BQL	50	ug/l	12/29/93		JJB	
,2,4-Trimethylbenzene	BQL	50	ug/l	12/29/93		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,3,5-Trimethylbenzene	BQL	50	ug/l	12/29/93		JJB	
Vinyl Chloride	BQL	50	ug/l	12/29/93		JJB	
o-Xylene	BQL	50	ug/l	12/29/93		JJB	
m/p-Xylene	BQL	50	ug/l	12/29/93		JJB	
Mod. DRO (WDNR)	BQL	0.10	mg/l	12/24/92	12/23/92	SEL	Wis Mod. DNR
Mod. GRO (WDNR)	0.42	0.10	mg/l	12/22/92		SEL	Wis Mod. DNR
TRPH, Water	BQL	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073

Sample ID: **NMW-2** Lab ID: 9212208-03A Collected: 12/18/92

8260 Water							8260
			ug/l	12/22/92		JJB	
Benzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromodichloromethane	BQL	5.0	ug/l	12/22/92		JJB	
omoform	BQL	5.0	ug/l	12/22/92		JJB	
Bromomethane	BQL	5.0	ug/l	12/22/92		JJB	
n-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
sec-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
tert-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Carbon tetrachloride	BQL	5.0	ug/l	12/22/92		JJB	
Chlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Chloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Chloroform	BQL	5.0	ug/l	12/22/92		JJB	
Chloromethane	BQL	5.0	ug/l	12/22/92		JJB	
2-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
4-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromoethane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromomethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethane	J 2.3	5.0	ug/l	12/22/92		JJB	
1,2-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethene	7.7	5.0	ug/l	12/22/92		JJB	
s-1,2-Dichloroethene	35	5.0	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
trans-1,2-Dichloroethene	13	5.0	ug/l	12/22/92		JJB	
1,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
2,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloropropene	BQL	5.0	ug/l	12/22/92		JJB	
Ethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Hexachlorobutadiene	BQL	5.0	ug/l	12/22/92		JJB	
Isopropylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
p-Isopropyltoluene	BQL	5.0	ug/l	12/22/92		JJB	
Methylene Chloride	(5.0) 19	5.0	ug/l	12/22/92		JJB	
M-t-butyl-ether	BQL	5.0	ug/l	12/22/92		JJB	
Naphthalene	BQL	5.0	ug/l	12/22/92		JJB	
n-Propylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Styrene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Tetrachloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Toluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1-Trichloroethane	19	5.0	ug/l	12/22/92		JJB	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Trichloroethene	130	5.0	ug/l	12/22/92		JJB	
Trichlorofluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Vinyl Chloride	BQL	5.0	ug/l	12/22/92		JJB	
o-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
m/p-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
Mod. DRO (WDNR)	BQL	0.10	mg/l	12/24/92	12/23/92	SEL	Wis Mod. DNR
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/22/92		SEL	Wis Mod. DNR
TRPH, Water	BQL	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073

Sample ID: **CREEK** Lab ID: 9212208-04A Collected: 12/18/92

8260 Water							8260
			ug/l	12/22/92		JJB	
Benzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromobenzene	BQL	5.0	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Bromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromodichloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromoform	BQL	5.0	ug/l	12/22/92		JJB	
Bromomethane	BQL	5.0	ug/l	12/22/92		JJB	
n-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
sec-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
tert-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Carbon tetrachloride	BQL	5.0	ug/l	12/22/92		JJB	
Chlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Chloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Chloroform	BQL	5.0	ug/l	12/22/92		JJB	
Chloromethane	BQL	5.0	ug/l	12/22/92		JJB	
2-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
4-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromoethane	BQL	5.0	ug/l	12/22/92		JJB	
.bromomethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
cis-1,2-Dichloroethene	J 1.2	5.0	ug/l	12/22/92		JJB	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
2,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloropropene	BQL	5.0	ug/l	12/22/92		JJB	
Ethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Hexachlorobutadiene	BQL	5.0	ug/l	12/22/92		JJB	
Isopropylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
p-Isopropyltoluene	BQL	5.0	ug/l	12/22/92		JJB	
Methylene Chloride	(5.0) 20	5.0	ug/l	12/22/92		JJB	
M-t-butyl-ether	BQL	5.0	ug/l	12/22/92		JJB	
Naphthalene	BQL	5.0	ug/l	12/22/92		JJB	
n-Propylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Styrene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Tetrachloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Toluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Trichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Trichlorofluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Vinyl Chloride	BQL	5.0	ug/l	12/22/92		JJB	
o-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
m/p-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
Mod. DRO (WDNR)	0.42	0.10	mg/l	01/01/93	12/23/92	SEL	Wis Mod. DNR
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/22/92		SEL	Wis Mod. DNR
B, Water							EPA 8080
Aroclor-1016	BQL	1.0	ug/l	12/27/92	12/23/92	DLK	
Aroclor-1221	BQL	2.0	ug/l	12/27/92	12/23/92	DLK	
Aroclor-1232	BQL	1.0	ug/l	12/27/92	12/23/92	DLK	
Aroclor-1242	BQL	1.0	ug/l	12/27/92	12/23/92	DLK	
Aroclor-1248	BQL	1.0	ug/l	12/27/92	12/23/92	DLK	
Aroclor-1254	BQL	1.0	ug/l	12/27/92	12/23/92	DLK	
Aroclor-1260	BQL	1.0	ug/l	12/27/92	12/23/92	DLK	
TRPH, Water	BQL	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073

BQL - Below Quantification Limit

PRECISION ANALYTICAL LABORATORY

Report Comments

01/05/93

CLIENT: **RMT Laboratories, Inc.**

PAL Order #: 9212208

All analysis as per approved method found in one or more of the following:
Standard Methods for the Evaluation of Water and Wastewater, 16th Edition.
Methods for Chemical Analysis for Water and Wastes, Revised March 1983, EPA 600/4-79-020
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition 1986 EPA SW846

Analysis performed or certified by Precision Analytical Laboratory

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

(B) - Analyte found in the associated method blank. The value in parentheses is the blank value with the dilution factor taken into account.

J - Analyte positively identified below the quantification limit.

