[redacted]

September 12, 1996

Mr. Scott Ferguson
WDNR, Richards Street Annex
4041 N. Richards Street
P.O. Box 12436
Milwaukee, WI 53212

268005430,
GENCL

RE: Navistar International Transportation Corporation - FID No. 268005430

Dear Scott;

On behalf of our client, Navistar International Transportation Corporation, RMT, Inc. (RMT), is submitting this "Supplemental Soil and Groundwater Quality Investigation Report for the Navistar International Transportation Corporation Casting Facility in Waukesha, Wisconsin," September 1996. As you previously requested, this report summarizes the results of recent activities as well as the details and findings of previous investigative activities performed by Navistar at this site.

The recent phase of investigation included the completion and sampling of soil probe borings near the boundary of the Navistar and Wisconsin Coach Lines (WCL) properties, installation of five monitoring wells and two piezometers on the Navistar property and sampling of 18 monitoring wells and three piezometers. In addition, the work included installation and sampling of six soil probe borings at the Navistar chemical storage area and one hand auger boring at the former Navistar used foundry sand storage area, as you had requested. Navistar was also granted permission by the current WCL building occupant to sample the remaining oil and nearby soil materials associated with a former hydraulic line within the building.

We believe that the new information obtained from these activities indicates that chlorinated VOCs were in fact, used by WCL and that WCL is partially if not wholly responsible for the chlorinated VOC impacts observed in groundwater at these sites. We look forward to our meeting with you and Frank Schultz on September 16th. Please call either of the undersigned with any questions or comments at (414) 879-1212.

Sincerely;

Daniel M. Peplinski, P.E., P.G.
Project Manager

Kathryn R. Huibregtse, P.E.
Vice President - Northern Region

Enclosure

cc: Frank Schultz, WDNR
Woody Deischel, Navistar
Edith Ardiente, Navistar

RMT, INC. – MILWAUKEE
150 N. PATRICK BLVD.
BROOKFIELD, WI • 53045
414/879-1212 • 414/879-1220 FAX

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SUBMITTAL CERTIFICATION

"I, Daniel M. Peplinski hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03, Wisconsin Administrative Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wisconsin Administrative Code."

Signature and Title

Date 9/12/96

EXECUTIVE SUMMARY

A supplemental groundwater investigation was performed at the Waukesha Foundry facility of Navistar International Transportation Corporation (NITC). The objectives of the investigation were to further assess groundwater impacts in both shallow and deep wells, and to evaluate potential source area(s) of chlorinated solvents. The investigation included advancement of soil borings, and installation and sampling of monitoring wells and piezometers. Groundwater from 17 wells on the NITC property and 3 wells on the adjacent Wisconsin Coach Lines (WCL) property were sampled and analyzed. The wells were also surveyed and groundwater elevations were measured to help evaluate current groundwater flow direction.

Chlorinated volatile organic compounds (CVOCs) were detected in groundwater from 19 of the 20 wells sampled. The overall distribution was similar to previous groundwater sampling rounds, although actual concentrations were generally higher. The highest concentrations were detected nearest the former waste oil tank, with trichloroethylene (TCE) levels being the greatest. In the water table monitoring wells, TCE concentrations generally decreased with distance from the former waste oil UST area. Groundwater at depth [40 feet below ground surface (bgs)] also contained TCE. The trend of increasing CVOC concentrations with time suggests that a continuing source of these materials exists within soil and/or bedrock. However, other potential shallow source areas needed to be investigated.

To investigate possible shallow source areas, 19 soil samples were collected from 15 geoprobes and one hand auger location. Six geoprobes were advanced near the former chemical storage area. TCE and 1,1-dichloroethane (DCA) were the only non-qualified chlorinated compounds detected in one of eight samples collected from this area. These two parameters were quantified in a shallow sample (1 to 3 feet bgs) at concentrations below 100 ppb. Analysis of a sample from 5 to 7 feet in the same boring did not confirm the presence of DCE or TCE.

Three additional geoprobes were completed in the former waste oil tank area. Two of the three soil samples analyzed from these borings confirmed the presence of TCE, tetrachloroethylene, and other CVOCs at levels less than 100 ppb. The hand auger sample collected from the used sand area did not contain detectable CVOCs. Finally, five geoprobes were extended between the WCL south property boundary and the NITC facility. TCE at less than 100 ppb was detected in

the soil sample from the boring nearest to the former waste oil UST area. It was concluded that the NITC chemical storage area and used sand area do not appear to be the sources of CVOCs detected in groundwater. Although residual concentrations of CVOCs near the former waste oil UST are low, their presence after the extensive source excavation activities performed by WCL in 1991 implies that these compounds may be residuals from the tank or other operations performed by WCL in this area. However, the low levels of CVOCs detected in soils may be attributed to adsorption from impacted groundwater. The most likely ongoing source may be product which has extended into the fractured bedrock and is slowly dissolving into groundwater, creating increasing CVOC concentrations and representing a complex flow system to remediate.

With permission and oversight from the WCL building occupant, RMT sampled and analyzed oil from a hydraulic line within the WCL building. This oil was present from past operations at the facility. TCE, TCA, perchloroethene, and methylene chloride were detected in this sample at 8100, 3800, 590, and 810 ppb, respectively. Based on these data and other new and existing information, it appears that CVOCs were used on site by WCL and that WCL may have caused or significantly contributed to the CVOCs currently detected in groundwater.

Section 1
INTRODUCTION

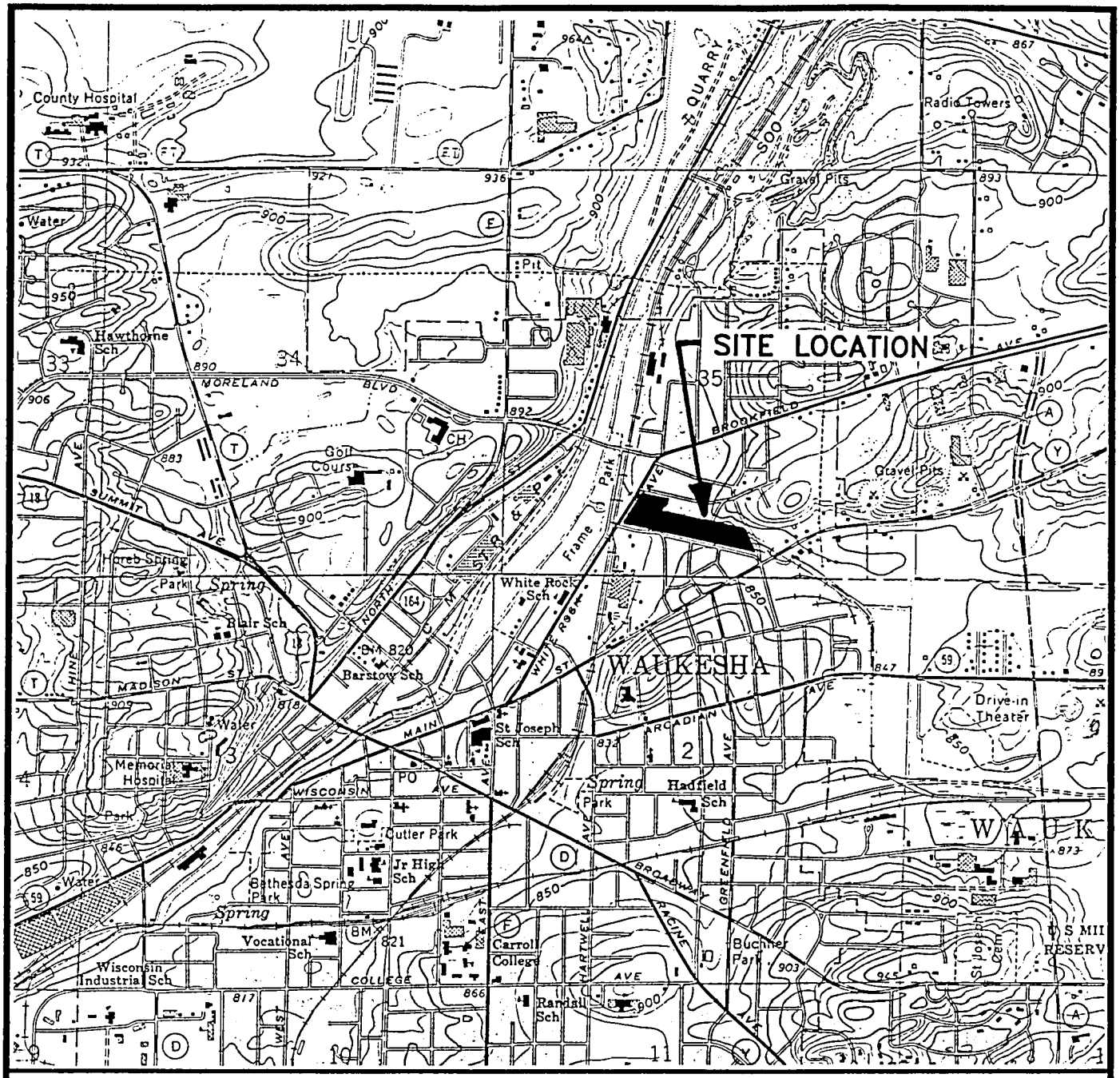
1.1 Background

The Navistar International Transportation Corporation (NITC) received a request from the Wisconsin Department of Natural Resources (WDNR), dated June 8, 1992, to investigate potential groundwater contamination by trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) at their manufacturing facility located at 1401 Perkins Avenue in Waukesha, Wisconsin (Figure 1). The WDNR's request followed the discovery of TCE, TCA, and other chlorinated volatile organic compounds (CVOCs) in groundwater at the adjoining property to the north, which was 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. Although the extent of petroleum contamination was apparently confined to the WCL property, the solvents were identified in groundwater on both the WCL and NITC properties.

Upon discovery of the CVOCs detected in groundwater in 1992, NITC retained RMT, Inc. (RMT), to investigate the nature and apparent source of these constituents. The scope of work, which was approved by the WDNR, included the following:

- Installation of six soil and bedrock borings, of which four were located on the NITC property and two were installed on the WCL property.
- Conversion of the six borings to groundwater monitoring wells.
- Collection and analysis of soil samples from nine additional soil sampling locations on the NITC and WCL properties.
- Sampling groundwater from the six NITC wells and fourteen monitoring wells installed by WCL on their property.
- Hydraulic testing of the six monitoring wells installed by NITC.

WCL has investigated and is now remediating the petroleum contamination on their site. However, because the greatest concentrations of chlorinated solvents on the WCL property were identified adjacent to NITC, and because the interpreted groundwater flow direction is from NITC



STATE LOCATION

SITE LOCATOR MAP

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION WAUKESHA, WISCONSIN

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

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770112

FIGURE 1

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toward WCL, the WDNR has issued an opinion to WCL on June 23, 1993. This opinion states that based on existing information available at that time, NITC is allegedly responsible for the solvent impacts. Therefore, the WDNR has not required WCL to address those constituents any further. WDNR's opinion was based primarily on recorded chemical usage at the two facilities, which confirms chlorinated solvents at NITC with no corresponding evidence of use at WCL. The completeness and content of the records reviewed by the WDNR is unknown. NITC requested a review of the WDNR's opinion regarding the sites and identified technical information (groundwater concentrations, hydrogeologic setting, etc.) that did not support the conclusion that NITC was responsible for the CVOC plume. However, following a meeting in July 1995, the WDNR indicated that they would not re-evaluate the site issues until additional data were available.

Subsequently, NITC completed this supplemental soil and groundwater quality investigation to better document existing conditions. This report summarizes the results of previous investigations performed by NITC and WCL and presents the results from the most recent investigation. Because of the importance of understanding the environmental and hydrogeologic conditions in the combined site area, a description of the NITC facility and a brief background of the WCL site information is presented.

1.2 Navistar Facility

Navistar operates a foundry at the Perkins Avenue location. Various chemicals are used in their operations, including a limited volume of TCA. Based on a review of records, NITC staff indicated that the NITC casting facility had used approximately 7,000 to 31,000 pounds of TCA through 1993. Less than 0.1 percent TCE was present in the TCA as an impurity. There is no record of the use of TCE in a more concentrated form. NITC indicated that TCA had been used as a reducing agent (thinner) for a core coating process. The use of TCA as a thinner was eliminated by NITC in mid-1993. This process was operated in the core room at the west end of the facility and is shown on the map on Figure 2. TCA was purchased in 55-gallon drums, in four- to six-drum lots. The material was stored on pallets under a roof in the west yard of the plant approximately 60 feet east of monitoring well NMW-1. The material was stored in the west yard for convenience as well as safety. The core room, where the material was used, is just east of the storage shed. The west yard is asphalt covered with no storm drains are located in it. The TCA

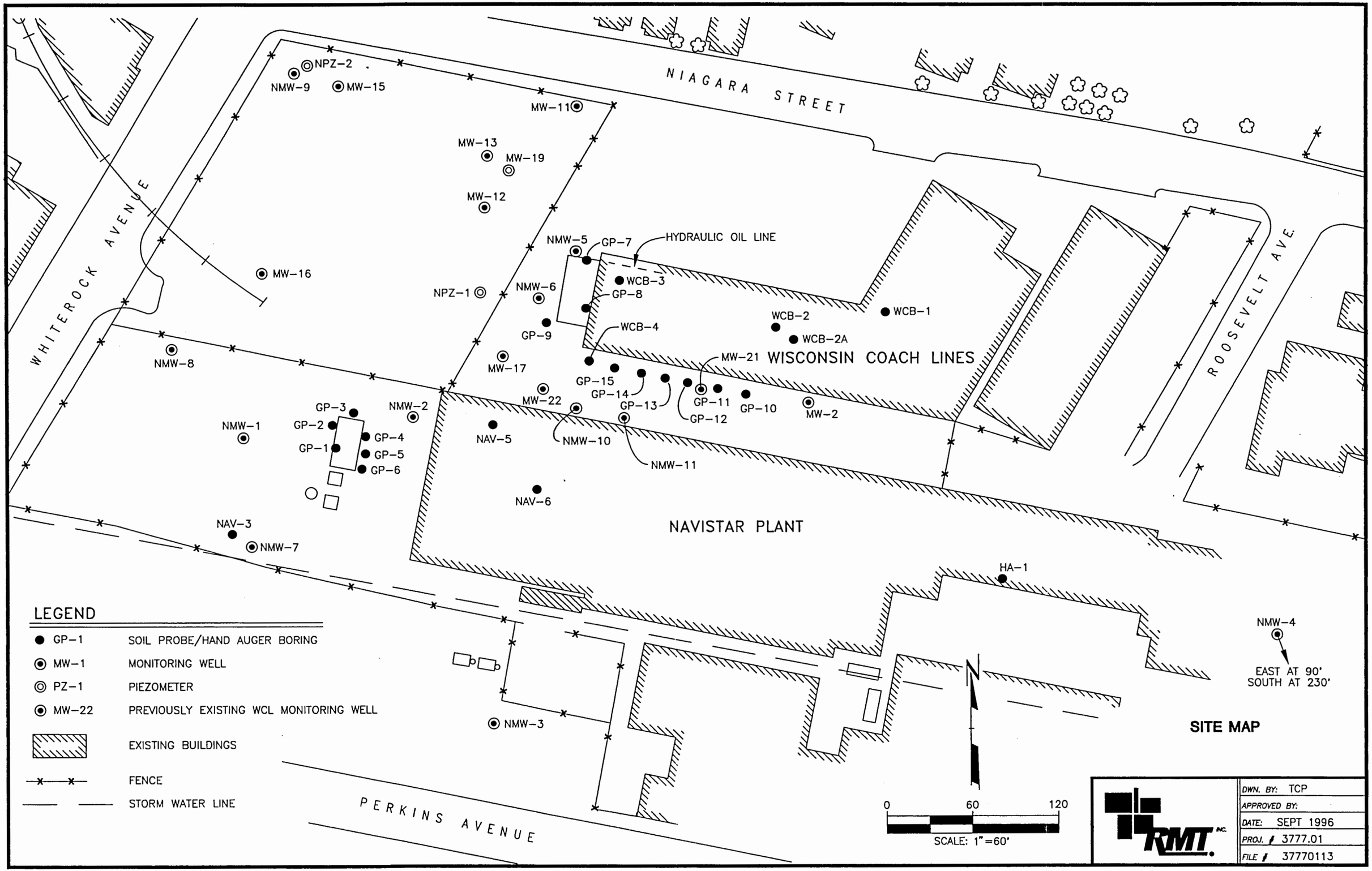

NIAGARA STREET
WHITEROCK AVENUE
ROOSEVELT AVE.
PERKINS AVENUE
NAVISTAR PLANT
WISCONSIN COACH LINES
NPZ-2
NMW-9
MW-15
MW-11
MW-13
MW-19
MW-12
MW-16
NPZ-1
NMW-5
GP-7
HYDRAULIC OIL LINE
WCB-3
NMW-6
GP-8
WCB-1
WCB-2
WCB-2A
GP-9
WCB-4
NMW-8
MW-17
MW-21
GP-15
GP-14
GP-13
GP-12
GP-11
GP-10
MW-2
MW-22
NMW-10
NMW-11
NAV-5
NMW-1
GP-3
GP-2
GP-1
GP-4
GP-5
GP-6
NMW-2
NAV-6
NAV-3
NMW-7
HA-1
NMW-4
EAST AT 90'
SOUTH AT 230'
NMW-3
LEGEND
GP-1 SOIL PROBE/HAND AUGER BORING
MW-1 MONITORING WELL
PZ-1 PIEZOMETER
MW-22 PREVIOUSLY EXISTING WCL MONITORING WELL
EXISTING BUILDINGS
FENCE
STORM WATER LINE
0
60
120
SCALE: 1"=60'
SITE MAP
RMT INC.
DWN. BY: TCP
APPROVED BY:
DATE: SEPT 1996
PROJ. # 3777.01
FILE # 37770113

FIGURE 2

was transported by truck into the core room where it was opened and drained directly into the coating tank.

1.3 Wisconsin Coach Lines Facility

The WCL property, located directly to the north of the NITC facility, has been used to repair and refuel busses since the 1940s. Consequently, several petroleum fuel UST systems and a waste oil UST system were operated at the site. The general sequence of the WCL investigation and remediation activities associated with these UST areas is as follows:

- ***October 1990*** - A 12,000-gallon diesel tank and a 1,000-gallon waste oil tank were 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. 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.

- ***1991 to 1992*** - A soil and groundwater quality investigation was performed on the WCL site to identify the nature and extent of petroleum impacts. The investigation, which was performed by WCL's environmental consultant Graef Anhalt and Schloemer (G.A.S.), delineated an area of waste oil-contaminated soil approximately 120 feet east/west by 150 feet north/south. Subsequently, approximately 552 cubic yards of waste oil-impacted soils were excavated and disposed off site. However, because the waste oil-impacted soils were analyzed only for petroleum-related VOCs, it is not possible to directly verify whether the waste oil UST or former surrounding soil materials are a source(s) of the CVOCs.

The G.A.S. report states that diesel and waste oil are the primary soil contaminants at and surrounding the waste oil and diesel tank excavation. The zone of greatest contamination was about 12 to 16 feet below ground surface, which is at or below the water table in this area. The overlying soils exhibited relatively little evidence of petroleum impacts. The report 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 granular materials present on top of the bedrock.