The samples ordered for 8260 were analyzed according to Method 8260 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

The samples ordered for PCB were analyzed according to Method 608 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

PRECISION ANALYTICAL LABORATORY
205 WEST GALENA
MILWAUKEE, WI 53212
(414) 272-5222

Analytical Report

ATTN:
CLIENT: RMT Laboratories, Inc.
744 Heartland Trail
P.O. Box 8923
Madison, WI 53708

WORK ID: 2585.03 Navistar

RECEIVED DATE: 12/17/92
REPORTED DATE: 01/05/93

PAL ORDER #: 9212179

SAMPLE DESCRIPTION	LAB ID	DATE COLLECTED
TRIP BLANK	01A	12/16/92
NMW-3	02A	12/16/92
NMW-4	03A	12/16/92
NMW-5	04A	12/16/92
NMW-6	05A	12/16/92
MW-12	06A	12/16/92
MW-17	07A	12/16/92
MW-21	08A	12/16/92
MW-22	09A	12/16/92
MW-23	10A	12/16/92
DUP	11A	12/16/92
FIELD BLANK	12A	12/16/92

Laboratory ID Number (Wisconsin DNR): 241369260

Certified By
Jeff Bushner

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Sample ID: **TRIP BLANK**			Lab ID: 9212179-01A	Collected: 12/16/92			
8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	5.0	ug/l	12/18/92		LJS	
Bromobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	5.0	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	5.0	ug/l	12/18/92		LJS	
Bromoform	BQL	5.0	ug/l	12/18/92		LJS	
Bromomethane	BQL	5.0	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	5.0	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Chloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Chloroform	BQL	5.0	ug/l	12/18/92		LJS	
hloromethane	BQL	5.0	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	5.0	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dibromoethane	BQL	5.0	ug/l	12/18/92		LJS	
Dibromomethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	5.0	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	5.0	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
-Isopropyltoluene	BQL	5.0	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Methylene Chloride	(8.5) 9.6	5.0	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	5.0	ug/l	12/18/92		LJS	
Naphthalene	BQL	5.0	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Styrene	BQL	5.0	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	5.0	ug/l	12/18/92		LJS	
Toluene	BQL	5.0	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Trichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	5.0	ug/l	12/18/92		LJS	
o-Xylene	BQL	5.0	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	5.0	ug/l	12/18/92		LJS	

Sample ID: **NMW-3** Lab ID: 9212179-02A Collected: 12/16/92

8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	50	ug/l	12/18/92		LJS	
Bromobenzene	BQL	50	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	50	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	50	ug/l	12/18/92		LJS	
Bromoform	BQL	50	ug/l	12/18/92		LJS	
Bromomethane	BQL	50	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	50	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	50	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	50	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	50	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	50	ug/l	12/18/92		LJS	
Chloroethane	BQL	50	ug/l	12/18/92		LJS	
Chloroform	BQL	50	ug/l	12/18/92		LJS	
Chloromethane	BQL	50	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
2-Chlorotoluene	BQL	50	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	50	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	50	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	50	ug/l	12/18/92		LJS	
1,2-Dibromoethane	BQL	50	ug/l	12/18/92		LJS	
Dibromomethane	BQL	50	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	50	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	50	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	50	ug/l	12/18/92		LJS	
1,1-Dichloroethene	J 23	50	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	50	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	50	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	50	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	50	ug/l	12/18/92		LJS	
,2-Dichloropropane	BQL	50	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	50	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	50	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	50	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	50	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	50	ug/l	12/18/92		LJS	
Methylene Chloride	(85) 110	50	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	50	ug/l	12/18/92		LJS	
Naphthalene	BQL	50	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	50	ug/l	12/18/92		LJS	
Styrene	BQL	50	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	50	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	50	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	50	ug/l	12/18/92		LJS	
Toluene	BQL	50	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	60	50	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	50	ug/l	12/18/92		LJS	
Trichloroethene	200	50	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	50	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	50	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	50	ug/l	12/18/92		LJS	
3,5-Trimethylbenzene	BQL	50	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Vinyl Chloride	BQL	50	ug/l	12/18/92		LJS	
o-Xylene	BQL	50	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	50	ug/l	12/18/92		LJS	
Mod. DRO (WDNR)	BQL	0.10	mg/l	12/23/92	12/22/92	SEL	Wis Mod. DNR
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/18/92		EMC	Wis Mod. DNR
TRPH, Water	BQL	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073
Sample ID: **NMW-4**			Lab ID:	9212179-03A	Collected: 12/16/92		
8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	5.0	ug/l	12/18/92		LJS	
Bromobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	5.0	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	5.0	ug/l	12/18/92		LJS	
Bromoform	BQL	5.0	ug/l	12/18/92		LJS	
3romomethane	BQL	5.0	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	5.0	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Chloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Chloroform	BQL	5.0	ug/l	12/18/92		LJS	
Chloromethane	BQL	5.0	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	5.0	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dibromoethane	BQL	5.0	ug/l	12/18/92		LJS	
Dibromomethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,2-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	5.0	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	5.0	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	5.0	ug/l	12/18/92		LJS	
Methylene Chloride	(8.5) 8.7	5.0	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	5.0	ug/l	12/18/92		LJS	
Naphthalene	BQL	5.0	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Styrene	BQL	5.0	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	5.0	ug/l	12/18/92		LJS	
Toluene	BQL	5.0	ug/l	12/18/92		LJS	
,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Trichloroethene	21	5.0	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	5.0	ug/l	12/18/92		LJS	
o-Xylene	BQL	5.0	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	5.0	ug/l	12/18/92		LJS	
Mod. DRO (WDNR)	BQL	0.10	mg/l	12/23/92	12/22/92	SEL	Wis Mod. DNR
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/18/92		EMC	Wis Mod. DNR
TRPH, Water	BQL	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073

Sample ID: **NMW-5** Lab ID: 9212179-04A Collected: 12/16/92

8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	50	ug/l	12/18/92		LJS	
Bromobenzene	BQL	50	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	50	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Bromodichloromethane	BQL	50	ug/l	12/18/92		LJS	
Bromoform	BQL	50	ug/l	12/18/92		LJS	
Bromomethane	BQL	50	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	50	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	50	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	50	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	50	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	50	ug/l	12/18/92		LJS	
Chloroethane	BQL	50	ug/l	12/18/92		LJS	
Chloroform	BQL	50	ug/l	12/18/92		LJS	
Chloromethane	BQL	50	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	50	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	50	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	50	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	50	ug/l	12/18/92		LJS	
1,2-Dibromoethane	BQL	50	ug/l	12/18/92		LJS	
Dibromomethane	BQL	50	ug/l	12/18/92		LJS	
,2-Dichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	50	ug/l	12/18/92		LJS	
1,1-Dichloroethane	J 10	50	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	50	ug/l	12/18/92		LJS	
1,1-Dichloroethene	J 30	50	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	290	50	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	50	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	50	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	50	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	50	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	50	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	50	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	50	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	50	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	50	ug/l	12/18/92		LJS	
Methylene Chloride	(85) 110	50	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	50	ug/l	12/18/92		LJS	
Naphthalene	BQL	50	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	50	ug/l	12/18/92		LJS	
Styrene	BQL	50	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	50	ug/l	12/18/92		LJS	
,,1,2,2-Tetrachloroethane	BQL	50	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Tetrachloroethene	BQL	50	ug/l	12/18/92		LJS	
Toluene	BQL	50	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	50	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	76	50	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	50	ug/l	12/18/92		LJS	
Trichloroethene	250	50	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	50	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	50	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	50	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	50	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	50	ug/l	12/18/92		LJS	
o-Xylene	BQL	50	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	50	ug/l	12/18/92		LJS	
Mod. DRO (WDNR)	6.4	0.10	mg/l	12/24/92	12/22/92	SEL	Wis Mod. DNR
Mod. GRO (WDNR)	0.79	## 0.50	mg/l	12/21/92		EMC	Wis Mod. DNR
TRPH, Water	2.4	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073

Sample ID: **NMW-6** Lab ID: 9212179-05A Collected: 12/16/92

8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	500	ug/l	12/18/92		LJS	
Bromobenzene	BQL	500	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	500	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	500	ug/l	12/18/92		LJS	
Bromoform	BQL	500	ug/l	12/18/92		LJS	
Bromomethane	BQL	500	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	500	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	500	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	500	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	500	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	500	ug/l	12/18/92		LJS	
Chloroethane	BQL	500	ug/l	12/18/92		LJS	
Chloroform	BQL	500	ug/l	12/18/92		LJS	
Chloromethane	BQL	500	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	500	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	500	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	500	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	500	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,2-Dibromoethane	BQL	500	ug/l	12/18/92		LJS	
Dibromomethane	BQL	500	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	500	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	500	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	500	ug/l	12/18/92		LJS	
1,1-Dichloroethene	540	500	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	500	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	500	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	500	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	500	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	500	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	500	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	500	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	500	ug/l	12/18/92		LJS	
›opropylbenzene	BQL	500	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	500	ug/l	12/18/92		LJS	
Methylene Chloride	(850)1100	500	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	500	ug/l	12/18/92		LJS	
Naphthalene	BQL	500	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	500	ug/l	12/18/92		LJS	
Styrene	BQL	500	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	500	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	500	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	500	ug/l	12/18/92		LJS	
Toluene	BQL	500	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	1400	500	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	500	ug/l	12/18/92		LJS	
Trichloroethene	7900	500	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	500	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	500	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	500	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	500	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	500	ug/l	12/18/92		LJS	
o-Xylene	BQL	500	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	500	ug/l	12/18/92		LJS	
d. DRO (WDNR)	4.8	0.10	mg/l	12/24/92	12/22/92	SEL	Wis Mod. DNR

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Mod. GRO (WDNR)	1.8	## 0.50	mg/l	12/21/92		EMC	Wis Mod. DNR
TRPH, Water	2.6	0.10	mg/l	01/04/93	12/23/92	JJB	Wis Mod 9073

Sample ID: **MW-12** Lab ID: 9212179-06A Collected: 12/16/92

8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	250	ug/l	12/18/92		LJS	
Bromobenzene	BQL	250	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	250	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	250	ug/l	12/18/92		LJS	
Bromoform	BQL	250	ug/l	12/18/92		LJS	
Bromomethane	BQL	250	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	250	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	250	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	250	ug/l	12/18/92		LJS	
arbon tetrachloride	BQL	250	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	250	ug/l	12/18/92		LJS	
Chloroethane	BQL	250	ug/l	12/18/92		LJS	
Chloroform	BQL	250	ug/l	12/18/92		LJS	
Chloromethane	BQL	250	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	250	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	250	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	250	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	250	ug/l	12/18/92		LJS	
1,2-Dibromoethane	BQL	250	ug/l	12/18/92		LJS	
Dibromomethane	BQL	250	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	250	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	250	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	250	ug/l	12/18/92		LJS	
1,1-Dichloroethene	J 78	250	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	790	250	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	250	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	250	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	250	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	250	ug/l	12/18/92		LJS	
,1-Dichloropropene	BQL	250	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Ethylbenzene	BQL	250	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	250	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	250	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	250	ug/l	12/18/92		LJS	
Methylene Chloride	(420) 550	250	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	250	ug/l	12/18/92		LJS	
Naphthalene	BQL	250	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	250	ug/l	12/18/92		LJS	
Styrene	BQL	250	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	250	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	250	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	250	ug/l	12/18/92		LJS	
Toluene	BQL	250	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	J 240	250	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	250	ug/l	12/18/92		LJS	
richloroethene	680	250	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	250	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	250	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	250	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	250	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	250	ug/l	12/18/92		LJS	
o-Xylene	BQL	250	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	250	ug/l	12/18/92		LJS	
Mod. GRO (WDNR)	0.95	## 0.50	mg/l	12/21/92		EMC	Wis Mod. DNR

Sample ID: **MW-17** Lab ID: 9212179-07A Collected: 12/16/92

8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	250	ug/l	12/18/92		LJS	
Bromobenzene	BQL	250	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	250	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	250	ug/l	12/18/92		LJS	
Bromoform	BQL	250	ug/l	12/18/92		LJS	
Bromomethane	BQL	250	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	250	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	250	ug/l	12/18/92		LJS	
rt-Butylbenzene	BQL	250	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Carbon tetrachloride	BQL	250	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	250	ug/l	12/18/92		LJS	
Chloroethane	BQL	250	ug/l	12/18/92		LJS	
Chloroform	BQL	250	ug/l	12/18/92		LJS	
Chloromethane	BQL	250	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	250	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	250	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	250	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	250	ug/l	12/18/92		LJS	
1,2-Dibromoethane	BQL	250	ug/l	12/18/92		LJS	
Dibromomethane	BQL	250	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	250	ug/l	12/18/92		LJS	
1,1-Dichloroethane	J 89	250	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	250	ug/l	12/18/92		LJS	
,1-Dichloroethene	550	250	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	250	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	250	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	250	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	250	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	250	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	250	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	250	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	250	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	250	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	250	ug/l	12/18/92		LJS	
Methylene Chloride	(420) 540	250	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	250	ug/l	12/18/92		LJS	
Naphthalene	BQL	250	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	250	ug/l	12/18/92		LJS	
Styrene	BQL	250	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	250	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	250	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	250	ug/l	12/18/92		LJS	
Toluene	BQL	250	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	250	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	1600	250	ug/l	12/18/92		LJS	
,1,2-Trichloroethane	BQL	250	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Trichloroethene	8600	250	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	250	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	250	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	250	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	250	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	250	ug/l	12/18/92		LJS	
o-Xylene	BQL	250	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	250	ug/l	12/18/92		LJS	
Mod. GRO (WDNR)	1.8	## 0.50	mg/l	12/21/92		EMC	Wis Mod. DNR