1.4 Summary of Previous Investigations

The analysis of subsurface conditions presented in this report is based on a review and evaluation of previous investigations at both sites. This includes NITC and WCL site information collected during the previous three phases of investigation as follows.

1.4.1 Phase I Investigation

The initial phase was conducted by RMT for NITC in October 1992 and included the following:

- Completion of six 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).
- 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 elevations at the newly installed NITC wells and selected wells at the WCL site.

During the field investigation conducted by RMT in 1992, NITC allowed WCL, through its consultant G.A.S., to split soil and groundwater samples at the newly installed borings and wells (NMW-1 through NMW-6).

1.4.2 Phase II Investigation

The second phase of the investigation by RMT for NITC began in 1993 when NITC gave permission to WCL to perform soil borings at their site. Layne Geosciences, Inc. installed soil borings at five locations across the NITC site. RMT split samples with Layne Geosciences, Inc. and analyzed one soil sample per boring.

1.4.3 Phase III Investigation

The third phase of investigation by RMT for NITC occurred later in 1993 when the consultants for NITC and WCL split soil samples from six borings on the NITC property and four areas within the WCL building. NITC forwarded all sampling results to WCL;

however, the soil sample results collected by G.A.S. from within the WCL building were never provided to NITC.

1.5 Goals of Present Supplemental Investigation

The goal of the supplemental investigation was to better define the nature and overall extent of impacts in order to evaluate the necessity of soil and/or groundwater remediation and, if necessary, to identify a cost-effective remedial approach for the site. Specific objectives of the supplemental site investigation are to:

- determine whether CVOC concentrations in groundwater increase to the south and southeast of the former WCL waste oil UST area;
- confirm whether soils in the gravel driveway on the northwestern side of the NITC property and the former CVOC storage area at the west end of the NITC plant property are likely source areas for CVOCs in groundwater;
- determine the general extent of CVOC-impacted soil, if encountered;
- assess current groundwater quality conditions and/or trends in groundwater quality since the last sampling round in 1993;
- determine whether shallow groundwater impacts extend to the NITC property boundary to the west or to the fence line directly north of the former CVOC storage area;
- assess whether the groundwater impacts extend to a 35- to 40-foot depth within the bedrock; and
- evaluate the necessity of soil and/or groundwater remediation and identify practicable remedial approaches, if appropriate.

1.6 Scope of Work

The supplemental investigation was performed by RMT from March through June of 1996. This specific scope of work included the following.

1.6.1 Characterization of Soil Materials in Suspected Potential Source Areas

During the recent phase of investigation, 19 soil samples from 15 geoprobe locations and one hand auger boring were submitted for laboratory analysis of VOCs. The general areas of recent sample collection are presented on Figure 2 and include:

- the NITC chemical storage area near the west side of the facility (GP-1 through GP-6);
- the former WCL waste oil UST area (GP-7, GP-8, and GP-9);
- the border between the NITC and WCL properties (GP-10 through GP-15); and
- the former NITC used foundry sand storage area (hand auger boring HA-1).

1.6.2 Analysis of WCL Hydraulic Oil Line

To determine whether evidence of historic CVOC usage by WCL could be found, RMT sampled an out-of-service hydraulic oil line and soils beneath the concrete floor adjacent to the oil line within the WCL building. The hydraulic oil line is located indoors on the west side of the WCL building.

1.6.3 Supplemental Characterization of the Shallow Groundwater Flow System

To better define the lateral extent of groundwater quality and to characterize the site-specific hydrogeology, five additional shallow groundwater monitoring wells were installed. Monitoring wells NMW-7 through NMW-9 were installed along the fence line to the west and southwest of the plant building. Monitoring wells NMW-10 and NMW-11 were installed on the northern side of the NITC building, south and southeast of the former WCL waste oil UST area. Monitoring wells MW-17, MW-21, and MW-22, which were installed by WCL as part of the petroleum VOC investigation, are located to the south between the WCL and NITC facilities. Previous groundwater monitoring results indicate that CVOC concentrations are lower near the former WCL waste oil UST area. However, these wells were recently abandoned by WCL. The purpose of installing NMW-10 and NMW-11 was to confirm the previous CVOC concentration trends and/or determine whether a CVOC source on the NITC property was apparent. Consequently, NMW-10 and NMW-11 were installed to fill a data gap between former monitoring wells MW-21 and MW-22 (Figure 2).

1.6.4 Characterization of Deeper Bedrock Hydrogeology

Two additional piezometers, NPZ-1 and NPZ-2, were installed to determine whether CVOCs have impacted groundwater quality at depth and to obtain a preliminary indication of the deeper bedrock hydrogeology. These new piezometers were installed to an

approximate 40-foot depth, similar to the existing piezometer MW-19, which was previously installed by WCL on the NITC property. To better characterize groundwater transport mechanisms in the bedrock (such as variations in bedrock productivity, trends in fracture size and frequency, and other factors), continuous bedrock core samples were retained while installing the two piezometers. The 15 monitoring wells and piezometers installed on the NITC property and three of the monitoring wells installed on the WCL property were resurveyed and sampled for VOCs.

Section 2
INVESTIGATION RESULTS

2.1 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 Castings property is located within several hundred feet south of the west end of the NITC facility. Subsurface environmental investigations have been initiated at the General Castings property, but the extent of soil and groundwater impacts have not been fully characterized.

2.1.1 Topography and Drainage

The land surface at the facility is approximately 832 feet above mean sea level (MSL) and slopes gradually to the west. The Fox River, which flows to the southwest, is located about 600 feet west of the NITC property. 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 NITC plant, extends westward beneath the NITC facility, and empties into the Fox River.

2.1.2 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 deposits. 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 produce usable quantities of water.

Unconsolidated sediments 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 most significantly the source of permeability of the Niagara Dolomite aquifer.

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 Cambrian Sandstone aquifer is used by the City of Waukesha as a potable water supply.

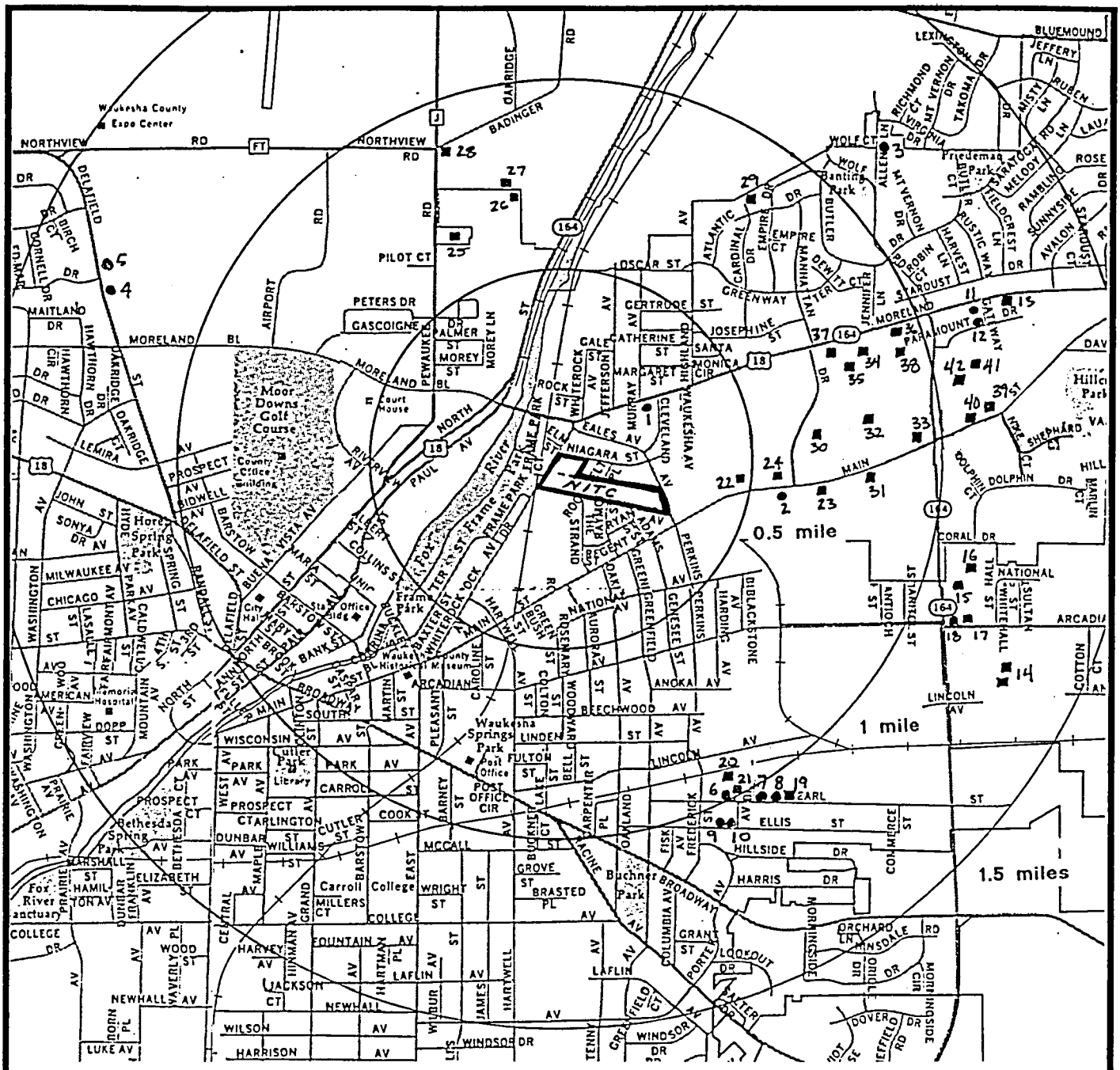
2.1.3 Local Groundwater Usage

The vast majority of groundwater used in the City of Waukesha is provided by the municipal water supply system, which obtains its groundwater from the deep Cambrian Sandstone aquifer. However, many private groundwater supply wells within the city and in surrounding communities currently obtain groundwater from the Niagara Dolomite and the unconsolidated sediments. Prior to the establishment of the municipal water supply system, residents in the City of Waukesha obtained potable water supplies from private wells. According to the City of Waukesha Water Utility, several areas of the city are not yet connected to the municipal water supply and are known to use the Niagara aquifer as a potable water supply. In addition, many residents and businesses that are connected to the municipal system reportedly still use their old private wells as a source of non-potable water. Figures 3 and 4 present the locations of many private water supply wells completed within the Niagara Dolomite that may still be in use. Figure 3 presents the locations of wells identified by RMT as part of this investigation. Figure 4 was prepared by G.A.S. and was presented in the 1992 "Initial Site Assessment, Extent of Contamination and Remediation Progress Report" prepared for WCL.

2.2 Site Hydrogeology

2.2.1 Geology

The subsurface materials and trends in conditions encountered during this phase of investigation were generally consistent with previous findings. However, a more comprehensive inspection of subsurface materials was performed to better understand



● 1 – 12 BASED ON FILES FROM WAUKESHA WATER UTILITY.
■ 16 – 41 BASED ON WELL LOGS FROM USGS.

N

0 .4 .8

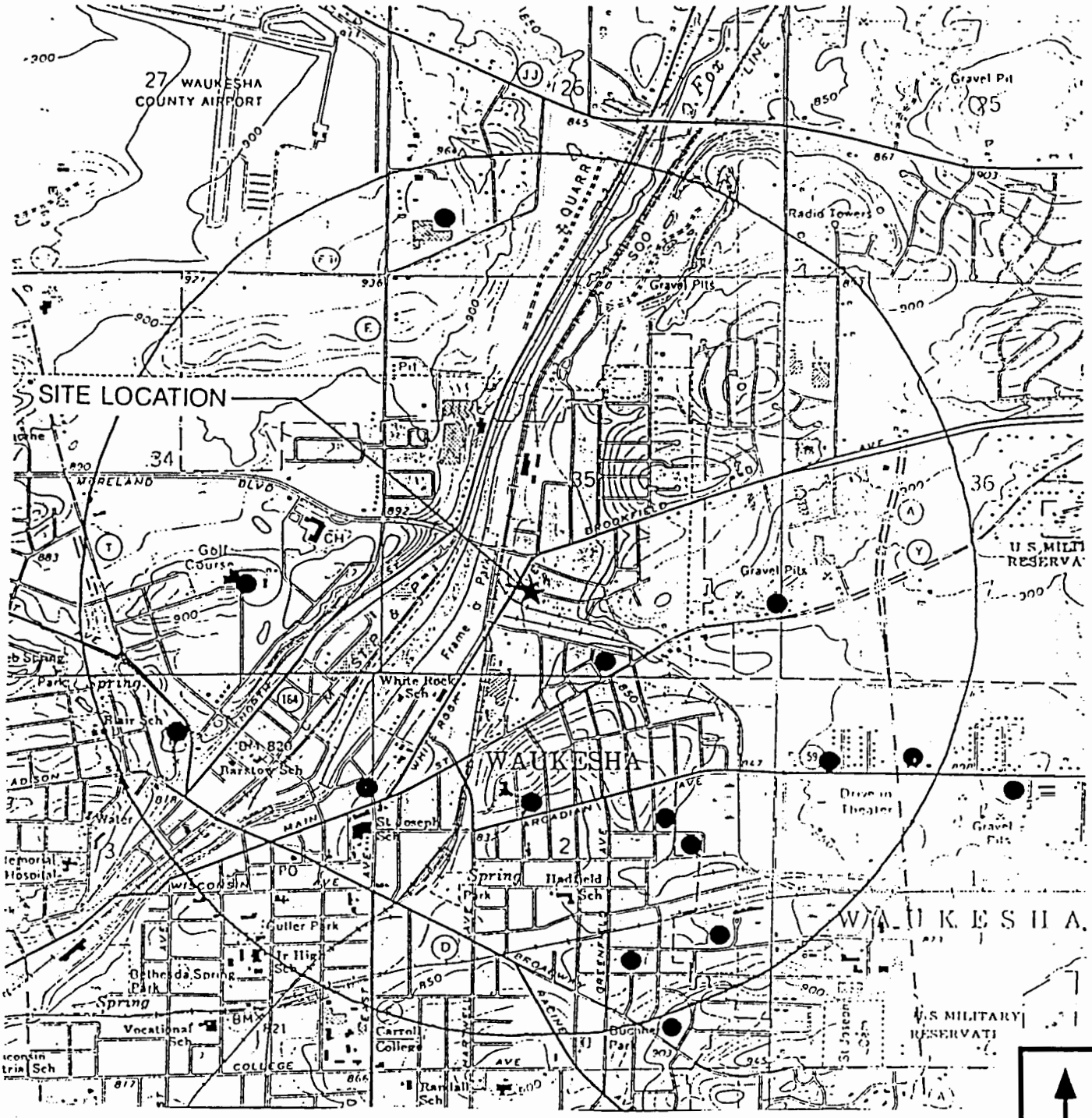
SCALE: 1"=.4 mi

POTENTIALLY ACTIVE SHALLOW PRODUCTION WELLS NEAR NAVISTAR

RMT INC.

DWN. BY:	SCD
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770115

FIGURE 3



SOURCE: 1971 USGS WAUKESHA WISCONSIN 7.5 MINUTE QUADRANGLE

● WATER SUPPLY WELL

WATER WELL LOCATION MAP

WISCONSIN COACH LINES, INC.
WAUKESHA, WISCONSIN

SCALE:	1" = 2,000'
DATE:	6-2-92
PROJECT MGR:	DGV
DRAWN BY:	JDJ
JOB NUMBER:	908070
REVISION DATE:	

GRAEF ANHALT SCHLOEMER and Associates Inc.
CONSULTING ENGINEERS

908070DGV.D3

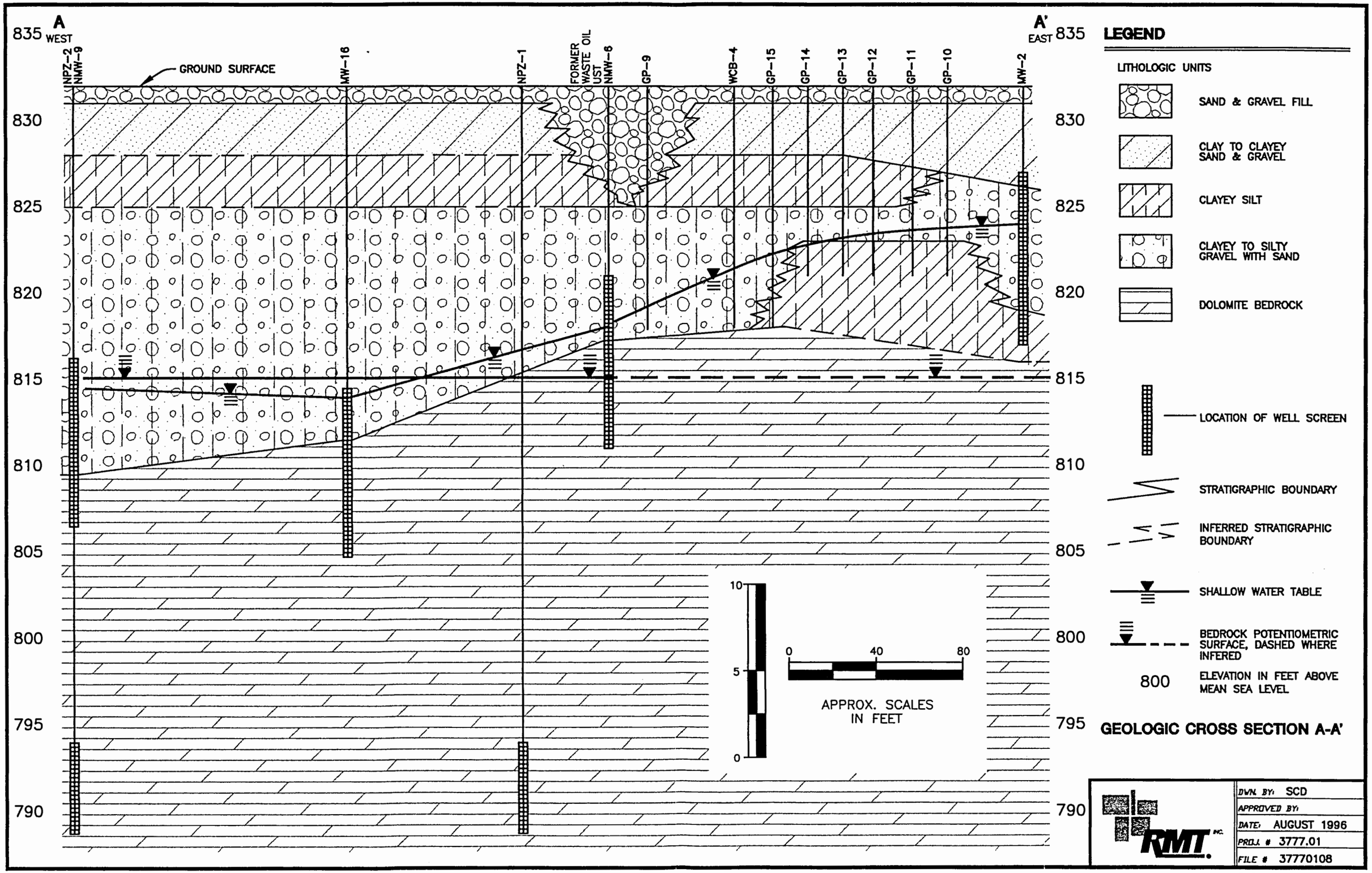
FIGURE 4

the potential CVOC source areas and migration pathways. Granular fill and apparently native unconsolidated materials overlie the Niagara dolomite. Unconsolidated materials consist of relatively permeable silty sand and gravel, which become more silt and clay-rich near the ground surface. Because of extreme weathering, the uppermost portion of the dolomite is a transition from granular materials to competent bedrock. Consequently, the bedrock surface was generally defined in this investigation as the depth to auger refusal. The bedrock surface was typically encountered at depths from approximately 12 to 15 feet below ground surface. Geologic cross sections depicting subsurface conditions are presented as Figures 5 and 6.