Sample ID: **MW-21** Lab ID: 9212179-08A Collected: 12/16/92

8260 Water						8260
			ug/l	12/22/92	JJB	
Benzene	BQL	5.0	ug/l	12/22/92	JJB	
Bromobenzene	BQL	5.0	ug/l	12/22/92	JJB	
`romochloromethane	BQL	5.0	ug/l	12/22/92	JJB	
Bromodichloromethane	BQL	5.0	ug/l	12/22/92	JJB	
Bromoform	BQL	5.0	ug/l	12/22/92	JJB	
Bromomethane	BQL	5.0	ug/l	12/22/92	JJB	
n-Butylbenzene	BQL	5.0	ug/l	12/22/92	JJB	
sec-Butylbenzene	BQL	5.0	ug/l	12/22/92	JJB	
tert-Butylbenzene	BQL	5.0	ug/l	12/22/92	JJB	
Carbon tetrachloride	BQL	5.0	ug/l	12/22/92	JJB	
Chlorobenzene	BQL	5.0	ug/l	12/22/92	JJB	
Chloroethane	BQL	5.0	ug/l	12/22/92	JJB	
Chloroform	BQL	5.0	ug/l	12/22/92	JJB	
Chloromethane	BQL	5.0	ug/l	12/22/92	JJB	
2-Chlorotoluene	BQL	5.0	ug/l	12/22/92	JJB	
4-Chlorotoluene	BQL	5.0	ug/l	12/22/92	JJB	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/22/92	JJB	
Dibromochloromethane	BQL	5.0	ug/l	12/22/92	JJB	
1,2-Dibromoethane	BQL	5.0	ug/l	12/22/92	JJB	
Dibromomethane	BQL	5.0	ug/l	12/22/92	JJB	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/22/92	JJB	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/22/92	JJB	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/22/92	JJB	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/22/92	JJB	
1,1-Dichloroethane	BQL	5.0	ug/l	12/22/92	JJB	
2-Dichloroethane	BQL	5.0	ug/l	12/22/92	JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,1-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
cis-1,2-Dichloroethene	29	5.0	ug/l	12/22/92		JJB	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
2,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloropropene	BQL	5.0	ug/l	12/22/92		JJB	
Ethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Hexachlorobutadiene	BQL	5.0	ug/l	12/22/92		JJB	
Isopropylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
p-Isopropyltoluene	BQL	5.0	ug/l	12/22/92		JJB	
Methylene Chloride	(5.0) 8.3	5.0	ug/l	12/22/92		JJB	
M-t-butyl-ether	BQL	5.0	ug/l	12/22/92		JJB	
Naphthalene	BQL	5.0	ug/l	12/22/92		JJB	
n-Propylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Styrene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Tetrachloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Toluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Trichloroethene	J 3.8	5.0	ug/l	12/22/92		JJB	
Trichlorofluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Vinyl Chloride	BQL	5.0	ug/l	12/22/92		JJB	
o-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
m/p-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/21/92		EMC	Wis Mod. DNR

Sample ID: **MW-22** Lab ID: 9212179-09A Collected: 12/16/92

8260 Water						8260
			ug/l	12/18/92	LJS	
Benzene	BQL	500	ug/l	12/18/92	LJS	
romobenzene	BQL	500	ug/l	12/18/92	LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Bromochloromethane	BQL	500	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	500	ug/l	12/18/92		LJS	
Bromoform	BQL	500	ug/l	12/18/92		LJS	
Bromomethane	BQL	500	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	500	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	500	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	500	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	500	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	500	ug/l	12/18/92		LJS	
Chloroethane	BQL	500	ug/l	12/18/92		LJS	
Chloroform	BQL	500	ug/l	12/18/92		LJS	
Chloromethane	BQL	500	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	500	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	500	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	500	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	500	ug/l	12/18/92		LJS	
' 2-Dibromoethane	BQL	500	ug/l	12/18/92		LJS	
ibromomethane	BQL	500	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	500	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	500	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	500	ug/l	12/18/92		LJS	
1,1-Dichloroethene	J 240	500	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	500	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	500	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	500	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	500	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	500	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	500	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	500	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	500	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	500	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	500	ug/l	12/18/92		LJS	
Methylene Chloride	(850)1000	500	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	500	ug/l	12/18/92		LJS	
Naphthalene	BQL	500	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	500	ug/l	12/18/92		LJS	
Styrene	BQL	500	ug/l	12/18/92		LJS	
,1,1,2-Tetrachloroethane	BQL	500	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,1,2,2-Tetrachloroethane	BQL	500	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	500	ug/l	12/18/92		LJS	
Toluene	BQL	500	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	500	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	J 460	500	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	500	ug/l	12/18/92		LJS	
Trichloroethene	3500	500	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	500	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	BQL	500	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	500	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	500	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	500	ug/l	12/18/92		LJS	
o-Xylene	BQL	500	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	500	ug/l	12/18/92		LJS	
Mod. GRO (WDNR)	0.97	## 0.50	mg/l	12/21/92		EMC	Wis Mod. DNR

Sample ID: **MW-23** Lab ID: 9212179-10A Collected: 12/16/92

8260 Water							8260
			ug/l	12/18/92		LJS	
Benzene	BQL	5.0	ug/l	12/18/92		LJS	
Bromobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Bromochloromethane	BQL	5.0	ug/l	12/18/92		LJS	
Bromodichloromethane	BQL	5.0	ug/l	12/18/92		LJS	
Bromoform	BQL	5.0	ug/l	12/18/92		LJS	
Bromomethane	BQL	5.0	ug/l	12/18/92		LJS	
n-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
sec-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
tert-Butylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Carbon tetrachloride	BQL	5.0	ug/l	12/18/92		LJS	
Chlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Chloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Chloroform	BQL	5.0	ug/l	12/18/92		LJS	
Chloromethane	BQL	5.0	ug/l	12/18/92		LJS	
2-Chlorotoluene	BQL	5.0	ug/l	12/18/92		LJS	
4-Chlorotoluene	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/18/92		LJS	
Dibromochloromethane	BQL	5.0	ug/l	12/18/92		LJS	
2-Dibromoethane	BQL	5.0	ug/l	12/18/92		LJS	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Dibromomethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
cis-1,2-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/18/92		LJS	
1,2-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,3-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
2,2-Dichloropropane	BQL	5.0	ug/l	12/18/92		LJS	
1,1-Dichloropropene	BQL	5.0	ug/l	12/18/92		LJS	
Ethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Hexachlorobutadiene	BQL	5.0	ug/l	12/18/92		LJS	
Isopropylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
p-Isopropyltoluene	BQL	5.0	ug/l	12/18/92		LJS	
Methylene Chloride	(8.5) 7.6	5.0	ug/l	12/18/92		LJS	
M-t-butyl-ether	BQL	5.0	ug/l	12/18/92		LJS	
Naphthalene	BQL	5.0	ug/l	12/18/92		LJS	
n-Propylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Styrene	BQL	5.0	ug/l	12/18/92		LJS	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Tetrachloroethene	BQL	5.0	ug/l	12/18/92		LJS	
Toluene	BQL	5.0	ug/l	12/18/92		LJS	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/18/92		LJS	
Trichloroethene	27	5.0	ug/l	12/18/92		LJS	
Trichlorofluoromethane	BQL	5.0	ug/l	12/18/92		LJS	
1,2,3-Trichloropropane	J 1.9	5.0	ug/l	12/18/92		LJS	
1,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
1,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/18/92		LJS	
Vinyl Chloride	BQL	5.0	ug/l	12/18/92		LJS	
o-Xylene	BQL	5.0	ug/l	12/18/92		LJS	
m/p-Xylene	BQL	5.0	ug/l	12/18/92		LJS	
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/22/92		EMC	Wis Mod. DNR