The bedrock surface generally slopes downward to the west and northwest, towards the Fox River. The slope of the bedrock is gentle across the WCL property and the majority of the NITC property; however, the slope becomes abruptly steeper at the northwest corner of the NITC property. The deepening of the bedrock surface at the northwest corner of the site is likely associated with historic erosion from the Fox River. A small bedrock knob or mound that was previously identified in the vicinity of the former WCL USTs appears to extend to the southeast, toward NMW-10 and NMW-11.

2.2.2 Hydrogeology

Continuous bedrock cores were retained when installing piezometers NPZ-1 and NPZ-2. Examination of the cores indicated that frequent thin horizontal and occasional vertical fractures/partings exist within the dolomite. Although no large solution features were observed (e.g., solution cavities, fissures, weathered zones), the thin fractures/partings were extensive and continuous enough to produce groundwater. While installing piezometers NPZ-1 and NPZ-2 using air rotary techniques, several gallons per minute of groundwater were produced when drilling through bedrock. Considerably more groundwater was produced when drilling from 34 to 43 feet deep in piezometer NPZ-1. Because permanent well casing was grouted in from the ground surface to several feet below the top of competent bedrock prior to drilling deeper, it is not likely that the groundwater produced during the air rotary drilling was caused by leakage from the overlying saturated unconsolidated sediments.



LEGEND

LITHOLOGIC UNITS

- SAND & GRAVEL FILL
- CLAY TO CLAYEY SAND & GRAVEL
- CLAYEY SILT
- CLAYEY TO SILTY GRAVEL WITH SAND
- DOLOMITE BEDROCK

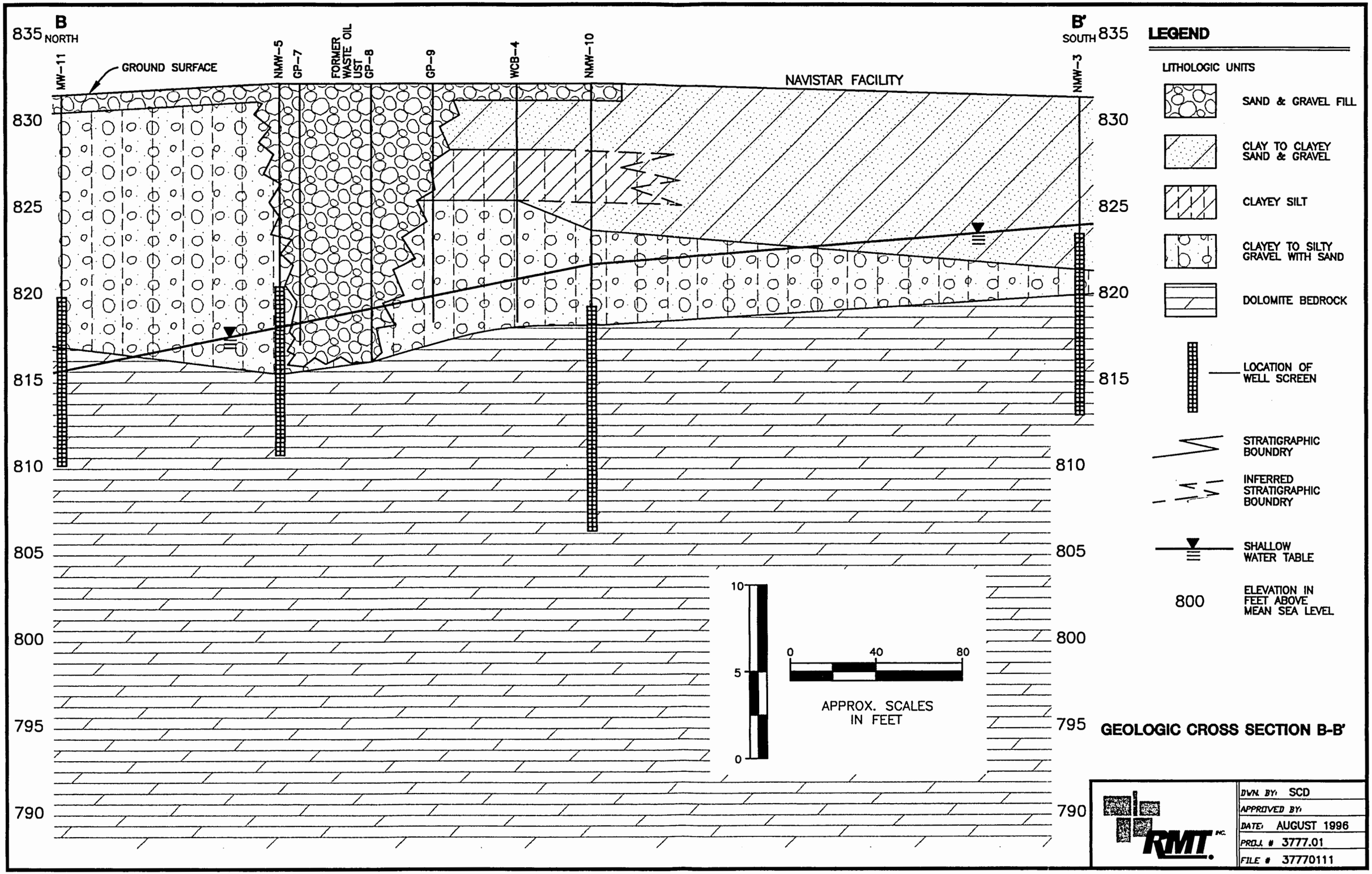
- LOCATION OF WELL SCREEN
- STRATIGRAPHIC BOUNDARY
- INFERRED STRATIGRAPHIC BOUNDARY
- SHALLOW WATER TABLE
- BEDROCK POTENTIOMETRIC SURFACE, DASHED WHERE INFERED
- 800 ELEVATION IN FEET ABOVE MEAN SEA LEVEL

GEOLOGIC CROSS SECTION A-A'

RMT INC.

DWN. BY:	SCD
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770108

FIGURE 6



LEGEND

LITHOLOGIC UNITS

- SAND & GRAVEL FILL
- CLAY TO CLAYEY SAND & GRAVEL
- CLAYEY SILT
- CLAYEY TO SILTY GRAVEL WITH SAND
- DOLOMITE BEDROCK
- LOCATION OF WELL SCREEN
- STRATIGRAPHIC BOUNDRY
- INFERRED STRATIGRAPHIC BOUNDRY
- SHALLOW WATER TABLE
- 800 — ELEVATION IN FEET ABOVE MEAN SEA LEVEL

GEOLOGIC CROSS SECTION B-B'

RMT INC.

DWN. BY:	SCD
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770111

FIGURE 6

Consistent with previous measurements, the shallow groundwater table generally slopes to the west-northwest (Table 1 and Figure 7) toward the Fox River. The water table is located directly above the bedrock surface and closely follows the bedrock contour. The water table slopes more northwesterly at the southwestern corner of the NITC facility. According to NITC's records, a natural creek historically extended across the NITC property from west to east and discharged into the Fox River. Many decades ago, the NITC facility expanded and the portion of the creek on the NITC property was converted into a large diameter brick and concrete lined storm water line. This storm water line currently extends beneath the NITC plant. Because of the steeply sloping groundwater table across the site, the storm water line appears to be below the water table on the eastern two-thirds of the NITC property and above the water table on the western one-third of the site. Consequently, it is likely that the slight change in direction of the shallow groundwater flow gradient in the southwestern corner of the site is caused by localized infiltration of water from the storm line. The proximity of the water table and deeper potentiometric surface is presented on Figure 5. Figure 6 presents a geologic cross section and groundwater table extending north to south across the NITC and WCL facilities.

The potentiometric surface measured in piezometers NPZ-1, NPZ-2, and MW-19 is relatively flat and distinct from the shallow water table. Although the shallow and deeper groundwater flow systems are hydraulically connected (as evidenced by the presence of CVOCs in both systems and the occasional vertical fractures observed in the bedrock cores from NPZ-1 and NPZ-2), the factors controlling lateral flow within them may be different. Groundwater flow within the shallow system appears to be strongly influenced by the topography of the local bedrock surface. However, the orientation and magnitude of the hydraulic gradient measured within the deeper bedrock system, as measured on four occasions was not consistent over time. This suggests that other factors, such as the adjacent groundwater extraction system on the WCL property, nearby groundwater supply wells that draw groundwater from the Niagara dolomite, barometric fluctuations, or other factors may be influencing the deeper gradient. In addition, because the potentiometric surface in bedrock is relatively flat, chemical diffusion could be a significant factor in the migration of CVOCs in the deeper flow system.

TABLE 1

GROUNDWATER ELEVATION SUMMAY - NAVISTAR

Monitoring Well I.D.	Elevation Top of PVC (feet, MSL)	Elevation Top of Ground (feet MSL)	April 9, 1996		May 21, 1996		June 19, 1996		June 26, 1996		August 13, 1996	
			Depth to Water (feet)	Water Level Elevation (feet, MSL)	Depth to Water (feet)	Water Level Elevation (feet, MSL)	Depth to Water (feet)	Water Level Elevation (feet, MSL)	Depth to Water (feet)	Water Level Elevation (feet, MSL)	Depth to Water (feet)	Water Level Elevation (feet, MSL)
MW-11	832.02	832.29	18.12	813.90	--	--	16.11	815.91	--	--	--	--
MW-12	831.14	831.53	17.89	813.25	--	--	16.14	815.00	17.84	813.30	--	--
MW-13	832.02	832.33	18.43	813.59	--	--	16.48	815.54	--	--	--	--
MW-15	832.33	832.70	18.67	813.66	--	--	16.34	815.99	--	--	--	--
MW-16	832.39	832.93	18.47	813.92	--	--	16.31	816.08	--	--	--	--
MW-19	831.14	831.53	18.62	812.52	--	--	17.81	813.33	17.14	814.00	18.81	812.33
NMW-1	832.33	832.70	17.09	815.24	--	--	15.88	816.45	--	--	--	--
NMW-2	832.39	832.93	15.74	816.65	--	--	17.26	815.13	--	--	--	--
NMW-3	831.14	831.53	18.93	812.21	--	--	7.65	823.49	--	--	--	--
NMW-4	832.02	832.33	13.83	818.19	--	--	12.81	819.21	--	--	--	--
NMW-5	832.25	832.45	15.21	817.04	--	--	15.25	817.00	--	--	--	--
NMW-6	831.85	832.11	14.63	817.22	--	--	14.20	817.65	--	--	--	--
NMW-7	831.76	831.96	15.45	816.31	15.03	816.73	14.55	817.21	--	--	--	--
NMW-8	831.14	831.53	17.96	813.18	16.96	814.18	15.96	815.18	--	--	--	--
NMW-9	832.02	832.33	18.78	813.24	17.61	814.41	16.31	815.71	--	--	--	--
NMW-10	832.33	832.70	-	-	10.03	822.30	10.51	821.82	--	--	--	--
NMW-11	832.39	832.93	-	-	7.87	824.52	8.92	823.47	--	--	--	--
NPZ-1	832.19	832.56	18.60	813.59	18.06	814.13	17.61	814.58	17.11	815.08	18.20	813.99
NPZ-2	831.90	832.33	17.90	814.00	18.27	813.63	17.26	814.64	17.25	814.65	18.10	813.80

NOTES: MSL = Mean Sea Level

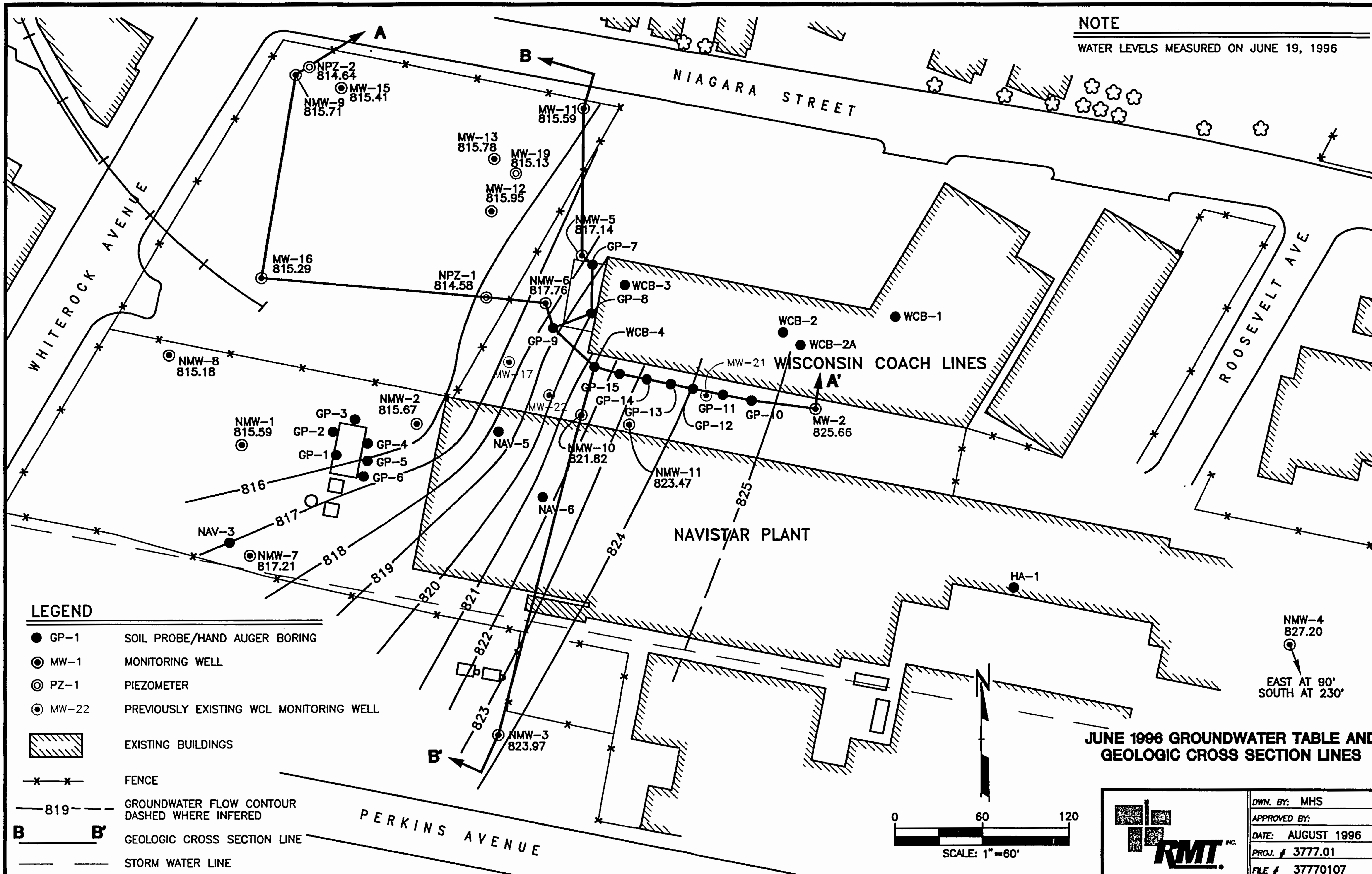

NOTE
WATER LEVELS MEASURED ON JUNE 19, 1996
NIAGARA STREET
WHITEROCK AVENUE
ROOSEVELT AVE.
PERKINS AVENUE
WISCONSIN COACH LINES
NAVISTAR PLANT
A
A'
B
B'
NPZ-2 814.64
MW-15 815.41
NMW-9 815.71
MW-11 815.59
MW-13 815.78
MW-19 815.13
MW-12 815.95
NMW-5 817.14
MW-16 815.29
NPZ-1 814.58
NMW-6 817.76
GP-7
GP-8
GP-9
WCB-3
WCB-4
WCB-2
WCB-2A
WCB-1
MW-21
MW-17
MW-22
NMW-8 815.18
NMW-2 815.67
NMW-1 815.59
GP-1
GP-2
GP-3
GP-4
GP-5
GP-6
NAV-5
NAV-6
NAV-3
NMW-7 817.21
GP-10
GP-11
GP-12
GP-13
GP-14
GP-15
MW-2 825.66
NMW-10 821.82
NMW-11 823.47
HA-1
NMW-4 827.20
EAST AT 90'
SOUTH AT 230'
NMW-3 823.97
816
817
818
819
820
821
822
823
824
825
LEGEND
GP-1 SOIL PROBE/HAND AUGER BORING
MW-1 MONITORING WELL
PZ-1 PIEZOMETER
MW-22 PREVIOUSLY EXISTING WCL MONITORING WELL
EXISTING BUILDINGS
FENCE
819 GROUNDWATER FLOW CONTOUR DASHED WHERE INFERED
B B' GEOLOGIC CROSS SECTION LINE
STORM WATER LINE
N
0 60 120
SCALE: 1"=60'
JUNE 1996 GROUNDWATER TABLE AND GEOLOGIC CROSS SECTION LINES
RMT INC.
DWN. BY: MHS
APPROVED BY:
DATE: AUGUST 1996
PROJ. # 3777.01
FILE # 37770107

FIGURE 7

Vertical gradients between the shallow and deeper aquifer systems were observed to be downwards to the east (at NPZ-1 and MW-19) and upwards at NPZ-2 near the northwestern corner of the site. This shift in the vertical gradient is a result of the natural steep northwestward horizontal gradient in the shallow water table.

2.3 Soil and Groundwater Quality

2.3.1 Soil Quality Data Overview

During the recent phase of investigation, 19 soil samples from 15 geoprobe locations and one hand auger boring were submitted for laboratory analysis of VOCs. The soil analytical data from the recent sampling activities and previous phases of investigation are presented in Tables 2 and 2A, respectively. The general areas of recent sample collection are presented on Figure 2 and include:

- the NITC chemical storage area near the west side of the facility (GP-1 through GP-6);
- the border between the NITC and WCL properties (GP-10 through GP-15);
- the former WCL waste oil UST area (GP-7, GP-8, and GP-9); and
- the former NITC used foundry sand storage area (HA-1).

In summary, it appears that low levels of CVOCs are present in soil materials above the water table on both the NITC and the WCL properties. However, all detected TCE concentrations were too low to account for the TCE impacts observed in groundwater.

TCE was detected in three samples collected from the WCL property and one sample collected on the NITC property. In addition, tetrachloroethene and other CVOCs were detected in several of the soil samples at concentrations below 100 ppb. For the sampling activities performed by NITC during this phase and previous phases of investigation, and on sampling activities performed in 1993 by WCL in cooperation with NITC, all TCE concentrations detected in soil samples were below 100 ppb. TCA was not detected in any of the soil samples collected in this phase of investigation. However, in previous phases of investigation, concentrations of TCA were higher in several soil samples from the NITC property. Details of the recent soil sampling activities are presented in the following paragraphs.

TABLE 2

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION
SOIL QUALITY DATA - SUMMARY OF DETECTED COMPOUNDS
SOIL SAMPLES FROM THE NAVISTAR PROPERTY
MARCH 1, 1996

Compound	NITC CHEMICAL STORAGE AREA								USED SAND AREA
	GP-1	GP-2	GP-3	GP-4	GP-5	GP-5	GP-6	GP-6	HA-1
Sample depth bls.	5-7'	5-7'	3-5'	3-5'	1-3'	5-7'	3-5'	7-9'	2-3'
Sample Number	3	3	2	2	1	3	2	4	
PID	<2	<2	<2	<2	3	<2	3	<2	3
Benzene									180
n-Butylbenzene									62
sec-Butylbenzene									20
tert-Butylbenzene									
2-Chlorotoluene									
Cis-1,2-Dichloroethene									
1,1 Dichloroethane					65				
Ethylbenzene									130
Hexachlorobutadiene									
Isopropylbenezene									30
p-Isopropyltoluene									40
Methylene Chloride	56	50	64	68	60	59		68	
Methyl-tert-butyl-ether									
Naphthalene							60		410
n-Propylbenzene									59
Tetrachloroethene									
Toluene	30					40			310(B)
1,1,1-Trichloroethane									
Trichloroethene					69				
1,2,3-Trichlorobenzene			50						
1,2,4-Trichlorobenzene			50						
1,2,4-Trimethylbenzene									260
1,3,5-Trimethylbenzene									100
Xylenes, Total								30	480

NOTES:

All concentrations reported in ppb.
Blank cells indicate that parameter was not detected.
(B) indicates parameter was also detected in the laboratory sample bank
Samples were analyzed by method 8021 for Wisconsin LUST List VOCs

TA[redacted]A

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION
SOIL QUALITY DATA - SUMMARY OF DETECTED COMPOUNDS
SOIL SAMPLES FROM WISCONSIN COACH LINES PROPERTY

	WCL WASTE OIL AREA			SOUTHERN BORDER OF WCL PROPERTY							WCL HYDRAULIC OIL
Compound	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-12	GP-13	GP-14	GP-15	WCL OIL
Sample depth bls.	11-13'	13-15'	7-9'	5-7'	7-9'	1-3'	5-7'	5-7'	7-9'	5-7'	
Sample Number	6	7	4	3	4	1	3	3	4	3	
PID	<2	5	<2	<2	<2	<2	<2	<2	<2	<2	
Benzene											1900
n-Butylbenzene		120									3700
sec-Butylbenzene		91									2300
tert-Butylbenzene		30									
2-Chlorotoluene		20									
Cis-1,2-Dichloroethene		30									
1,1 Dichloroethane											
Ethylbenzene		20									1600
Hexachlorobutadiene		110(B)									
Isopropylbenezene		40									960
p-Isopropyltoluene											620
Methylene Chloride											810
Methyl-tert-butyl-ether											
Naphthalene				60(B)		60(B)		20(B)			970
n-Propylbenzene		60									2400
Tetrachloroethene		40									590
Toluene						20					5500
1,1,1-Trichloroethane											3800
Trichloroethene		20	53							50	8100
1,2,3-Trichlorobenzene		83(B)									
1,2,4-Trichlorobenzene		70(B)									
1,2,4-Trimethylbenzene		30				20					2900
1,3,5-Trimethylbenzene		30									910
Xylenes, Total		50				50					5300

NOTES:

All concentrations reported in ppb
Blank cells indicate that parameter was not detected
(B) indicates parameter was also detected in the laboratory sample bank
Samples were analyzed by method 8021 for Wisconsin LUST List VOCs

2.3.2 NITC Chemical Storage Area

To determine whether this area could be the source of CVOCs detected in groundwater, eight soil samples were collected from six geoprobe locations (GP-1 through GP-6) around the former TCA storage area near the west end of the NITC property. The borings extended from the ground surface to probe refusal, which varied from 8 to 16 feet deep. Soil materials consisted of 6 to 8 feet of shallow clayey to sandy fill with underlying apparently native clayey sand and gravel. Elevated PID readings (3 ppm) were observed within the upper 3 feet of fill materials in GP-5 and GP-6. One sample was of the shallow fill materials was collected from each boring. In borings GP-5 and GP-6, shallow sample consisted of the interval with elevated PID readings. In addition, a second sample was collected from borings GP-5 and GP-6 to identify vertical trends in concentrations.

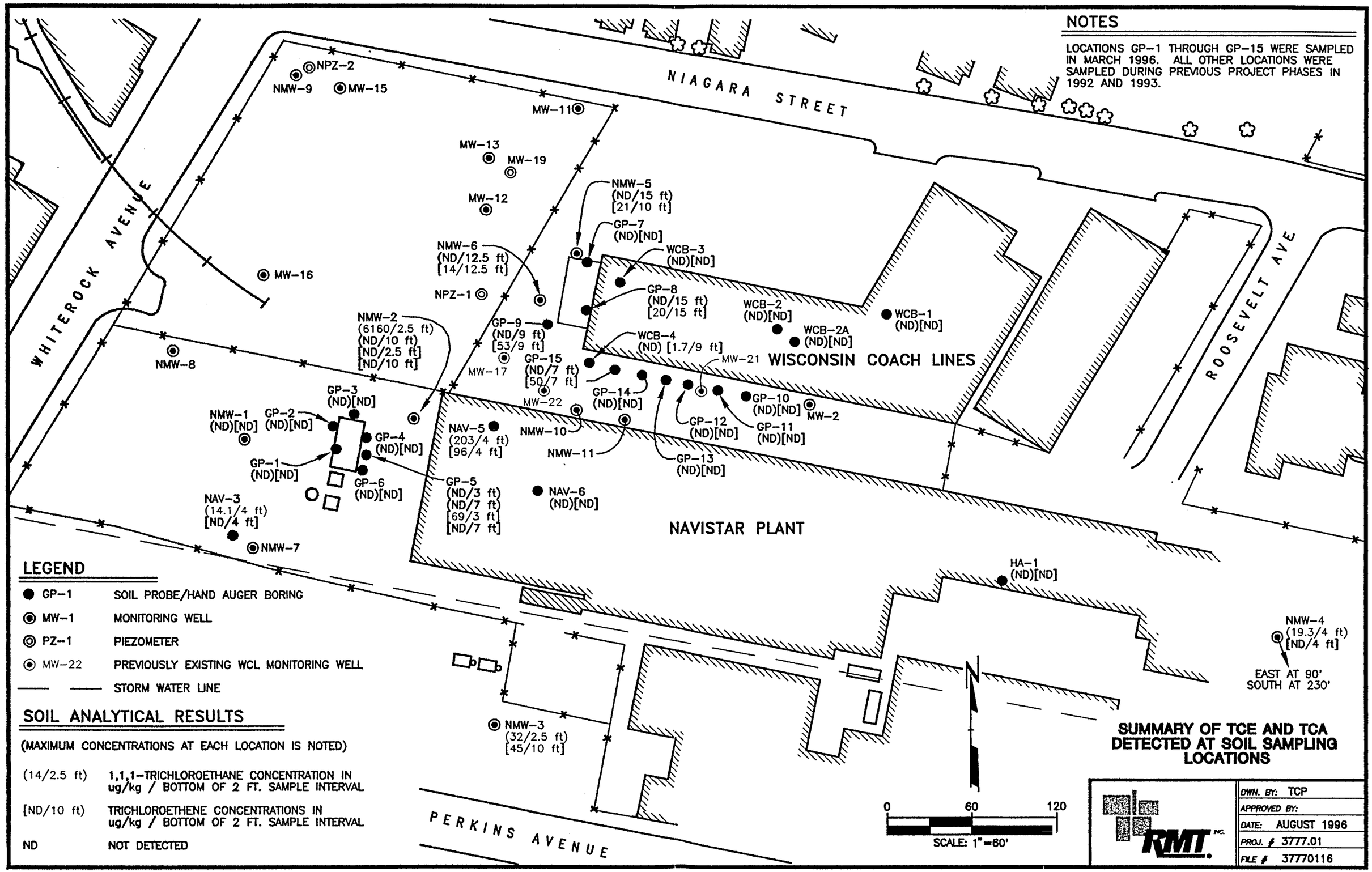
TCE and 1,1 DCA were detected at 69 and 65 ppb, respectively, at 1 to 3 feet deep in GP-5, but were not detected in the sample collected from 5 to 7 feet in the same boring (Figure 8). Low levels of methylene chloride (50 to 68 ppb), trichlorobenzenes (50 ppb), and several petroleum VOCs (naphthalene, toluene, and xylenes at 30 to 60 ppb) were also detected in several samples from this area. However, because methylene chloride is a common laboratory contaminant and trichlorobenzenes and naphthalene were detected in a laboratory blank, the presence of these constituents in the samples is questionable.

2.3.3 WCL Waste Oil UST Area

Soil probe borings GP-7, GP-8, and GP-9 were completed within and adjacent to the former waste oil UST excavation. The majority of impacted soil was apparently excavated and disposed of in the past. As a result, limited samples of the native materials were obtained. Soil from GP-7 did not appear to contain any native materials and only the deepest sample from GP-8, at 13 to 15 feet deep, appeared to be native soils. The upper 7 feet of materials in GP-9 appeared to be clean fill. One sample from each boring was submitted for VOC analysis. TCE at 20 and 53 ppb was detected in samples from 13 to 15 feet in GP-8 and 7 to 9 feet in GP-9, respectively. In addition, tetrachloroethene (40 ppb), cis-1,2-DCE (30 ppb) and 2-chlorotoluene (20 ppb) were detected in the sample from GP-8. The presence of TCE in soil above the water table in GP-9 and other soil samples previously collected at the site confirms that TCE and other CVOCs are present and may have been used in the past at the site.

NOTES

LOCATIONS GP-1 THROUGH GP-15 WERE SAMPLED IN MARCH 1996. ALL OTHER LOCATIONS WERE SAMPLED DURING PREVIOUS PROJECT PHASES IN 1992 AND 1993.



LEGEND

● GP-1	SOIL PROBE/HAND AUGER BORING
◉ MW-1	MONITORING WELL
◎ PZ-1	PIEZOMETER
◉ MW-22	PREVIOUSLY EXISTING WCL MONITORING WELL
—— ——	STORM WATER LINE

SOIL ANALYTICAL RESULTS

(MAXIMUM CONCENTRATIONS AT EACH LOCATION IS NOTED)

(14/2.5 ft)	1,1,1-TRICHLOROETHANE CONCENTRATION IN ug/kg / BOTTOM OF 2 FT. SAMPLE INTERVAL
[ND/10 ft)	TRICHLOROETHENE CONCENTRATIONS IN ug/kg / BOTTOM OF 2 FT. SAMPLE INTERVAL
ND	NOT DETECTED

SUMMARY OF TCE AND TCA DETECTED AT SOIL SAMPLING LOCATIONS

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770116

FIGURE 8

2.3.4 Border Between the NITC and WCL facilities

Soil probe borings GP-10 through GP-15 were installed along the south side of the WCL property. Soil in these borings consisted of approximately 1 foot of surficial gravel fill with up to 3 feet of clay with gravel-sized fill materials. Underlying native materials consisted of silt to gravel-sized materials that appeared to mainly consist of weathered dolomite. One soil sample was collected from each of these borings for laboratory analysis. TCE, at 50 ppb, was detected in the sample from 5 to 7 feet in GP-15, which is located near the former waste oil UST area. No other CVOCs were detected in any of these borings.

2.3.5 NITC Used Sand Area

A hand auger boring was completed within the former used foundry sand storage area near the center of the NITC facility. The boring was completed to approximately 3 feet deep. Materials encountered consisted of foundry sand and soil fill. One sample of the fill materials at the bottom of the boring was submitted for VOC analysis. The sample was found to contain various petroleum-related VOCs, but no CVOCs. Therefore, this area does not appear to be a potential CVOC source area.

2.4 Contaminants in Groundwater

In April and May 1996, groundwater from the eleven NITC monitoring wells and two piezometers was sampled for VOCs. In addition, six WCL monitoring wells and piezometer MW-19 on the west side of the WCL site were sampled for VOCs (Tables 3 and 3A). In this sampling round, only CVOCs were detected; no non-chlorinated VOCs were detected. CVOCs were detected in all of the sampled monitoring wells except MW-2. MW-2, which was installed by WCL, extends only to approximately 15 feet deep, which is above the top of bedrock. In addition, in the shallow groundwater flow system, MW-2 is upgradient of the suspected CVOC source area.

The trends in CVOC concentrations are similar to previous sampling rounds; however, overall concentrations were higher. Greatest concentrations were again detected in monitoring well NMW-6, with decreasing concentrations generally being detected outward from the former waste oil UST area. Concentrations of TCE were greater than all other CVOCs detected.

However, the temporal and spatial trends in the CVOCs concentrations closely followed that of TCE. Consequently, the discussion of groundwater quality presented in the following sections of

TABLE 3A (CONTINUED)

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

		MW-13	MW-12		MW-11	MW-15	MW-16	MW-18	MW-20	MW-23
Parameter	NR 141 Enforcement Standards	10/14/92	10/13/92	12/16/92	10/13/92	10/13/92	10/13/92	10/14/92	10/14/92	12/16/92
Trichloroethene	5	1,100	1,100	680	560	1,100	350	380	630	27
1,1,1-Trichloroethane	200	300	310	J 240	230	420	120	69		
cis-1,2-Dichloroethene	70		1,300	790	280	300	7.7	230		
Trans-1,2-dichloroethene	100	J58								
Chloromethane	NE									
1,1-Dichloroethene	7		140	J 78	67	120	31	22		
1,1-Dichloroethane	850				22	28		14	J14	
Methylene chloride	5	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				290			28		
Naphthalene	40				12					
o-Xylene	620				38					
1,1,2-Trichloroethane	5								150	
GRO	NE	510	1,000	950	1,200	830	220	300	330	
DRO	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRPH	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

NE indicates NR 140 ES is not established for this compound.
NA indicates sample was not analyzed for this parameter.
RMT's VOC analysis were conducted by EPA Method 8260.
Blank cells indicates parameter was 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 3A (CONTINUED)

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION
1992 GROUNDWATER QUALITY DATA - SUMMARY OF DETECTED COMPOUNDS
(concentrations in µg/L)

		MW-17		Dup (MW-17)	MW-22		MW-21		MW-2	MW-6	MW-19
Parameter	NR 141 Enforcement Standards	10/14/92	12/16/92	12/16/92	10/14/92	12/16/92	10/14/92	12/16/92	10/14/92	10/14/92	10/14/92
Trichloroethene	5	5,400	8,600	8,500	2,700	3,500	J42	J 3.8		81	720
1,1,1-Trichloroethane	200	2,000	1,600	1,900	440	J 460				65	120
cis-1,2-Dichloroethene	70							29		490	
Trans-1,2-dichloroethene	100				J55						J16
Chloromethane	NE									B(4.0)37	
1,1-Dichloroethene	7	600	550	640		J 240				20	
1,1-Dichloroethane	850	96	J 89	J 100							J17
Methylene chloride	5	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						110				
Naphthalene	40										
o-Xylene	620										
1,1,2-Trichloroethane	5										
GRO	NE	620	1,800	1,700	340	970	130			250	250
DRO	NE	NA			NA		NA		NA	NA	NA
TRPH	NE	NA			NA		NA		NA	NA	NA

NOTES:

NE indicates NR 140 ES is not established for this compound.
NA indicates sample was not analyzed for this parameter.
RMT's VOC analysis were conducted by EPA Method 8260.
Blank cells indicates parameter was 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 3A

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION
1992 GROUNDWATER QUALITY DATA - SUMMARY OF DETECTED COMPOUNDS
(concentrations in µg/L)

Parameter	NR 141 Enforcement Standards	NMW-1		NMW-2		DUP 1 (NMW-2)	NMW-3		NMW-4		NMW-5		NMW-6	
		10/13/92	12/16/92	10/13/92	12/16/92	10/13/92	10/13/92	12/16/92	10/13/92	12/16/92	10/13/92	12/16/92	10/13/92	12/16/92
Trichloroethene	5	750	980	E110	130	E 110	220	200	22	21	910	250	7900	7900
1,1,1-Trichloroethane	200	560	620	35	19	34	200	60			370	76	2300	1400
cis-1,2-Dichloroethene	70			35	35	34			3.0			290		
Trans-1,2-dichloroethene	100			12	13	12								
Chloromethane	NE					3.1								
1,1-Dichloroethene	7		160	5.2	7.7	5.4	11	J 23			86	J 30	580	540
1,1-Dichloroethane	850		J 11	3.9	J 2.3	3.8					25	J 10	120	
Methylene chloride	5	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			2.5		2.3			4.4					
Benzene	5													
Naphthalene	40													
o-Xylene	620													
1,1,2-Trichloroethane	5													
GRO	NE	530	420				140				1,700	790	4,300	1,800
DRO	NE										4,200	6,400	3,800	4,800
TRPH	NE										2,400	2,400	2,500	2,600

NOTES:

NE indicates NR 140 ES is not established for this compound.
NA indicates sample was not analyzed for this parameter.
RMT's VOC analysis were conducted by EPA Method 8260.
Blank cells indicates parameter was 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 3

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

APRIL 1996 GROUNDWATER QUALITY DATA - SUMMARY OF DETECTED COMPOUNDS

(concentrations in µg/L)

Compound	NR 140 STANDARDS		NMW-1	NMW-2	NMW-3	NMW-4	NMW-5	NMW-6	NMW-7	NMW-8	NMW-9	NMW-10	NMW-11	NPZ-1	NPZ-2	MW-2	MW-11	MW-12	MW-13	MW-15	MW-16	MW-19
	ES	PAL																				
1,1 Dichloroethane	850	85	11	4.4	7.3	<1.0	28	150	6.1	11	20	<50	<50	23	31	<1	29	46	37	23	5.3	2.1
1,1 Dichloroethene	7	0.7	29	5.7	6.7	<1.0	30	260	18	25	21	100	81	42	44	<1	32	71	58	27	9.4	3.6
Cis-1,2-Dichloroethene	70	7	<10	28	11	2	470	<100	<5.0	<5.0	200	71	84	<10	90	<1	180	600	300	140	8.4	4.7
Trans-1,2-Dichloroethene	100	20	<10	6.4	1.2	<1.0	<10	<100	<5.0	<5.0	<10	<50	<50	<10	<20	<1	<20	<25	<20	<10	<5.0	<1.0
1,1,1-Trichloroethane	200	40	300	32	60	<1.0	110	1500	150	230	160	1400	1000	370	250	<1	200	490	420	200	99	12
Trichloroethene	5	0.5	870	250	200	17	590	12000	420	600	1000	7900	4600	1400	1900	<1	1700	2600	2500	1400	540	170
Vinyl chloride	0.2	0.02	<10	<2.0	<1.0	<1.0	94	<100	<5.0	<5.0	<10	<50	<50	<10	<20	<1	<20	<25	<20	<10	<5.0	<1.0

NOTES:

Bolded data represent NR 140 PAL exceedances.

Bolded and underlined data represent NR 140 ES exceedances.