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Sample ID: **DUP**			Lab ID: 9212179-11A	Collected: 12/16/92			
8260 Water							8260
			ug/l	12/22/92		JJB	
Benzene	BQL	250	ug/l	12/22/92		JJB	
Bromobenzene	BQL	250	ug/l	12/22/92		JJB	
Bromochloromethane	BQL	250	ug/l	12/22/92		JJB	
Bromodichloromethane	BQL	250	ug/l	12/22/92		JJB	
Bromoform	BQL	250	ug/l	12/22/92		JJB	
Bromomethane	BQL	250	ug/l	12/22/92		JJB	
n-Butylbenzene	BQL	250	ug/l	12/22/92		JJB	
sec-Butylbenzene	BQL	250	ug/l	12/22/92		JJB	
tert-Butylbenzene	BQL	250	ug/l	12/22/92		JJB	
Carbon tetrachloride	BQL	250	ug/l	12/22/92		JJB	
Chlorobenzene	BQL	250	ug/l	12/22/92		JJB	
Chloroethane	BQL	250	ug/l	12/22/92		JJB	
Chloroform	BQL	250	ug/l	12/22/92		JJB	
hloromethane	BQL	250	ug/l	12/22/92		JJB	
2-Chlorotoluene	BQL	250	ug/l	12/22/92		JJB	
4-Chlorotoluene	BQL	250	ug/l	12/22/92		JJB	
1,2-Dibromo-3-chloropropane	BQL	250	ug/l	12/22/92		JJB	
Dibromochloromethane	BQL	250	ug/l	12/22/92		JJB	
1,2-Dibromoethane	BQL	250	ug/l	12/22/92		JJB	
Dibromomethane	BQL	250	ug/l	12/22/92		JJB	
1,2-Dichlorobenzene	BQL	250	ug/l	12/22/92		JJB	
1,3-Dichlorobenzene	BQL	250	ug/l	12/22/92		JJB	
1,4-Dichlorobenzene	BQL	250	ug/l	12/22/92		JJB	
Dichlorodifluoromethane	BQL	250	ug/l	12/22/92		JJB	
1,1-Dichloroethane	J 100	250	ug/l	12/22/92		JJB	
1,2-Dichloroethane	BQL	250	ug/l	12/22/92		JJB	
1,1-Dichloroethene	640	250	ug/l	12/22/92		JJB	
cis-1,2-Dichloroethene	BQL	250	ug/l	12/22/92		JJB	
trans-1,2-Dichloroethene	BQL	250	ug/l	12/22/92		JJB	
1,2-Dichloropropane	BQL	250	ug/l	12/22/92		JJB	
1,3-Dichloropropane	BQL	250	ug/l	12/22/92		JJB	
2,2-Dichloropropane	BQL	250	ug/l	12/22/92		JJB	
1,1-Dichloropropene	BQL	250	ug/l	12/22/92		JJB	
Ethylbenzene	BQL	250	ug/l	12/22/92		JJB	
Hexachlorobutadiene	BQL	250	ug/l	12/22/92		JJB	
Isopropylbenzene	BQL	250	ug/l	12/22/92		JJB	
Isopropyltoluene	BQL	250	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Methylene Chloride	(250) 460	250	ug/l	12/22/92		JJB	
M-t-butyl-ether	BQL	250	ug/l	12/22/92		JJB	
Naphthalene	BQL	250	ug/l	12/22/92		JJB	
n-Propylbenzene	BQL	250	ug/l	12/22/92		JJB	
Styrene	BQL	250	ug/l	12/22/92		JJB	
1,1,1,2-Tetrachloroethane	BQL	250	ug/l	12/22/92		JJB	
1,1,2,2-Tetrachloroethane	BQL	250	ug/l	12/22/92		JJB	
Tetrachloroethene	BQL	250	ug/l	12/22/92		JJB	
Toluene	BQL	250	ug/l	12/22/92		JJB	
1,2,3-Trichlorobenzene	BQL	250	ug/l	12/22/92		JJB	
1,2,4-Trichlorobenzene	BQL	250	ug/l	12/22/92		JJB	
1,1,1-Trichloroethane	1900	250	ug/l	12/22/92		JJB	
1,1,2-Trichloroethane	BQL	250	ug/l	12/22/92		JJB	
Trichloroethene	8500	250	ug/l	12/22/92		JJB	
Trichlorofluoromethane	BQL	250	ug/l	12/22/92		JJB	
1,2,3-Trichloropropane	BQL	250	ug/l	12/22/92		JJB	
1,2,4-Trimethylbenzene	BQL	250	ug/l	12/22/92		JJB	
,3,5-Trimethylbenzene	BQL	250	ug/l	12/22/92		JJB	
Vinyl Chloride	BQL	250	ug/l	12/22/92		JJB	
o-Xylene	BQL	250	ug/l	12/22/92		JJB	
m/p-Xylene	BQL	250	ug/l	12/22/92		JJB	
Mod. GRO (WDNR)	1.7	## 0.50	mg/l	12/21/92		EMC	Wis Mod. DNR

Sample ID: **FIELD BLANK** Lab ID: 9212179-12A Collected: 12/16/92

8260 Water							8260
			ug/l	12/22/92		JJB	
Benzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Bromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromodichloromethane	BQL	5.0	ug/l	12/22/92		JJB	
Bromoform	BQL	5.0	ug/l	12/22/92		JJB	
Bromomethane	BQL	5.0	ug/l	12/22/92		JJB	
n-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
sec-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
tert-Butylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Carbon tetrachloride	BQL	5.0	ug/l	12/22/92		JJB	
Chlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Chloroethane	BQL	5.0	ug/l	12/22/92		JJB	
'hloroform	BQL	5.0	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
Chloromethane	BQL	5.0	ug/l	12/22/92		JJB	
2-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
4-Chlorotoluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromo-3-chloropropane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromochloromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dibromoethane	BQL	5.0	ug/l	12/22/92		JJB	
Dibromomethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,3-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,4-Dichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
Dichlorodifluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
cis-1,2-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
trans-1,2-Dichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
1,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
,3-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
2,2-Dichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
1,1-Dichloropropene	BQL	5.0	ug/l	12/22/92		JJB	
Ethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Hexachlorobutadiene	BQL	5.0	ug/l	12/22/92		JJB	
Isopropylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
p-Isopropyltoluene	BQL	5.0	ug/l	12/22/92		JJB	
Methylene Chloride	(5.0) 9.0	5.0	ug/l	12/22/92		JJB	
M-t-butyl-ether	BQL	5.0	ug/l	12/22/92		JJB	
Naphthalene	BQL	5.0	ug/l	12/22/92		JJB	
n-Propylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Styrene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2,2-Tetrachloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Tetrachloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Toluene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,2,4-Trichlorobenzene	BQL	5.0	ug/l	12/22/92		JJB	
1,1,1-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
1,1,2-Trichloroethane	BQL	5.0	ug/l	12/22/92		JJB	
Trichloroethene	BQL	5.0	ug/l	12/22/92		JJB	
Trichlorofluoromethane	BQL	5.0	ug/l	12/22/92		JJB	
1,2,3-Trichloropropane	BQL	5.0	ug/l	12/22/92		JJB	
,2,4-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	