Samples were analyzed by Method 8021 for Wisconsin LUST List VOCs.

this report focus on TCE impacts and migration. Figures 9 through 12 present the TCA and TCE isoconcentration maps prepared from the recent and previous groundwater sampling rounds. Elevated concentrations of TCE were detected in all three piezometers. In addition, the concentration of TCE in piezometer NPZ-2 (1900 ppb), located at the northwestern corner of the site, was greater than concentrations measured in adjacent shallow groundwater monitoring wells NMW-9 (1000 ppb) and MW-15 (1400 ppb). This suggests that flow through the bedrock is significant and possibly a dominant mechanism for CVOC migration.

Although the hydraulic gradient observed in the piezometers appears to be somewhat variable and relatively flat, the bedrock aquifer system appears to be a significant mechanism for CVOC migration. It is well documented that free-phased TCE and other CVOCs, being dense non-aqueous phase liquids (DNAPLs), will migrate vertically and laterally by gravity, rather than being driven only by hydraulic gradients. Although the areal extent of groundwater impacted by TCE cannot be completely explained by separate phase migration, the combination of density gradients, and the influence of a distinct deeper bedrock groundwater flow system could explain the observed distribution of CVOCs.

2.5 WCL Building Hydraulic Oil Line Sampling

Interstate Pump & Tank Company (IP&T) is the current occupant of the WCL building. On August 23, 1996, Michael Madeson of IP&T, gave permission to RMT and observed the sampling of standing oil within an out-of-service hydraulic line located indoors on the west side of the WCL building. The pipe was originally suspected by RMT to be a fill pipe for the former waste oil UST. However, upon further inspection, it was concluded by RMT and IP&T that the pipe is an oil line for the former hydraulic lifts at the west side of the WCL building.

Subsequently, IP&T removed approximately a 2-foot-by-6-foot section of concrete floor around the oil line in order to confirm that the pipe is an hydraulic oil line and to determine whether an underground oil reservoir remains. After IP&T removed the concrete and exposed a portion of the oil line, RMT examined and field-screened the soil materials adjacent to the pipe. In addition, two samples of these soil materials were collected for VOC analysis. No PID readings or solvent-like odors were observed in association with the soil materials. Soil materials beneath the removed portion of the concrete floor consisted of sand and gravel fill. No underground hydraulic oil tank was identified. Based on observations during the soil sampling, it appears that an aboveground

oil reservoir adjacent to the pipe was historically used in association with the former hydraulic lift system.

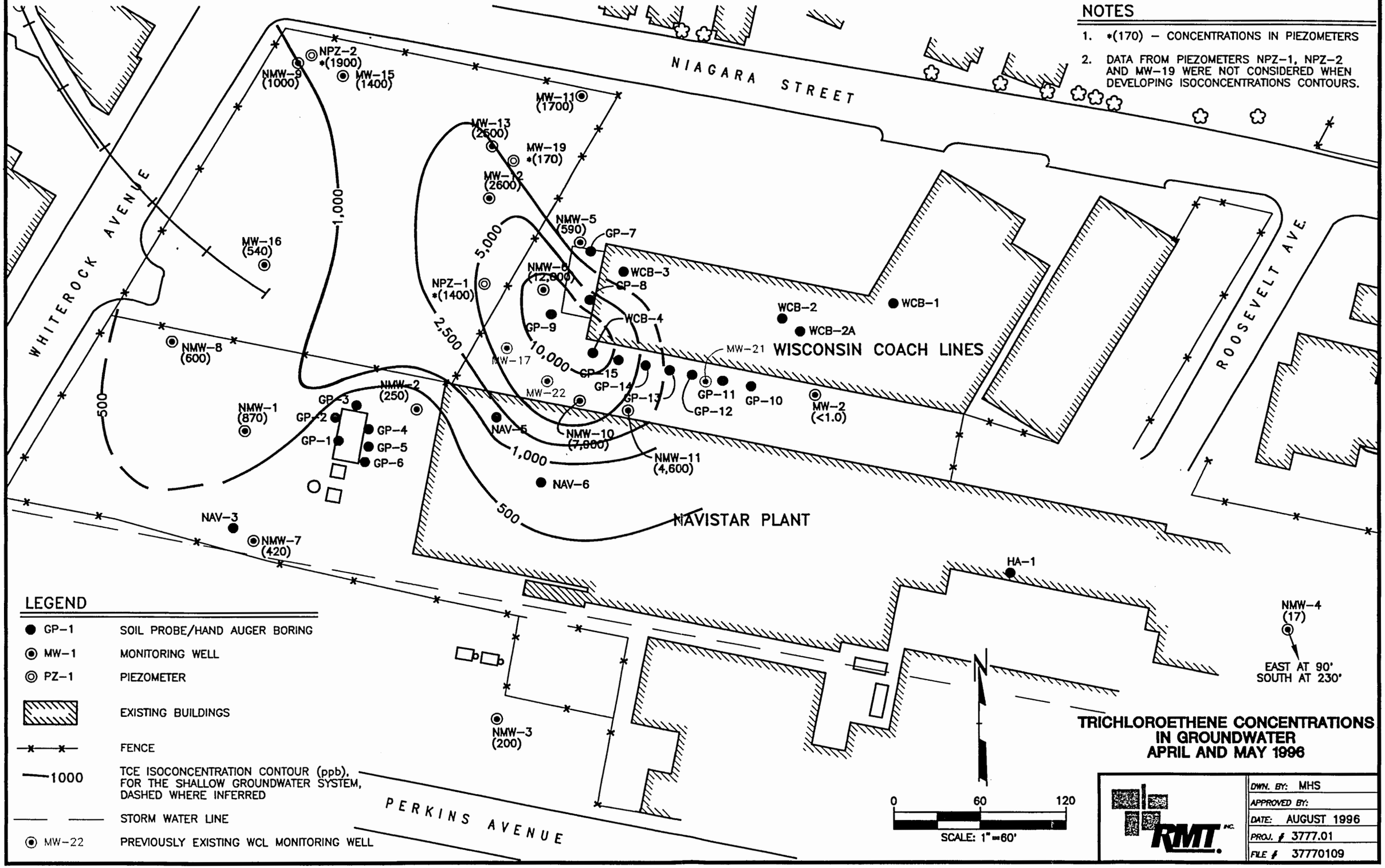

NOTES
1. *(170) – CONCENTRATIONS IN PIEZOMETERS
2. DATA FROM PIEZOMETERS NPZ-1, NPZ-2 AND MW-19 WERE NOT CONSIDERED WHEN DEVELOPING ISOCONCENTRATIONS CONTOURS.
NIAGARA STREET
WHITEROCK AVENUE
ROOSEVELT AVE.
WISCONSIN COACH LINES
NAVISTAR PLANT
PERKINS AVENUE
NPZ-2 *(1900)
NMW-9 (1000)
MW-15 (1400)
MW-11 (1700)
MW-13 (2600)
MW-19 *(170)
MW-12 (2600)
MW-16 (540)
NMW-5 (590)
GP-7
NMW-6 (12,000)
NPZ-1 *(1400)
WCB-3
GP-8
WCB-4
GP-9
WCB-2
WCB-1
WCB-2A
MW-21
NMW-8 (600)
MW-17
GP-15
GP-14
GP-13
MW-22
GP-11
GP-12
GP-10
MW-2 (<1.0)
NMW-2 (250)
GP-3
NMW-1 (870)
GP-2
GP-1
GP-4
GP-5
GP-6
NAV-5
NMW-10 (7,900)
NMW-11 (4,600)
NAV-6
NAV-3
NMW-7 (420)
HA-1
NMW-4 (17)
EAST AT 90'
SOUTH AT 230'
NMW-3 (200)
1,000
5,000
2,500
10,000
500
1,000
500
LEGEND
GP-1 SOIL PROBE/HAND AUGER BORING
MW-1 MONITORING WELL
PZ-1 PIEZOMETER
EXISTING BUILDINGS
FENCE
1000 TCE ISOCONCENTRATION CONTOUR (ppb), FOR THE SHALLOW GROUNDWATER SYSTEM, DASHED WHERE INFERRED
STORM WATER LINE
MW-22 PREVIOUSLY EXISTING WCL MONITORING WELL
0 60 120
SCALE: 1"=60'
TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER APRIL AND MAY 1996
RMT INC.
DWN. BY: MHS
APPROVED BY:
DATE: AUGUST 1996
PROJ. # 3777.01
FILE # 37770109

FIGURE 12

NOTE

CONCENTRATIONS PRESENTED IN ppb

NIAGARA STREET

WHITEROCK AVENUE

ROOSEVELT AVE

PERKINS AVENUE

WISCONSIN COACH LINES

NAVISTAR PLANT

MW-18 (380)
NPZ-2
NMW-9
MW-15 (1100)
MW-11 (560)
MW-20 (630)
MW-13 (1100)
MW-19
MW-6 (81)
MW-12 (1100)
NMW-5 (910)
GP-7
MW-16 (350)
NMW-6 (7900)
NPZ-1
WCB-3
GP-8
WCB-2
WCB-1
WCB-2A
GP-9
WCB-4
NMW-8
MW-17 (5400)
MW-22 (2700)
MW-21
GP-15
GP-14
GP-13
GP-11 (42J)
GP-10
MW-2 (ND)
GP-12
NMW-1 (750)
GP-3
NMW-2 (110)
GP-2
GP-4
GP-1
GP-5
GP-6
NAV-5
NMW-10
NMW-11
NAV-6
NAV-3
NMW-7
HA-1
NMW-4 (22)
EAST AT 90'
SOUTH AT 230'
NMW-3 (220)

500
1000
5000

LEGEND

- GP-1 — SOIL PROBE/HAND AUGER BORING
- MW-1 — MONITORING WELL
- PZ-1 — PIEZOMETER
- MW-22 — PREVIOUSLY EXISTING WCL MONITORING WELL
- EXISTING BUILDINGS
- FENCE
- STORM WATER LINE
- 1000 — TCE ISOCONCENTRATION CONTOUR (ppb), FOR THE SHALLOW GROUNDWATER SYSTEM, DASHED WHERE INFERRED

0 60 120

SCALE: 1"=60'

TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER OCTOBER 1992

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770118

FIGURE 11

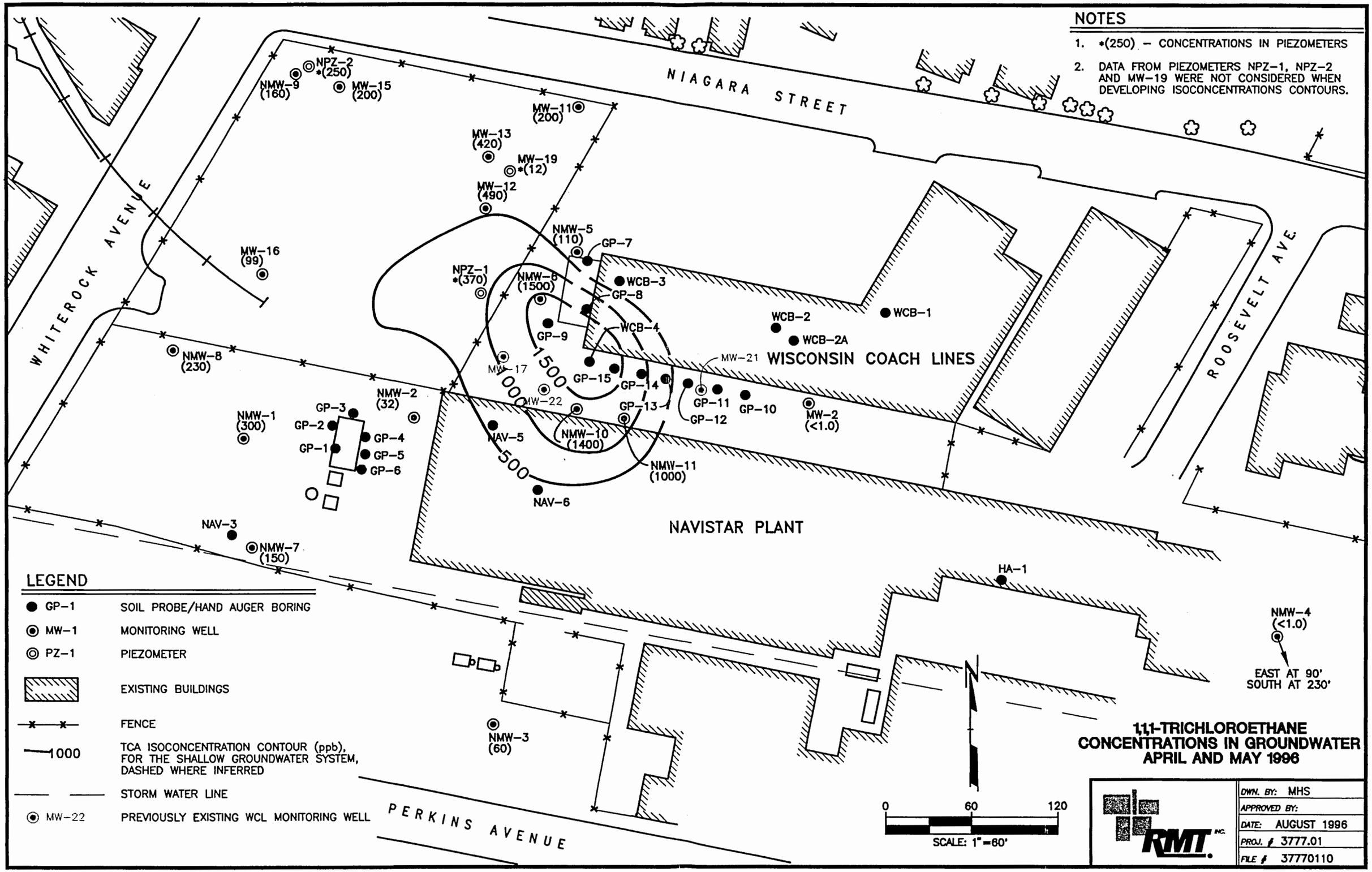

NOTES
1. *(250) – CONCENTRATIONS IN PIEZOMETERS
2. DATA FROM PIEZOMETERS NPZ–1, NPZ–2 AND MW–19 WERE NOT CONSIDERED WHEN DEVELOPING ISOCONCENTRATIONS CONTOURS.
NIAGARA STREET
WHITEROCK AVENUE
ROOSEVELT AVE.
PERKINS AVENUE
WISCONSIN COACH LINES
NAVISTAR PLANT
NPZ–2 *(250)
NMW–9 (160)
MW–15 (200)
MW–11 (200)
MW–13 (420)
MW–19 *(12)
MW–12 (490)
MW–16 (99)
NMW–5 (110)
GP–7
NPZ–1 *(370)
NMW–6 (1500)
WCB–3
GP–8
WCB–4
GP–9
WCB–2
WCB–1
WCB–2A
MW–21
NMW–8 (230)
MW–17
1500
1000
500
GP–15
GP–14
GP–13
MW–22
NMW–2 (32)
NMW–1 (300)
GP–3
GP–2
GP–1
GP–4
GP–5
GP–6
NAV–5
NMW–10 (1400)
NMW–11 (1000)
NAV–6
GP–11
GP–12
GP–10
MW–2 (<1.0)
NAV–3
NMW–7 (150)
HA–1
NMW–4 (<1.0)
EAST AT 90'
SOUTH AT 230'
NMW–3 (60)
LEGEND
GP–1 SOIL PROBE/HAND AUGER BORING
MW–1 MONITORING WELL
PZ–1 PIEZOMETER
EXISTING BUILDINGS
FENCE
1000 TCA ISOCONCENTRATION CONTOUR (ppb), FOR THE SHALLOW GROUNDWATER SYSTEM, DASHED WHERE INFERRED
STORM WATER LINE
MW–22 PREVIOUSLY EXISTING WCL MONITORING WELL
0 60 120
SCALE: 1"=60'
1,1,1-TRICHLOROETHANE CONCENTRATIONS IN GROUNDWATER APRIL AND MAY 1996
RMT INC.
DWN. BY: MHS
APPROVED BY:
DATE: AUGUST 1996
PROJ. # 3777.01
FILE # 37770110

FIGURE 10

NOTE

CONCENTRATIONS PRESENTED IN ppb

MW-18 (69)

NIAGARA STREET

NPZ-2

NMW-9

MW-15 (420)

MW-11 (230)

MW-13 (300)

MW-19

MW-20 (ND)

MW-12 (310)

MW-6 (65)

NMW-5 (370)

GP-7

1000

MW-16 (120)

NPZ-1

NMW-6 (2300)

WCB-3

GP-8

2000

WCB-2

WCB-1

WCB-4

WCB-2A

GP-9

MW-21 (ND)

WISCONSIN COACH LINES

WHITEROCK AVENUE

500

NMW-8

MW-17 (2000)

MW-22 (440)

GP-15

GP-14

GP-13

GP-11

GP-12

GP-10

MW-2 (ND)

ROOSEVELT AVE.

NMW-2 (35)

GP-3

NMW-1 (560)

GP-2

GP-4

GP-1

GP-5

GP-6

NAV-5

NMW-10

NMW-11

NAV-6

NAV-3

NMW-7

NAVISTAR PLANT

HA-1

NMW-4 (ND)

EAST AT 90'
SOUTH AT 230'

NMW-3 (200)

PERKINS AVENUE

LEGEND

GP-1	SOIL PROBE/HAND AUGER BORING
MW-1	MONITORING WELL
PZ-1	PIEZOMETER
MW-22	PREVIOUSLY EXISTING WCL MONITORING WELL
	EXISTING BUILDINGS
	FENCE
	STORM WATER LINE
1000	TCA ISOCONCENTRATION CONTOUR (ppb), FOR THE SHALLOW GROUNDWATER SYSTEM, DASHED WHERE INFERRED

0 60 120

SCALE: 1"=60'

1,1,1-TRICHLOROETHANE CONCENTRATIONS IN GROUNDWATER OCTOBER 1992

RMT INC.

DWN. BY:	TCP
APPROVED BY:	
DATE:	AUGUST 1996
PROJ. #	3777.01
FILE #	37770117

FIGURE 9

Section 3
FINDINGS AND CONCLUSIONS

3.1 Local Geology

Subsurface conditions encountered during this phase of investigation were generally consistent with previous findings. Granular fill and apparently native unconsolidated materials overlie the Niagara dolomite that is encountered at depths from approximately 12 to 15 feet below ground surface. The unconsolidated materials consist of a shallow silty to clayey unit with underlying relatively permeable silty sand and gravel. The unconsolidated materials generally become coarser with depth and appear to be composed of primarily weathered dolomite fragments.

The bedrock surface generally slopes downward to the west and northwest, toward the Fox River. The slope of the bedrock is gentle across the WCL property and the majority of the NITC property; however, the slope abruptly steepens at the northwestern corner of the NITC property. The deepening of the bedrock surface at the northwestern corner of the site is likely associated with historic erosion from the Fox River.

A small bedrock knob or mound that was previously identified in the vicinity of the former WCL USTs appears to extend to the southeast, toward NMW-10 and NMW-11.

Continuous bedrock cores were retained when installing piezometers NPZ-1 and NPZ-2. Examination of the cores indicated that frequent thin horizontal and occasional vertical fractures/partings exist within the dolomite. Although no large solution features were observed (e.g., solution cavities, fissures, weathered zones), the thin fractures/partings were apparently extensive and continuous enough to produce groundwater.