BQL - Below Quantification Limit

CLIENT: **RMT Laboratories, Inc.**

Test	Result	Quant.Lmt.	Units	Analyzed	Extracted	BY	Method(SW846)
1,3,5-Trimethylbenzene	BQL	5.0	ug/l	12/22/92		JJB	
Vinyl Chloride	BQL	5.0	ug/l	12/22/92		JJB	
o-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
m/p-Xylene	BQL	5.0	ug/l	12/22/92		JJB	
Mod. GRO (WDNR)	BQL	0.10	mg/l	12/21/92		EMC	Wis Mod. DNR

BQL - Below Quantification Limit

PRECISION ANALYTICAL LABORATORY

Report Comments

01/05/93

CLIENT: **RMT Laboratories, Inc.**

PAL Order #: 9212179

All analysis as per approved method found in one or more of the following:
Standard Methods for the Evaluation of Water and Wastewater, 16th Edition.
Methods for Chemical Analysis for Water and Wastes, Revised March 1983, EPA 600/4-79-020
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition 1986 EPA SW846

Analysis performed or certified by Precision Analytical Laboratory

(B) - Analyte found in the associated method blank. The value in parentheses is the blank value with the dilution factor taken into account.

J - Analyte positively identified below the quantification limit.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for 8260 were analyzed according to Method 8260 (SW 846 Test Methods for Evaluating Solid Waste - Physical/ Chemical Methods)

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

APPENDIX I
LANDFILL TEST DATA FOR WCL SITE FROM WASTE OIL TANK AREA

NATIONAL ENVIRONMENTAL TESTING, INC.

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

ANALYTICAL REPORT

Mr. Dave Volkert
GRAEF, ANHALT, SCHLOEMER
& ASSOCIATES, INC.
345 N 95th Street
Milwaukee WI 53226

10-03-90

Sample No: 14785

SAMPLE DESCRIPTION: Staged Soil Pile of Drill Cuttings
Project #908070 Wisconsin Coach
WMA #052835

Date Taken: 09-13-90 1000

Date Received: 09-14-90 1330

Chlorine, Total (%)	0.02	%
TCLP - Lead	0.21	mg/L
PCB's		
PCB-1016	<0.05	mg/kg
PCB-1221	<0.05	mg/kg
PCB-1232	<0.05	mg/kg
PCB-1242	<0.05	mg/kg
PCB-1248	<0.05	mg/kg
PCB-1254	<0.05	mg/kg
PCB-1260	<0.05	mg/kg
PCB's, Total	<0.05	mg/kg

David W. Havick adv.

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

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-6120

ANALYTICAL REPORT

Mr. Dave Volkert
GRAEF, ANHALT, SCHLOEMER
& ASSOCIATES, INC.
345 N 95th Street
Milwaukee WI 53226

10-16-90

Sample No: 12905

SAMPLE DESCRIPTION: Boreholes SB-1,2,4,5 Composite
Project #908070 Wisconsin Coach
WMA 052835

Date Taken: 08-01-90

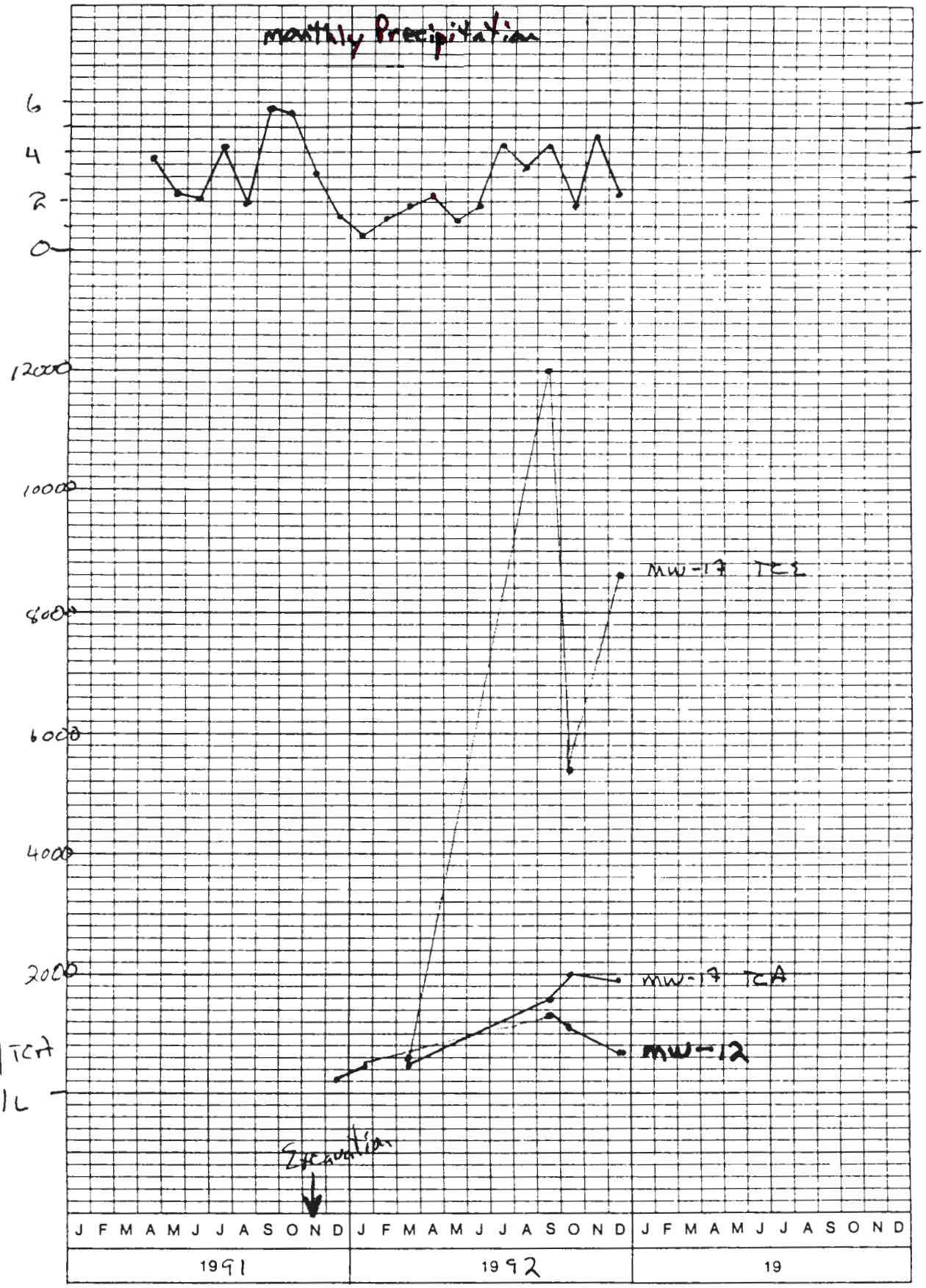
Date Received: 08-03-90

Flash Point	>205.	Deg. F
pH	8.6	units
Solids, Total	89.7	%
Water (Paint Filter)	No Detect	per 100g
Lead	8.7	mg/kg
EP TOXICITY TEST		
EP Tox - Lead	<0.001	mg/L
Extractable pH	5.0	units
Final pH	6.2	units
VOL. COMPOUNDS - BTEX		mg/kg
Benzene	<0.1	mg/kg
Ethyl benzene	<0.1	mg/kg
Toluene	<0.1	mg/kg
Xylenes, Total	<0.1	mg/kg
TPH		mg/kg
Diesel Fuel	<5.	mg/kg
Gasoline	<5.	mg/kg

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

APPENDIX J

RAINFALL RECORDS FOR WAUKESHA (CARROLL COLLEGE)


monthly Precipitation
Rainfall @ Waukesha
inches
6
4
2
0
6
5
4
3
2
1
0
12000
10000
8000
6000
4000
2000
MW-17 TCE
MW-17 TCA
MW-12
TCE | TCA ug/L
Excavation
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1991
1992
19

RMT INC.