3.2 Local Hydrogeology

Consistent with previous measurements, the shallow groundwater table generally slopes to the west-northwest, toward the Fox River. The groundwater surface is located directly above the bedrock surface and closely follows the bedrock contour. The water table slopes more northwesterly at the southwestern corner of the NITC facility. It appears that a change in the direction of the shallow groundwater gradient in the southwestern corner of the site is caused by localized infiltration of surface water from a brick-lined, large diameter storm water line.

The potentiometric surface measured in piezometers NPZ-1, NPZ-2, and MW-19 was relatively flat and distinct from the shallow water table. Although the shallow and deeper groundwater flow systems are hydraulically connected (as evidenced by the presence of CVOCs in both systems), the factors controlling flow within them may be different. Groundwater flow within the shallow system appears to be strongly influenced by the topography of the local bedrock surface. The orientation of the hydraulic gradient measured within the deeper bedrock system on three occasions was not consistent. This suggests that other factors, such as the nearby groundwater extraction system on the WCL property or other factors may be influencing the deeper gradient. Because the potentiometric surface is relatively flat, chemical dispersion is expected to play a relatively large role in the migration of CVOCs in the deeper flow system.

Vertical gradients between the shallow and deeper aquifer systems were observed to be downwards to the east (near NPZ-1 and MW-19) and upwards at NPZ-2 near the northwestern corner of the site. The change in direction of the vertical gradient at the northwest area of the site is a result of the steep gradient in the shallow water table.

3.3 Contaminants in Soil

3.3.1 NITC Chemical Storage Area

TCE and 1,1-DCA were detected at 69 and 65 ppb, respectively at 1 to 3 feet deep in GP-5, but were not detected in the sample collected from 5 to 7 feet in the same boring. Low levels of methylene chloride, trichlorobenzenes, and several petroleum VOCs were also detected in several samples from this area. However, because methylene chloride is a common laboratory contaminant and trichlorobenzenes and naphthalene were detected in a laboratory blank, the presence of these constituents in the samples is questionable.

3.3.2 WCL Waste Oil UST Area

Soil probe borings GP-7, GP-8, and GP-9 were completed within and adjacent to the former waste oil UST excavation. However, because the majority of impacted soils were apparently excavated and disposed of in the past, limited samples of apparently native soil materials were observed. Soil from GP-7 did not appear to contain any native materials and only the bottom sample from GP-8, at 13 to 15 feet deep appeared to be native soils. The upper 7 feet of materials in GP-9 appeared to be clean fill.

One sample from each boring was submitted for VOC analysis. TCE at 20 and 53 ppb was detected in samples from 13 to 15 feet in GP-8 and 7 to 9 feet in GP-9, respectively. In addition, tetrachloroethene (40 ppb), cis-1,2-DCE (30 ppb) and 2-chlorotoluene (20 ppb) were detected in the sample from GP-8. Although the detected concentrations of CVOCs in these samples were not great enough to produce the magnitude of groundwater contamination observed at the site, the presence of TCE in soils more than 5 feet above the local water table at GP-9 and TCE and other CVOCs in soil samples previously collected at the WCL site from above the water table indicates that CVOCs are present and were likely used in the past at the WCL site.

3.3.3 Border Between the NITC and WCL facilities

Soil probe borings GP-10 through GP-15 were installed along the south side of the WCL property. One soil sample was collected from each of these borings for laboratory analysis. TCE, at 50 ppb, was detected in the sample from 5 to 7 feet in GP-15, which is located near the former waste oil UST area. No other CVOCs were detected in any of these borings.

3.3.4 NITC Used Sand Area

The soil sample from hand auger boring HA-1, located in the used sand area within the plant facility contained various non-chlorinated VOCs, but no CVOCs. Therefore, this area does not appear to be a potential CVOC source area.

3.4 Contaminants in Groundwater

The trends in CVOC concentrations are similar to previous sampling rounds; however, overall concentrations were higher. Greatest concentrations were again detected in monitoring well NMW-6, with decreasing concentrations generally being detected outward from the former waste oil UST area. The concentrations of TCE in monitoring wells NMW-3 and NMW-4 are the only wells monitored in which TCE concentrations have decreased since 1992.

CVOCs were detected in all of the sampled monitoring wells except MW-2. Monitoring well MW-2, which was installed by WCL, extends only to approximately 15 feet deep, which is above the top of bedrock. In addition, MW-2 is upgradient of the suspected CVOC source area.

If one CVOC source area exists, be it on NITC or the WCL property, the fact that TCE concentrations are decreasing in the two wells to the south and increasing in all other wells indicates that the conditions causing the TCE in NMW-3 and NMW-4 are no longer present or are diminished. The fact that concentrations continue to increase in the vicinity of the former waste oil UST indicates that an active source of TCE is still present in the area of the former UST. If the TCE plume had migrated onto the WCL site from the NITC property, one would expect one of the following scenarios to occur:

- a TCE plume with increasing concentrations toward NITC should be present, or
- if the current distribution of TCE was caused by the migration of the center of the plume from the NITC site, concentrations in upgradient and cross gradient monitoring wells (i.e., wells to the southeast and southwest of the former waste oil UST) should be decreasing over time. The recent and previously obtained groundwater quality data confirm that greatest concentrations of TCE are present in groundwater on the WCL site near the former waste oil UST. The 1993 sampling round included data from WCL monitoring wells MW-17, MW-21, and MW-22, which were subsequently abandoned by WCL. When data from these former wells are considered along with newly-installed monitoring wells NMW-10 and NMW-11, considerable data coverage is present between the former waste oil UST and the NITC facility. The newly-installed groundwater monitoring wells and observed trends in concentrations help to fill data gaps that were previously present.

The hydraulic gradient observed in the piezometers appears to be somewhat variable and relatively flat; however, the bedrock aquifer system appears to be a significant mechanism for CVOC migration. It is well documented that free phase TCE and other CVOCs, being dense non-aqueous phase liquids (DNAPLs), will migrate vertically and laterally by gravity, rather than being driven only by hydraulic gradients. Although the areal extent of groundwater impacted by TCE cannot be completely explained by separate phase migration, the combination of density gradients, relatively flat and variable hydraulic gradients, chemical diffusion, and hydraulic dispersion may explain the observed widespread distribution of CVOCs.

Elevated concentrations of TCE were detected in all three piezometers. In addition, the concentration of TCE in piezometer NPZ-2 (1900 ppb), located at the northwestern corner of the site, was greater than concentrations measured in adjacent shallow groundwater monitoring wells NMW-9 (1000 ppb) and MW-15 (1400 ppb). This suggests that migration through the bedrock is significant and possibly a dominant mechanism for widespread CVOC migration.

3.5 Contaminants in the WCL Building Hydraulic Oil Line

The hydraulic oil line sample was analyzed for VOCs using SW 846 Method 8021. As recommended in SW 846, this sample, being an oil matrix, was pretreated with tetraethylene glycol dimethyl ether by the laboratory and directly injected into the GC column.

In addition to various petroleum-related compounds, TCE, TCA, tetrachloroethene, and methylene chloride were detected in this sample at 8100, 3800, 590, and 810 ppb, respectively. No VOCs were detected in the two soil samples from adjacent to the hydraulic oil line. Analytical results for these samples are presented in Appendix E.

3.6 Summary of Source Area Evidence

3.6.1 Evidence to Support WCL as the Source of CVOCs in Groundwater

- High levels of TCE (8100 ppb), TCA (3800 ppb), and tecrachloroethene (590 ppb) were detected in the hydraulic oil sample on the WCL site. These sample results indicate that CVOCS were in fact used at the WCL facility. It is not suspected that this oil is a significant source of the CVOCs. Rather, it is suspected that chemical degreasing solvents were used by WCL and that the solvents contaminated the hydraulic oil lines. The solvents could have spilled or dripped onto the hydraulic lift cylinders during vehicle repair work. The CVOCs could then migrate through the hydraulic seals and into the hydraulic oil lines. In addition to the garage floor, it is possible that CVOC-containing chemicals were used, stored, and/or disposed at other areas on the WCL property, such as the former waste oil UST or surrounding area.

- TCE and TCA concentrations in the former waste oil UST area are consistently the highest within the area of investigation and continue to increase over time. These trends indicate that a continuing source (most likely below the water table in isolated bedrock fractures) is present at the former UST area.

- Highest concentrations of CVOCs have always been detected at the former waste oil UST area.

- Identification of low levels of TCE and other CVOCs including tetrachloroethene in unsaturated soils indicates the presence of potential on-site sources and historical usage by WCL.

- As documented in the former WCL waste disposal manifests, the mineral spirits-based solvent wash solution (i.e., Safety Kleen) is listed as a D039 (tetrachloroethene) listed hazardous waste.

- Although a review of available purchase receipts for the former WCL facility was performed by the WDNR to identify any documented purchases of bulk TCE, the search apparently did not include a review of purchases which may include

TCE-containing constituents. Cleaning materials, such as brake cleaning solutions, carburetor cleaning fluids, and other cleaning compounds used in vehicle maintenance, typically consisted of TCE, TCA, tetrachloroethene, and other CVOCs during the years WCL actively operated the facility.

- The distribution of CVOCs across most of the NITC property and on the properties to the northeast of WCL (apparently upgradient and side gradient of the area with highest concentrations) can be explained by the fact that the deeper bedrock groundwater flow system is distinct from the shallow flow system. Various rounds of groundwater level measurements indicate that the hydraulic gradient within bedrock is relatively flat and variable. Other factors, such as preferential groundwater flow along fracture trends, chemical dispersion, influence from the nearby existing and historical groundwater extraction wells, and other factors could also affect local groundwater gradients and the CVOC distribution within bedrock.

- The maximum potential ratio of TCA to TCE in the solvent formerly used by NITC was 1000:1. Although TCA can naturally degrade more rapidly than TCE in subsurface environments, the concentrations of TCE relative to TCA in soil and groundwater are too great to be reasonably explained by natural degradation of a TCA release.

- The concentrations of TCE detected in soil materials on the NITC site are too low to account for the levels detected in groundwater at the WCL site. A high concentration of TCA was detected in a shallow soil sample from NMW-2, located near the former TCA storage area. However, no TCE was detected at this location and groundwater from NMW-2 has always been relatively clean. Although a TCA release had apparently occurred in this area, there is no TCE associated with the release and the effects of this release and any other releases in this area on groundwater are insignificant, relative to concentrations measured to the northeast.

3.6.2 Evidence to Support NITC as the Source of CVOCs in Groundwater

- The documented evidence of TCA usage and a limited release in the former TCA storage area.

- The detection of low levels of CVOCs in soil materials on the NITC site, apparently associated with local fill materials.

- The distribution of CVOCs in groundwater from a WCL source area cannot be explained by the shallow groundwater flow gradient.

Section 4
RECOMMENDATIONS

Meet with the WDNR to discuss the results from the NITC investigations and request re-evaluating the existing no further action determination for WCL. Further, NITC should request that additional soil and groundwater quality data be obtained by WCL from additional potential source areas on the WCL site. A considerable effort has been performed by NITC to identify a CVOC source on their property. Although low levels of CVOCs have been detected within fill materials on the NITC site and on the WCL site, similar ranges in TCE concentrations were observed in soil samples from both the NITC and WCL sites. The new information obtained from this recent phase of investigation indicates that WCL is wholly, or at a minimum, partially responsible for the groundwater CVOC impacts and that some or all of any future efforts to investigate and remediate the CVOC impacts be undertaken by WCL. Future meetings with the WDNR should include discussion of the apparent CVOC source area(s) at the WCL site and details of the WDNR's review of past chemical usage by WCL. Remedial measures to address the apparent CVOC source at the WCL site should consider the depth of groundwater impacts and any potential past and ongoing sources of CVOCs. Follow-up remedial actions may include active source area groundwater control and downgradient monitoring.

APPENDIX A

WELL LOGS FOR LOCAL WATER SUPPLY WELLS

Database of Domestic Groundwater Supply Wells In Waukesha
From the City of Waukesha Water Utility
Summary of Potentially Active Wells

WELLCAND.XLS — CANDIDATES FOR WELL PREMISES
PREPARED AUGUST 27, 1990
REVISED TO EXCEL DATABASE JUNE 8, 1993

1 = YES

ENTRY #	TAX KEY NO.	Well Number on Figure 3 of RMT Report	HOUSE #	STREET	DATE BUILT	SERVICE INSTALLED	ACCOUNT NUMBER	SEWRPC PAGE NO.	WELL IN USE*	
1603	1004.972		2205	PATRICIA LANE	1960		1-12-572.000	12	1	
1604	1004.995		2209	PATRICIA LANE	1959		1-12-573.000	12	1	
1605	1005.975		2213	PATRICIA LANE	1959			12	1	
1606	1005.976		2217	PATRICIA LANE	1959		1-12-575.000	12	1	
1607	1005.995		2212	PATRICIA LANE	1900		1-12-601.000	12	1	
1608	1006.181		2122	NORTHVIEW ROAD	1950		1-16-12.000	13	1	
1609	1006.182		2112	NORTHVIEW ROAD	1953		1-16-11.000	13	1	
1610	1006.183		2707	SILVERNAIL ROAD	1940			29	1	
1611	1006.980		2401	SILVERNAIL ROAD	1900			29	1	
1612	1007.987		2821	SILVERNAIL ROAD	1900			47	1	
1613	1007.991		822	MAPLEWAY NORTH	1959			47	1	
1614	1127.988		301	MAPLEWAY SOUTH	1960			47	1	
1615	1130.994.004	1	1020	MORELAND BLVD	1900			48	1	
1616	1130.994.005		2000	SUMMIT AVE.	1924			94	1	
1617	996.980		1929	NORTHVIEW ROAD	1900		1-16-609.000	105	1	
1618	1130.994.006		2016	SUMMIT AVE.	1900			106	1	
1619	1130.996		2027	SUMMIT AVE.	1954		1-18-173.000	124	1	
1620	1299.984		2103	SUMMIT AVE.	1950		1-18-171.000	124	1	
1621	1299.990		2130	SUMMIT AVE.	1930			125	1	
1622	1299.993		621	GRANDVIEW BLVD.	1932			136	1	
1623	1304.066	4	1603	DELAFIELD STREET	1900			151	1	
1624	1304.998	5	1501	DELAFIELD STREET	1951			151	1	
	1304.993	3	2103	ALLEN LANE	1900			235	1	
	1304.995		2105	DAVIDSON ROAD	1940		3-9-509.000	235	1	
	1330.989		1221	GRAND AVE.	1941		2-22-105.000	544	1	
1628	1330.991		329	DOUGLASS AVE.	1948			550	1	
1629	1336.933		1328	HICKORY DRIVE	1955		2-22-87.000	553	1	
1630	1336.940		1320	HICKORY DRIVE	1960			553	1	
1631	1342.972		130	ELLSWORTH DRIVE	1913			553	1	
1632	1342.974		140	SUNSET DRIVE	1948			553	1	
1633	1342.976		116	SUNSET DRIVE	1940		2-22-200.000	553	1	
1634	1342.998		1506	RACINE AVE.	1900			569	1	
1635	1342.992		1541	RACINE AVE.	1934			631	1	
1636	1002.981		W222S316	RACINE AVE.	1900			642	1	
1637	973.991.001		1910	GUTHRIE ROAD	1900			644	1	
1638	973.992		1813	OAKDALE DRIVE				704	1	
1639	994.976		1211	SUNSET DRIVE	1957			712	1	
1640	1003.941		25042	NORTHVIEW ROAD		08-Mar-62	4-1-50.000		1	
1641	1003.989		2421	SILVERNAIL ROAD	1955			2	1	
1642	1004.120		2000	DAVIDSON ROAD	1883			10	1	
1643	1299.967		1801	GATEWAY DRIVE	1981		3-9-649.000	11	1	
1644	1299.988		1800	GATEWAY DRIVE	1980		3-9-692.000	11	1	
1645	1299.989		W228 S70	HWY A	1971			12	1	
1646	1299.991.001		2302	MORELAND BLVD.	1970			12	1	
1647	1299.992		2208	MORELAND BLVD.	1970		3-9-229.300	13	1	
1648	1299.994.001	6	1337	PEARL STREET	1949			18	1	
1649	1302.004		1700	RACINE AVE.	1900			39	1	
1650	1299.026		1910	GUTHRIE ROAD	1950				1	
1651	1304.081	7	1427	PEARL STREET			3-16-181.000	4	1	
1652	1304.082	8	1413	PEARL STREET				4	1	
1653	1304.083		W277S208	COMMERCE			3-16-445.000	4	1	
1654	1304.084	9	1344	ELLIS STREET				5	1	
1655	1304.085	10	1322	ELLIS STREET		08-Nov-67	3-16-15.000	5	1	
1656	1304.086		1700	RACINE				10	1	
1657	1304.088		1305	LOOKOUT DRIVE		15-Aug-39				
1658	1304.989		1313	LOOKOUT DRIVE		15-Aug-39				
	1304.990		1321	LOOKOUT DRIVE		15-Aug-39				
	1304.069		1324	LOOKOUT DRIVE		15-Aug-39				
	1304.999		1325	LOOKOUT DRIVE		15-Aug-39				
1662	1304.065		1326	LOOKOUT DRIVE		15-Aug-39				
1663	1304.998		1404	LOOKOUT DRIVE		15-Aug-39				
1664	1299.985.001		1405	LOOKOUT DRIVE		15-Aug-39				
1665	1335.995		1411	LOOKOUT DRIVE		15-Aug-39				
1666	1336.930		1414	LOOKOUT DRIVE		15-Aug-39				
1667	1343.985		1500	LOOKOUT DRIVE		15-Aug-39				

Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

P. O. BOX 1026
WAUKESHA, WI 53187-1026

BRIAN S. BARRETT, P.E. — General Manager

June 11, 1993

1302 E Main St

Mr. Rich Sternkopf
335 W. Evert
P.O. Box 2046
Room A539
Milwaukee, Wi 53201

Main St.
Slater Motors

Dear Rich:

Enclosed is the map with the properties with private wells marked with blue dots. The area highlighted in yellow is the city boundary. Arrows indicate the city side of boundary. The blue dots are numbered and the following are the addresses:

#2 on Fig. 3

1. 1415 E. Main Street
2. 1350 Ellis Street
3. 1421 Pearl Street (Green Engineering)
4. 405 Commerece Street (Wildeck)
5. 1337 Pearl Street

Pink circle indicates 1 mile of radius. If you have any further questions, please give me a call.

Sincerely.

WAUKESHA WATER UTILITY

Jim Price
Meter Dept. Supervisor

mka

Enclosure

(3357)

Located at 115 Delafield Street – Telephone (414) 521-5272 • Fax (414) 521-5265

11

MAY 2 1980

State of Wisconsin
Department of Natural Resources
Box 7921
Madison, Wisconsin 53707

NOTE:
White Copy – Division's Copy
Green Copy – Driller's Copy
Yellow Copy – Owner's Copy

WELL CONSTRUCTOR'S REPORT

Form 3300-15 Rev. 12-76

1. COUNTY: Waukesha

CHECK (✓) ONE: ☒ Town ☐ Village ☐ City

Name: Pewaukee

2. LOCATION: ¼ Section: SE, SE, NW ✓ | Section: 36 | Township: 7N | Range: 19E

OR – Grid or Street No.: W227 S621 | Street Name: Gateway Dr.