COMMUNICATION RECORD

PARTICIPANTS	FIRM	TELEPHONE NUMBER
Chris Hyatt		(___) ___ - ____
		(___) ___ - ____
		(___) ___ - ____
		(___) ___ - ____
		(___) ___ - ____

PREPARED BY: _____

PROJECT NO. 2585.03

PROJECT NAME _____

DATE _____ '99___

TIME ____ : ____ TO ____ : ____

☐ MEETING @ _____

☐ PHONE CONVERSATION

SUBJECT/PURPOSE: Rainfall Waukesha, WI
Apr 91 – Dec 92

DISCUSSION/DECISION (SUMMARY):

91
April - 3.74
May - 2.37
June - 2.04
July - 4.19
Aug - 1.97
Sept 5.78
Oct 5.60
Nov - 3.07
Dec - 1.47

92
Jan 2.61 inches
Feb 1.28
Mar 1.89
April 2.25
May 1.20
June 1.87
July 4.24
Aug 3.45
Sept 4.19
Oct 1.81
Nov 4.53
Dec - 2.31

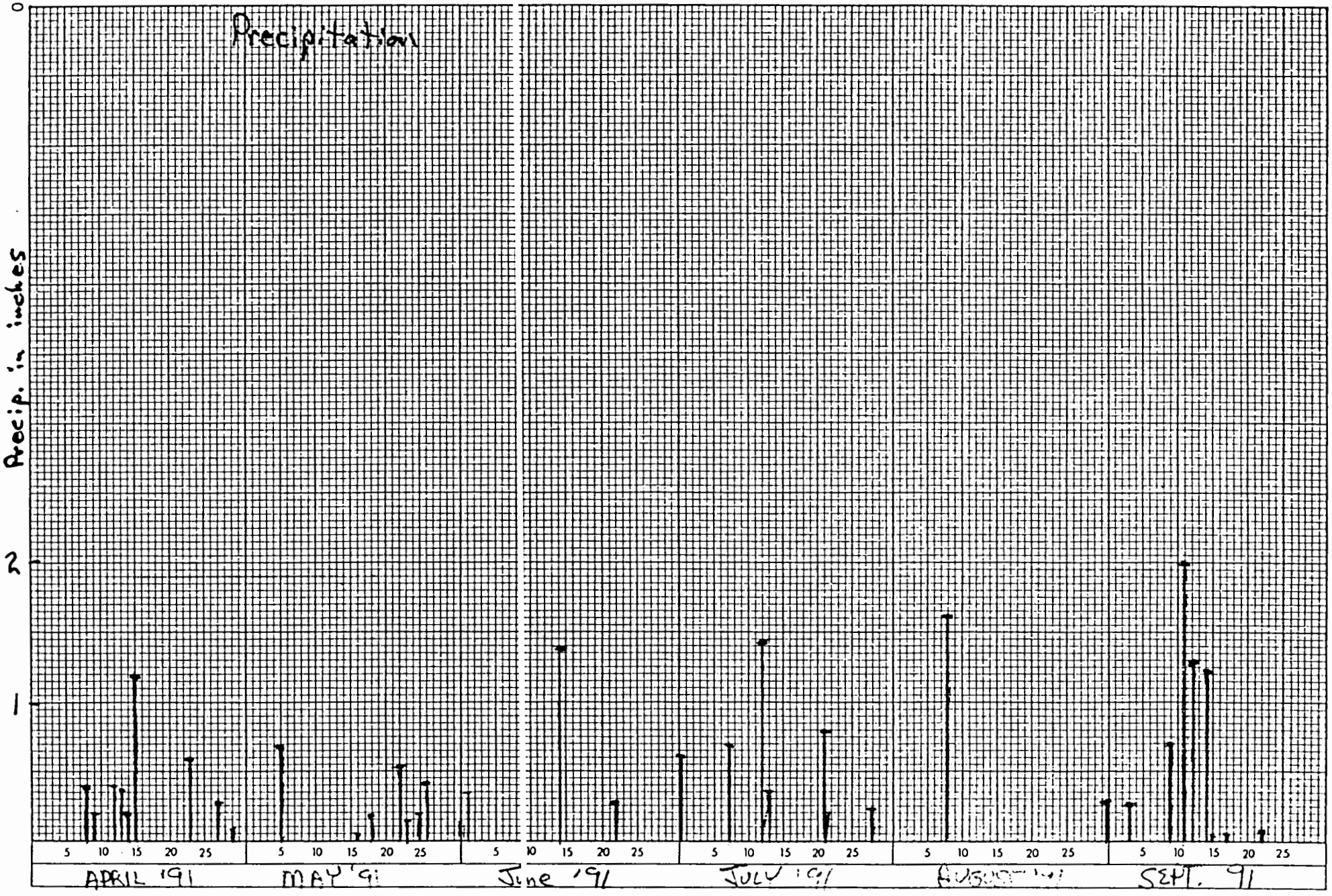
FOLLOW-UP ACTION/ASSIGNMENTS: _____

The above represents my understanding of the matters discussed and actions agreed upon. Any corrections or omissions should be reported promptly to me.