AND – If available subdivision name, lot & block No.:

3. NAME ☐ OWNER ☒ AGENT AT TIME OF DRILLING CHECK (✓) ONE: Elmbrook Homes, Inc.

ADDRESS: 675 Brookfield Rd.

POST OFFICE: Brookfield, Wisconsin

4. Distance in feet from well to nearest: (Record answer in appropriate block)

Building	Sanitary Bldg. Drain		Sanitary Bldg. Sewer		Floor Drain Connected To:		Storm Bldg. Drain		Storm Bldg. Sewer	
	C.I.	Other	C.I.	Other	C.I. Sewer	Other Sewer	C.I.	Other	C.I.	Other
29	Construction not started on septic system									

Street Sewer		Other Sewers		Foundation Drain Connected to:				Sewage Sump		Clearwater Sump	Septic Tank	Holding Tank	Sewage Absorption Unit
San.	Storm	C.I.	Other	Sewer		Sewage Sump		C.I.	Other				Seepage Pit
				Clearwater Dr.		Clearwater Sump							Seepage Bed
													Seepage Trench

Privy	Pet Waste Pit	Pit: Nonconforming Existing	Subsurface Pumproom	Barn Gutter	Animal Barn Pen	Animal Yard	Silo With Pit	Glass Lined Storage Facility	Silo w/o Pit	Earthen Silage Storage Trench Or Pit
		Well	Nonconforming Existing							
		Pump								
		Tank								

Temporary Manure Stack	Watertight Liquid Manure Tank	Solid Manure Storage Structure	Subsurface Gasoline or Oil Tank	Waste Pond or Land Disposal Unit (Specify Type)	Other (Give Description)

5. Well is intended to supply water for: Restaurant

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
3/4	Surface	129			
6	129	142			

7. CASING, LINER, CURBING AND SCREEN

Dia. (in.)	Material, Weight, Specification & Method of Assembly	From (ft.)	To (ft.)
6	18.97 lbs. per ft. new steel plain end U.S. Steel	Surface	129
		ASTM A-53	

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Clay slurry & drilling mud	Surface	129

9. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay	Surface	6
Sand and gravel	6	79
Clay	79	123
Sand and gravel	123	129
Limestone	129	142

10. TYPE OF DRILLING MACHINE USED

☐ Cable Tool
☐ Rotary-air w/drilling mud
☐ Rotary-w/drilling mud
☒ Rotary-hammer w/drilling mud & air
☐ Rotary-hammer & air
☐ Reverse Rotary
☐ Jetting with: ☐ Air ☐ Water

Well construction completed on: April 3, 1980

11. MISCELLANEOUS DATA

Yield Test: 5 Hrs. at 35 GPM

Depth from surface to normal water level: 43 Ft.

Depth of water level when pumping: 70 Ft. Stabilized ☒ Yes ☐ No

Well is terminated: 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to: Madison laboratory on: April 7, 1980

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of finishing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side.

Signature: Herr Well Drilling, Inc.

John Herr Pres. Registered Well Driller

Complete Mail Address: 295 Marsh Rd., Dousman, Wis. 53118

lot 78 3444

STATE OF WISCONSIN

WELL CONSTRUCTOR'S REPORT

DEPARTMENT OF RESOURCE DEVELOPMENT

AUG 2 ? 1971

12

Wel 6

1. COUNTY: Waukesha

CHECK ONE: ☒ Town ☐ Village ☐ City

NAME: Waukesha

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)

SE cor. of NW 1/4 sec.1 T6N R19E. Off of "A" South of "59"

OWNER AT TIME OF DRILLING

Standard Theaters Inc. Waukesha Wis. 53186

4. OWNER'S COMPLETE MAIL ADDRESS

"A" and "59" Waukesha Wis. 53186

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
8	10		10					

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
		Holding tank		50 ft.					

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for:

Sanitary Facilities

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20			
6	20	140			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Blk.19.45 lbT&C	Surface	85.5

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Drill mud	Surface	20

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Gravel fill	Surface	11
Sand silt	11	62
Gravel sand	62	72
Sand	72	80
Sand clay	80	85
Limestone WB	85	140

11. MISCELLANEOUS DATA

Yield test: 4 Hrs. at 15 GPM

Depth from surface to normal water level: 21 ft.

Depth to water level when pumping: 21 ft.

Well construction completed on: May 25 1971

Well is terminated: 10 inches ☒ above ☐ below final grade

Well disinfected upon completion: ☒ Yes ☐ No

Well sealed watertight upon completion: ☒ Yes ☐ No

Water sample sent to: Madison laboratory on: 5/25 1971

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Garber & Son B. J. Garber Registered Well Driller

COMPLETE MAIL ADDRESS: 22386 W. Green Rd Waukesha Wis. 53186

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
				plot

78353

UNIVERSITY OF WISCONSIN GEOLOGICAL & NATURAL HISTORY SURVEY
1815 University Avenue, Madison, Wisconsin 53706

Log No. Wk-352 13
Issued: May, 1967

County: Waukesha

Well name Spancrete Industries, Inc., Waukesha, Wis.

Completed... 8-65

Owner.... Spancrete Industries, Inc.
Address.. Waukesha, Wis.

Field check.

Altitude....

Use..... Industrial

Driller.. Layne-Northwest Co.

Static w. l.-37'

Engineer.

Spec. cap... 2.5

R. 19E.
T. 7 N.
Sec. 36

Quad. Waukesha 7½'

Drill Hole						Casing & Liner Pipe or Curbing							
Dia.	from	to	Dia.	from	to	Dia.	Wgt.& Kind	from	to	Dia.	Wgt.& Kind	from	to
14"	0	20'				14"	3/8"steel	+8"	20'				
8-5/8"	20'	95'				8"	steel	+8"	95'				
8"	95'	150'											

Grout: Kind	from	to
Neat cement	+8"	20'

Samples from 0 to 150' Date received: 3-2-66
Sample Nos. 263450 to 263479 Examined by: Joan M. Warren Date: 3-7-67
Formations: Drift, Silurian

Remarks: Well tested for 6 hours at 61 gpm with 24 feet of drawdown. Well may also be referred to as Waukesha Cement Block Co., Sand Sample 105-110 may have been a mismarked bag as dolomite above and below is quite uniform and this sand does not occur in other nearby wells.

LOG OF WELL:

DRIFT	0-5	5		Snd, mxd yls & bns, M&C,mchVC,ltl fn,trVfn,mstly dol&qtz,trig&cht;
	5-15	10		Snd,mxd yls&bns,M&C,Srnd,VP srtg, mchVC,ltl fn,mstly dol& qtz;tr ig&cht;mch fn gvl,trM&C
	15-30	15		Snd,mxd yls&bns,M&C,ltlVC,mstly dol&qtz,tr ig & cht;trVfn gvl&st
	30-35	5		Snd,mxd yls&bns,mchVC,mstly dol&qtz,tr ig&cht;mchVfn gvl,tr st
	35-45	10		Snd,mxd yls&bns,M&C,mchVC,mstly dol&qtz,tr ig&cht;ltl fn gvl,mchC
	45-50	5		Gvl,mxd yls&bns,mstly dol,ltl ig & cht;
	50-55	5		Gvl,mxd yls&bns,fn,mstly dol,ltl ig&cht;trM&C;ltl VC snd,trC
	55-65	10		Gvl,mxd yls&bns,fn,dolic,mstly dol,trM&C;mch st&Vfn snd,ltl fn&VC
	65-70	5		Gvl,mxd yls&bns,M&fn,mstly dol,trM,ltlC;ltl st&Vfn snd,tr fn/VC gvl
	70-75	5		Snd,mxd yls&bns,M/Vfn,dolic,ltlC,trVC;mch st&cl,tr fn/C gvl
	75-80	5		Snd,mxd yls&bns,C/Vfn,dolic,ltlVC;mch st & cl,ltl fn gvl, trM
	80-85	5		Snd,mxd clr,M&C,Srnd,P srtg,ltlfn,Vfn&VC;ltl fn gvl & st
	85-90	5		Gvl,mxd clr,fn&Vfn,Sang,tr M;mch C & VC snd, ltl Vfn/M, tr st
95'	90-95	5		Snd, mxd clr, M & C, Srnd, ltl fn, Vfn & VC; ltl fn gvl & st
SILURI	95-100	5		Dol,pl yl bn mot gry, fn & Vfn, dns, tr M; tr pyr
	100-105	5		Dol,pl yl bn mot gry, fn & Vfn, dns; tr pyr
	105-110	5		Snd, mxd clr,M,Sang,VG srtg,mstly dol & qtz;
	110-120	10		Dol,pl yl bn mot yl gry & gry,Vfn,dns; tr pyr
	120-125	5		Dol,yl gry mot pl yl bn,Vfn,dns; tr cht & cvd snd
	125-135	10		Dol, pl yl bn mot pl yl gry, Vfn, dns; tr pyr
	135-140	5		Dol,pl yl bn mot bn & gry,fn&Vfn,dns;tr pyr & cvd? snd
	140-145	5		Dol,pl yl bn mot bn & gry, Vfn, dns; tr sft & fn; tr pyr&cvd snd
145'	145-150	5		Dol,pl yl bn mot bn & gry,Vfn, sft, ltl fn; tr pyr & cvd snd

END OF WELL

UNIVERSITY OF WISCONSIN GEOLOGICAL & NATURAL HISTORY SURVEY
815 University Avenue, Madison, Wisconsin 53706

Log No. 43-Wk-718 #14
Sample Nos. Selective Retentic

Well name: Wisconsin Electric Power Co.
Waukesha Township
Owner.... Wis. Electric Power Co.
Address.. 231 West Michigan
Milwaukee, Wisconsin
Driller.. Liebau-Laun, Inc.
Engineer.

County: Waukesha
Completed... March 25, 1969
Field check.
Altitude.... 850-910 ETM
Use..... Dust Control
Static w.l.. 78'
Spec. cap... 5

R. 19E
T. 6 N.
Sec. 1

Quad. Waukesha 7½' & 15'

Drill Hole						Casing & Liner Pipe or Curbing							
Dia.	from	to	Dia.	from	to	Dia.	Wgt.& Kind	from	to	Dia.	Wgt.& Kind	from	to
14"	0	21'				14"	New Steel .375 Wall	0	21'				
10"	21'	380'				10"	New Steel .365 Wall	+14"	162'				

Grout: Kind	from	to
Cement	0	21'

Samples from 145' to 375' Rec'd: 5/1/69 Studied by: M. Roshardt Issued: Oct. 1969

Formations: Drift, Silurian Undifferentiated.

Remarks: Well tested for 8 hours at 65 gpm with 13 feet of drawdown.
Driller reports well depth of 380'.
Driller reports sample 0-145 destroyed at site by children.

LOG OF WELL:

	Depths	Graphic Section	Rock Type	Color	Grain Size Mode	Grain Size Range	Miscellaneous Characteristics
D	0-145		Not to scale. No Samples. Driller reports sand and gravel.				
F	145-150 S		Sand	Mixed	C	Fn/VC	Quartz, dolomite, mixed igneous. Few rnd grans-small pebs.
T	150-155		"	"	"	"	Same plus trace silt-clay.
160'	155-160 S		"	Brown	M	"	Qtz, dol, mixed igneous. Much gravel. Ltl silt - clay.
	160-165 S		Dolomite	Pnk br	Fn	Fn/M	Little mixed caved sand.
S	165-170 S		"	"	"	"	Trace gray mottling, speckling, pyrite, calcite.
I	170-175	G	"	"	"	Fn/C	Trace pyrite, calcite, fossil frags, glauconite, white chert.
L	175-180		"	"	"	"	Same but no glauconite, chert.
U	180-185		"	"	"	Fn/M	Trace calcite, pyrite, gray & orange chert, foss fragments.
R	185-190		"	"	"	"	Trace pyrite, calcite, chert, caved gravel, mottling.
I	190-195		"	"	"	"	Same
A	195-200 S		"	"	"	"	"
N	200-205 S		"	"	Fn	--	Trace caved sand.
	205-210		"	"	"	Fn/M	Same
	210-215		"	Pink gray	"	"	"
	215-220		"	"	"	"	"
	220-225		"	"	"	"	Same plus trace fossil fragments.
D	225-230		"	"	"	"	Trace calcite, stylolites.
N	230-235		"	Pink br	"	"	Much qtz and mixed sand- sample may be out of place.
D	235-240		"	Lt gray	"	"	Trace mottling, chert, caved sand.
I	240-245		"	"	"	"	Trace pyrite, chert, mottling, foss frags. Little caved sand.
F	245-250		"	"	"	"	Little chert. Trace pyrite, mottling, caved sand.
F	250-255		"	"	"	"	Trace chert, pyrite, mottling, caved sand.
E	255-260		"	"	"	"	Same but no chert.
R	260-265		"	"	"	"	Trace pyrite, white chert, mottling, fossil fragments.
	265-270 S		"	"	"	--	Much gray-white chert.
	270-275		"	"	"	--	Same
	275-280		"	"	"	--	"
	280-285		"	"	"	--	"
	285-290		"	"	"	--	"
	290-295		"	"	"	--	"
	295-300	G	"	"	"	--	Same plus trace glauconite.

IVERSITY OF WISCONSIN GEOLOGICAL & NATURAL HISTORY SURVEY
.15 University Avenue, Madison, Wisconsin 53706

Log No. 43-WK-718
Sample Nos. Selective

Well name: Wisconsin Electric Power Co.

	Depths	Graphic Section	Rock Type	Color	Grain Size		Miscellaneous Characteristics
					Mode	Range	
S	300-305	/△△△/	Dolomite	Lt. gray	Fn	--	Same but no glauconite.
I	305-310	△/△△/	"	Pink br	"	--	Same
L.	310-315 S	△/△△	"	"	"	--	Same plus trace mottling, pyrite.
	315-320 S	△/	"	"	"	--	Trace chert, mottling, pyrite.
	320-325	/△/	"	"	"	--	Same
U	325-330 S	G/△/	"	"	"	--	Same plus trace limonite, glauconite, calcite.
N	330-335 S	△/G/	"	"	"	Fn/M	Same
D	335-340	G△/	"	"	"	"	"
I	340-345	/G△/	"	"	"	"	"
F	345-350	/△/	"	"	"	"	Trace chert, limonite.
F.	350-355 S	G/△/	"	"	M	"	Trace limonite, pyrite, chert, glauconite.
	355-360	/G△/	"	"	"	"	Same
	360-365	/G△/	"	"	"	"	"
	365-370	/	"	Pink grey	"	"	Trace pyrite.
215	370-375 S	/G	"	"	"	"	Trace pyrite, glauconite.
			END OF LOG				

WELL CONSTRUCTOR'S REPORT

Wel–6

WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

14n

WK-718

1. COUNTY: Waukesha

CHECK ONE: ☐ Town ☒ Village ☐ City

NAME: Waukesha

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)

SW¼ of NE¼ Section 1 T6N R19E

3. OWNER AT TIME OF DRILLING

Wisconsin Electric Power Company

4. OWNER'S COMPLETE MAIL ADDRESS

231 West Michigan Milwaukee, Wisconin

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
–	–	–	–	–	–	–	–	–

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
–	–	–	–	–	–	–	–	–	–

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

none

6. Well is intended to supply water for:

commercial use

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
14	Surface	21			
10	21	380			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
14	New, black steel .375 wall	Surface	21
[redacted]			
10	New, black steel .365 wall	Surface	162

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Neat cement grout	Surface	21

10. FORMATIONS

Kind	From (ft.)	To (ft.)
± Top soil and clay	Surface	2
Clay and Gravel	2	16
Gravel, sand and stones	16	44
Gravel and sand	44	162
Limestone	162	380

Well construction completed on 3-25 19 69

Well is terminated 14 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 8 Hrs. at 65 GPM

Depth from surface to normal water level 78 ft.

Depth to water level when pumping 81 ft.

Water sample sent to Madison laboratory on: 3-24-69 19

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

[redacted]TURE

Arthur Liebau Jr. Registered Well Driller

COMPLETE MAIL ADDRESS

Liebau-Laun Inc.
1200 West Liebau Rd. Mequon, Wis.

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
				re: M.E. Ostrom plat 6-12-69 783520.

REV. 11–68

15

State of Wisconsin
Department of Natural Resources
Private Water Supply
Box 7921
Madison, Wisconsin 53707

NOTE:
White Copy – Division's Copy
Green Copy – Driller's Copy
Yellow Copy – Owner's Copy

WELL CONSTRUCTOR'S REPORT
Form 3300–15 Rev. 2-79

JUL 11 1985

1. COUNTY: WAUKESHA
CHECK (✓) ONE: ☒ Town ☐ Village ☐ City
Name: WAUKESHA

2. LOCATION: NE, NW¼, Section or Gov't. Lot ✓ | Section: 1 | Township: 6N | Range: 19E
OR – Grid or Street No.: W226 S1500 | Street or Road Name: CTH "A"
AND – If available subdivision name, lot & block No.:

3. NAME ☒ OWNER ☐ AGENT AT TIME OF DRILLING CHECK (✓) ONE: JOE RUETEMAN
ADDRESS: 1526 CARRIAGE
POST OFFICE: NEW BERLIN WI | ZIP CODE: 53151

4. Distance in feet from well to nearest: (Record answer in appropriate block)

Building	Sanitary Bldg. Drain		Sanitary Bldg. Sewer		Floor Drain Connected To:		Storm Bldg. Drain		Storm Bldg. Sewer	
	C.I.	Other	C.I.	Other	C.I. Sewer	Other Sewer	C.I.	Other	C.I.	Other
60										

Street Sewer		Other Sewers		Foundation Drain Connected to:		Sewage Sump		Clearwater Sump	Septic Tank	Holding Tank	Sewage Absorption Unit	Manure Hopper or Retention or Pneumatic Tank
San.	Storm	C.I.	Other	Sewer	Sewage Sump	C.I.	Other			100	☐ Seepage Pit ☐ Seepage Bed ☐ Seepage Trench	
				Clearwater Dr.	Clearwater Sump							

Privy	Pet Waste Pit	Pit: Nonconforming Existing	Subsurface Pumproom	Barn Gutter	Animal Barn Pen	Animal Yard	Silo With Pit	Glass Lined Storage Facility	Silo w/o Pit	Earthen Silage Storage Trench Or Pit	Earthen Manure Basin
		Well Pump Tank	Nonconforming Existing								

Temporary Manure Stack or Platform	Watertight Liquid Manure Tank or Basin	Manure Pressure Pipe	Subsurface Gasoline or Oil Tank	Waste Pond or Land Disposal Unit (Specify Type)	Manure Storage Basin Concrete Floor Only Concrete Floor and Partial Concrete Walls	Other (Describe)
						NONE

5. Well is intended to supply water for: GOLF DRIVING RANGE

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	21			
6	21	58			

7. CASING, LINER, CURBING AND SCREEN
Material, Weight, Specification

Dia. (in.)	Mfg. & Method of Assembly	From (ft.)	To (ft.)
6	NEW STEEL P/B	Surface	56
	WELDED 18.97 #/ft		
	ASTM A-53 NKK	STEEL	
6"	Telescope Well Screen	56	58
	DISSLOT MUSTANG Well Co.		