Signed: _____

Carol College – Waukesha

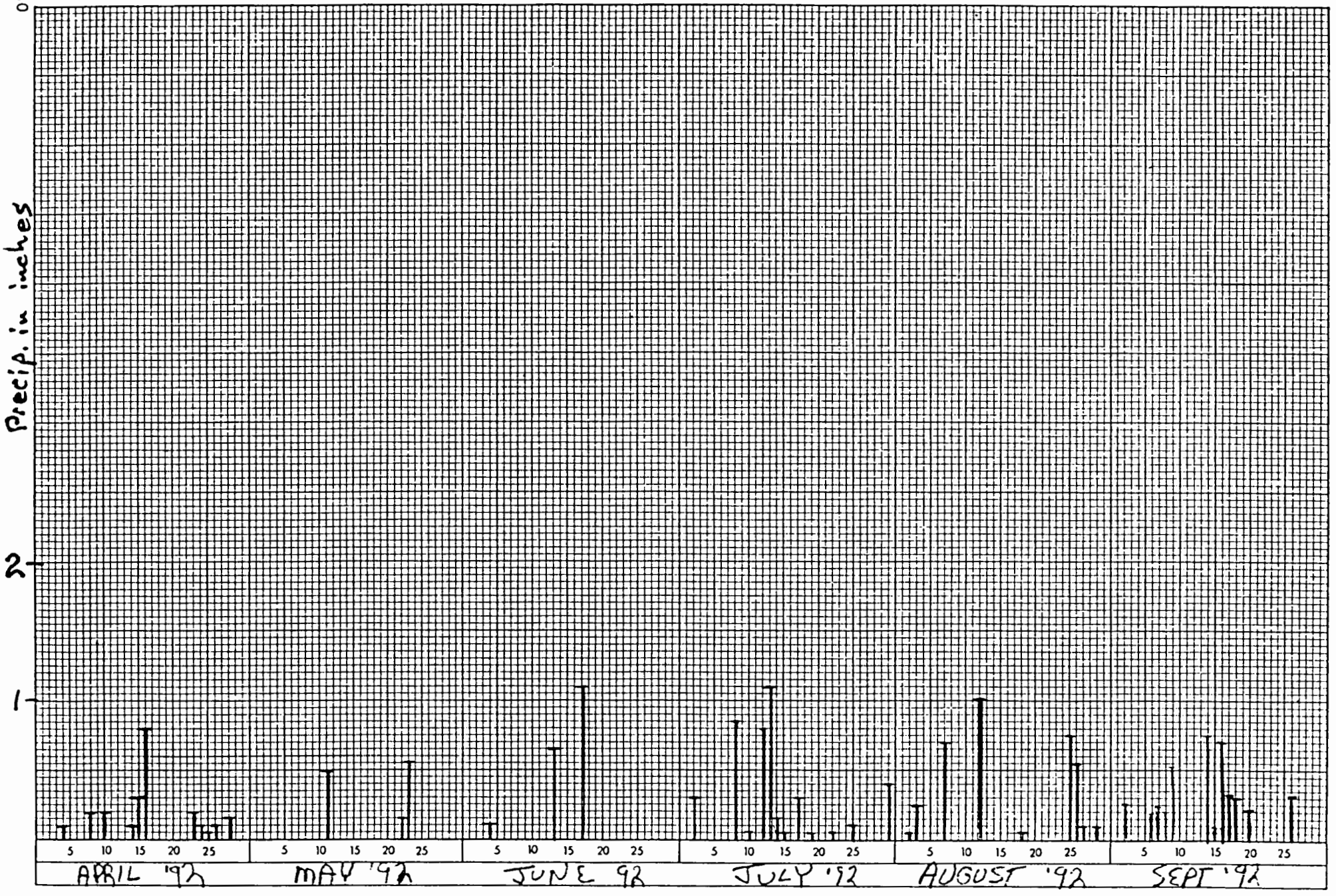
APRIL 1991 – December 1992



6 Months by Days 120 Divisions 10th Accent Long Axis

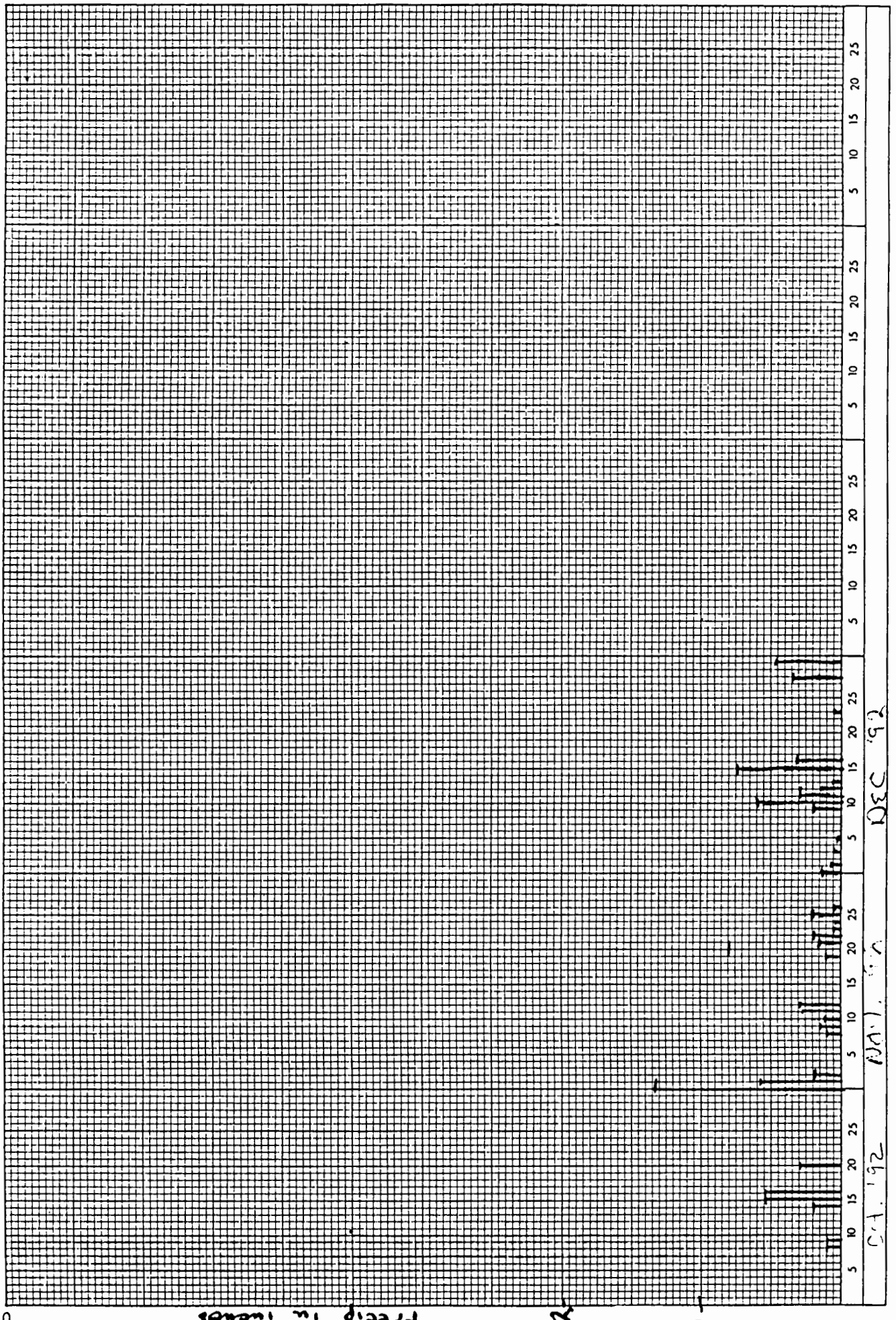
6 Months by Days 120 Divisions 10th Accent Long Axis

(2)



6 Months by Days 120 Divisions 10th Accent Long Axis

(3)


Precip in inches
2
1
OCT. 1992
NOV.
DEC '92