8. GROUT OR OTHER SEALING MATERIAL

Kind:	From (ft.)	To (ft.)
PUDDLED CLAY	Surface	21

9. FORMATIONS

Kind	From (ft.)	To (ft.)
TOP SOIL	Surface	8
CLAY & PEAT	8	21
SAND	21	38
CLAY	38	55
COARSE GRAVEL	55	58
W/ FINE SAND		

10. TYPE OF DRILLING MACHINE USED
☒ Cable Tool ☐ Rotary-air w/drilling mud ☐ Rotary-w/drilling mud ☐ Rotary-hammer w/drilling mud & air ☐ Rotary-hammer & air ☐ Reverse Rotary ☐ Jetting with Air ☐ Water

Well construction completed on JULY 5 19 85

11. MISCELLANEOUS DATA
Yield Test: 6 Hrs. at 27 GPM
Depth from surface to normal water level 3 Ft.
Depth of water level when pumping 29 Ft. Stabilized ☒ Yes ☐ No

Well is terminated 24 inches ☒ above ☐ below final grade
Well disinfected upon completion ☒ Yes ☐ No
Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to MADISON laboratory on JULY 8 19 85

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of finishing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side.

Signature: Randy L Stellan Registered Well Driller

Business Name and Complete Mailing Address: 1841 WATERVIEW
RANDY WILKINS Well Drlg WAUKESHA

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER DM 950

FEB - 1 1991

State of Wisconsin
Department of Natural Resources
Private Water Supply — WS/2
Box 7921
Madison, WI 53707

MAR 25 1991

16

Property Owner: Walmart | Telephone Number: 414549-3191

Mailing Address: W226 So 1500 Hwy 164

City: Waukesha | State: WI | Zip Code: 53186

County of Well Location: Waukesha | County Well Location Permit No.: W | Well Completion Date: 01/06/91 (MM/DD/YY)

(68)

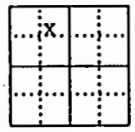
Well Constructor (Business Name): Layne-Northwest | Registration #: 582

Address: W229 N5005 DuPlainville Rd.

City: Pewaukee | State: WI | Zip Code: 53072

N

2. Mark well location in correct 40-acre parcel of section.



1. Location (Please type or print using a black pen.)

☒ Town ☐ City ☐ Village of Waukesha | Fire # (if available)

Grid or Street Address or Road Name and Number (if available)

Subdivision Name | Lot # | Block #

Gov't Lot # ____ or NE ¼ of NW ¼ of Section 1; T 6 N; R 19 ☐ E ☐ W

3. Well Type ☒ New ☐ Replacement ☐ Reconstruction

of unique well # ____ constructed in 19 ____.

Reason for new, replaced or reconstructed well? Water supply

4. Well serves ____ # of homes and/or industry (ex: barn, restaurant, church, school, industry, etc.)

High Capacity Well? ☐ Yes ☒ No

High Capacity Property? ☐ Yes ☒ No

☑ Drilled ☐ Driven Point ☐ Jetted ☐ Other ____

5. Well Located on Highest Point of Property, Consistent with the General Layout and Surroundings? ☒ Yes ☐ No If no, explain on back side.

Well Located in Floodplain? ☐ Yes ☒ No

Distance In Feet From Well Nearest:

____ 1. Landfill	____ 9. Downspout/Yard Hydrant	____ 17. Wastewater Sump
200 2. Building Overhang	____ 10. Privy	____ 18. Paved Animal Barn Pen
____ 3. Septic or Holding Tank	____ 11. Foundation Drain to Clearwater	____ 19. Animal Yard or Shelter
____ 4. Sewage Absorption Unit	____ 12. Foundation Drain to Sewer	____ 20. Silo — Type ____
____ 5. Nonconforming Pit	____ 13. Building Drain ☐ Cast Iron or Plastic ☐ Other	____ 21. Barn Gutter
____ 6. Buried Home Heating Oil Tank	____ 14. Building Sewer ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other	____ 22. Manure Pipe ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
____ 7. Buried Petroleum Tank	____ 15. Collector or Street Sewer	____ 23. Other Manure Storage ____
____ 8. Shoreline/Swimming Pool	____ 16. Clearwater Sump	Other NR 112 Waste Source ____ 24. ____

6. Drillhole Dimensions

Dia. (in.)	From (ft.)	To (ft.)
13	surface	150
8	150	230

Method of constructing upper enlarged drillhole only.

☒ 1. Rotary — Mud Circulation
☒ 2. Rotary — Air
☐ 3. Rotary — Foam
☐ 4. Reverse Rotary
☐ 5. Cable-tool Bit ____ in. dia.
☐ 6. Temp. Outer Casing 16 in. dia. Removed? ☒ Yes ☐ No If no, explain ____
☐ 7. Other ____

7. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Mfg. & Method of Assembly	From (ft.)	To (ft.)
8	BL. new steel P.E. welded A-53 GRB 28.55 IB L.T.V. Steel	surface	150

Dia. (in.)	screen type and material	From	To

8. Grout or Other Sealing Material

Method: Pumped tremie

Kind of Sealing Material	From (ft.)	To (ft.)	Sacks Cement
eat Cement	surface	150	105

DNR USE ONLY	9. Geology Type, Caving/Noncaving, Color, Hardness, Etc.	From (ft.)	To (ft.)
SG	Sand and gravel	surface	16
GC	Gravel with clay	16	55
G	Gravel	55	65
ZP	Gravel and clay hard pan	65	79
L	Limestone	79	230

10. Static Water Level
____ ft. above ground level
20 ft. below ground surface

11. Pump Test
Pumping Level 25 ft. below surface
Pumping at 65 GPM for 12 hours

12. Well Is:
☒ Above ☐ Below Grade
24 in.
Developed? ☒ Yes ☐ No
Disinfected? ☒ Yes ☐ No
Capped? ☒ Yes ☐ No

13. Did you permanently seal all unused, noncomplying, or unsafe wells?
☐ Yes ☐ No If no, explain ____

14. Signature of Point Driver or Registered Driller: Layne North West — Date Signed: 1-31-91 (BM)

Signature of Drill Rig Operator: Terry Blaser — Date Signed: 1/31/91 (TB)

Make additional comments on reverse side about geology, etc.

DNR

WELL CONSTRUCTION REPORT
Form 3300-77A Rev. 9-88

106

MAY 12 1992
DEC 28 1992
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First Water Quality Test For
WISCONSIN UNIQUE WELL NUMBER ~~FI 802~~ DQ804

State of Wisconsin
Private Water Supply - WS/2
Department of Natural Resources
Box 7921
Madison, WI 53707
(Please type or print using a black pen.)

Property Owner: AQUA WELL & PUMP
Telephone Number: ( ) DQ804
Mailing Address: P.O BOX 187
City: NORTH PRAIRIE State: WIS Zip Code: 53532
County of Well Location: WAUK
Co. Well Permit No. W____
Well Completion Date (mm-dd-yy): 9-26-91

68
Well Constructor (Business Name): W. H HARTMAN
License #: 436
Address: N83 W28280 MARSHALL
City: HARTLAND State: WIS Zip Code: 53029

1. Well Location — Please use decimals instead of fractions.
[X] Town [ ] City [ ] Village of WAUKESHA
Fire # (If avail.)
Grid or Street Address or Road Name and Number (If avail.): S15 W22460 ARCADIAN RD
Subdivision Name / Lot # / Block #
Gov't Lot # ____ or NE 1/4 of NW 1/4 of Section 1, T 6 N; R 19 [X] E [ ] W

2. Mark well location with a dot in correct 40-acre parcel of section.
N / W / E / S

3. Well Type [ ] New [X] Replacement [ ] Reconstruction
of previous unique well # ____ constructed in 19 ____
Reason for new, replaced or reconstructed well? OLD WELL IN BASEMENT
[X] Drilled [ ] Driven Point [ ] Jetted [ ] Other

4. Well serves 1 # of (homes) and or ____ (Ex: barn, restaurant, church, school, industry, etc.)
High Capacity: Well? [ ] Yes [X] No   Property? [ ] Yes [X] No

5. Well located on highest point of property, consistent with the general layout and surroundings? [X] Yes [ ] No If no, explain on back side.
Well located in floodplain? [ ] Yes [X] No
Distance in Feet From Well To Nearest: (note — FLY ASH, OK 2/28/91)

210	1. Landfill		9. Downspout/Yard Hydrant		17. Wastewater Sump
16	2. Building Overhang		10. Privy		18. Paved Animal Barn Pen
41	3. Septic or Holding Tank (circle one)		11. Foundation Drain to Clearwater		19. Animal Yard or Shelter
55	4. Sewage Absorption Unit		12. Foundation Drain to Sewer		20. Silo - Type
	5. Nonconforming Pit		13. Building Drain [ ] Cast Iron or Plastic [ ] Other		21. Barn Gutter
	6. Buried Home Heating Oil Tank	25	14. Building Sewer [X] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other		22. Manure Pipe [ ] Gravity [ ] Pressure [ ] Cast Iron or Plastic [ ] Other
	7. Buried Petroleum Tank		15. Collector or Street Sewer		23. Other Manure Storage; Other NR 112 Waste Source
	8. Shoreline/Swimming Pool	20	16. Clearwater Sump		24.

6. Drillhole Dimensions

Dia. (in.)	From (ft.)	To (ft.)
10	surface	160
6	160	223

Method of constructing upper enlarged drillhole only.
[ ] 1. Rotary - Mud Circulation
[X] 2. Rotary - Air
[ ] 3. Rotary - Foam
[ ] 4. Reverse Rotary
[ ] 5. Cable-tool Bit ____ in. dia.
[ ] 6. Temp. Outer Casing ____ in. dia. Removed? [ ] Yes [ ] No If no, explain ____
[ ] 7. Other

9. Geology

DNR USE ONLY	Type, Caving/Noncaving, Color, Hardness, Etc.	From (ft.)	To (ft.)
C	SURFACE CLAY	Surface	8
G	GRAVEL	8	80
P	HARDPAN	80	138
L	LIMESTONE	138	223

7. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	0.280 A-53 GR.B SAWHILL STEEL WELDED	surface	161

Dia. (in.)	screen type, material & slot size	From	To

8. Grout or Other Sealing Material
Method: PUMP

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
NEAT CEMENT	surface	160	38

10. Static Water Level
____ ft. above ground surface
64 ft. below ground surface

11. Pump Test
Pumping Level 80 ft. below surface
Pumping at 20 GPM for 4 hours

12. Well Is: 12 in. [X] Above [ ] Below Grade
Developed? [X] Yes [ ] No
Disinfected? [X] Yes [ ] No
Capped? [X] Yes [ ] No

13. Did you permanently seal all unused, noncomplying, or unsafe wells? [ ] Yes [X] No If no, explain PUMP MAN TO DO

14. Signature of Point Driver or Licensed Supervisory Driller: [signature] MH   Date Signed: 5-10-92
Signature of Drill Rig Operator (Mandatory unless same as above)   Date Signed

Make additional comments on reverse side about geology, additional screens, water quality, etc.
Comments on reverse side ____ (Check √, if yes)
DNR
WELL CONSTRUCTION REPORT 98
Form 3300-77A Rev. 1-92

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State of Wisconsin
Department of Natural Resources
Private Water Supply
Box 7921
Madison, Wisconsin 53707

NOTE:
White Copy – Division's Copy
Green Copy – Driller's Copy
Yellow Copy – Owner's Copy

WELL CONSTRUCTOR'S REPORT
Form 3300–15 Rev. 2-79

ECC 4 1985

COUNTY Waukesha

CHECK (✓) ONE: ☑ Town ☐ Village ☐ City

Name Waukesha

2. LOCATION ¼ Section or Govt. Lot: SE, NE, NW, ~~SW~~ | Section: 1 | Township: 6N | Range: 19E

OR – Grid or Street No.: S15 W22600 | Street or Road Name: Arcadian Rd.

AND – If available subdivision name, lot & block No.

3. NAME ☑ OWNER ☐ AGENT AT TIME OF DRILLING CHECK (✓) ONE: Abel Investments

ADDRESS: 1610 Peral St.

POST OFFICE: Waukesha | ZIP CODE

4. Distance in feet from well to nearest: (Record answer in appropriate block)

Building	Sanitary Bldg. Drain		Sanitary Bldg. Sewer		Floor Drain Connected To:		Storm Bldg. Drain		Storm Bldg. Sewer	
	C.I.	Other	C.I.	Other	C.I. Sewer	Other Sewer	C.I.	Other	C.I.	Other
10		X		X		X		X		X

Street Sewer		Other Sewers		Foundation Drain Connected to:		Sewage Sump		Clearwater Sump	Septic Tank	Holding Tank	Sewage Absorption Unit	Manure Hopper or Retention or Pneumatic Tank
San.	Storm	C.I.	Other	Sewer	X	Sewage Sump					Seepage Pit	
100				Clearwater Dr.		Clearwater Sump					Seepage Bed	
											Seepage Trench	

Privy	Pet Waste Pit	Pit: Nonconforming Existing	Subsurface Pumproom	Barn Gutter	Animal Barn Pen	Animal Yard	Silo With Pit	Glass Lined Storage Facility	Silo w/o Pit	Earthen Silage Storage Trench Or Pit	Earthen Manure Basin
		Well	Nonconforming Existing								
		Pump									
		Tank									

Temporary Manure Stack or Platform	Watertight Liquid Manure Tank or Basin	Manure Pressure Pipe	Subsurface Gasoline or Oil Tank	Waste Pond or Land Disposal Unit (Specify Type)	Manure Storage Basin	Other (Describe)
					Concrete Floor Only	
					Concrete Floor and Partial Concrete Walls	

5. Well is intended to supply water for: Office Building

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	228

7. CASING, LINER, CURBING AND SCREEN
Material, Weight, Specification Mfg. & Method of Assembly

Dia. (in.)	Material, Weight, Specification Mfg. & Method of Assembly	From (ft.)	To (ft.)
6	New Black	Surface	127
	P.E. A53		
	Driven Well		
	Joint		

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Clay Slurry	Surface	20

9. FORMATIONS

Kind	From (ft.)	To (ft.)
Sand & Clay	Surface	27
Sand	27	42
Clay	42	67
Gravel	67	72
Sand & Gravel	72	119
Gravel	119	127
Limestone	127	228

10. TYPE OF DRILLING MACHINE USED

☑ Cable Tool
☐ Rotary-air w/drilling mud
☐ Rotary-w/drilling mud
☐ Rotary-hammer w/drilling mud & air
☐ Rotary-hammer & air
☐ Reverse Rotary
☐ Jetting with: ☐ Air ☐ Water

Well construction completed on Nov. 29 19 84

11. MISCELLANEOUS DATA

Yield Test: 18 Hrs. at 15 GPM

Depth from surface to normal water level 50 Ft.

Depth of water level when pumping 55 Ft. Stabilized ☑ Yes ☐ No

Well is terminated 12 inches ☑ above ☐ below final grade

Well disinfected upon completion ☑ Yes ☐ No

Well sealed watertight upon completion ☑ Yes ☐ No

Water sample sent to LaTor No. Electric laboratory on _____ 19____

Opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of ing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side.

Signature: Steve J. Hartman Registered Well Driller

Business Name and Complete Mailing Address: HARTMAN WELL DRILLING & PUMP CO
19500 W. Lincoln Avenue plat
New Berlin, WI 53151 723-12
547-5222

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WELL CONSTRUCTOR'S REPORT — WISCONSIN STATE BOARD OF HEALTH — WK-649-U — Wel 6

1. COUNTY: Waukesha — CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Waukesha

RECEIVED MAR 25 1966

LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)

2114 Pearl Street T6N R19E S½, SW, NE, SE, Sec 2

2. OWNER AT TIME OF DRILLING: Oconomowac Electro Plating Co,

4. OWNER'S COMPLETE MAIL ADDRESS: Oconomowac Electro Plating Co. - 2114 Pearl Street - Waukesha, Wis.

SANITARY ENGINEERING

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
6					None			6 8

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
54		78	65	80					

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

RECEIVED APR - 7 1966

6. Well is intended to supply water for: Plating Shop

SANITARY ENGINEERING

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	7 (6⅝)	20	230

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
7	Black steel Iron Pipe 26#	Surface	55

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Drilled Mud	Surface	20

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay (red)	Surface	5
Gravel (coarse)	5	38
Clay (blue)	38	55
Limestone (water)bearing	55	230

Well construction completed on 12/14 1965

11. MISCELLANEOUS DATA

Yield test: 12 Hrs. at 40 GPM

Depth from surface to normal water level 30 ft.

Depth to water level when pumping 64 ft.

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison laboratory on: 3/21 19 66

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Nick Palkoski — Registered Well Driller

COMPLETE MAIL ADDRESS: S59W22813 Glengarry Dr. Waukesha Wis.

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
				plot 783507

WK-648-U

Wel. 6-30M (6-50) 20

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side WK-648-U

1. County Waukesha Town ☐ Village ☐ City ☐ Waukesha

2. Location E. Pearl St. Waukesha (Name of street and number of premise or Section, Town and Range numbers) — Check one and give name: NW, SW, NE, SE, Sec. 2 T6N R19E ✓

3. Owner ☑ or Agent ☐ Central Machine Works (Name of individual, partnership or firm)

4. Mail Address 453 W. Main St. Waukesha (Complete address required)

5. From well to nearest: Building 6 ft; sewer — ft; drain 40 ft; septic tank 55 ft; dry well or filter bed 20 ft; abandoned well ____ ft.

6. Well is intended to supply water for: Machine shop

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	30	6"	30	128

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Stanpard Blk. Steel	0	91

9. GROUT:

Kind	From (ft.)	To (ft.)
Puddled clay	0	30

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Hardpan	0	30
Sand	30	80
Gravel	80	91
Limestone	91	128

RECEIVED
AUG 17 1956
ENVIRONMENTAL SANITATION

Construction of the well was completed on: Aug 11 19 56

The well is terminated 8 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ____

Was the well sealed watertight upon completion? Yes ✓ No ____

11. MISCELLANEOUS DATA:

Yield test: 12 Hrs. at 8 GPM.

Depth from surface to water-level: 40 ft.

Water-level when pumping: 40 ft.

Water sample was sent to the state laboratory at: Madison (City) on Aug 13 1956

Signature Donald Feast (Registered Well Driller) — Edgewood Pump Co. 311 W. St. Paul Ave Waukesha (Complete Mail Address)

Please do not write in space below

Rec'd AUG 13 1956 No. 28654

Ans'd ____

Interpretation SAFE

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli	0				

plot

Examiner ____

783508

(SE,NE,SE) T6N R19E Sec 2, 1

Wel. 6-30M[(6-50)

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WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha — {Town ☑ Village ☐ City ☐} Waukesha — Check one and give name

2. Location Pearl Street
Name of street and number of premise or Section, Town and Range numbers

OCT 1952
ENVIRONMENTAL SANITATION

3. Owner ☑ or Agent ☐ Otto Bluhm
Name of individual, partnership or firm

4. Mail Address Pearl St Waukesha 1315 East Broadway
Complete address required

5. From well to nearest: Building 5 ft; sewer ____ ft; drain ____ ft; septic tank ____ ft; dry well or filter bed ____ ft; abandoned well ____ ft.

6. Well is intended to supply water for: Plumbing Shop

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6	0	67			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Standard Weight Black Steel Pipe	0	67

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Gravel broken rock	0	20
Sandy clay	20	55
Gravel (water bearing)	55	67

Construction of the well was completed on: Oct-6- 1952

The well is terminated 8 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ____ No ✓

Was the well sealed watertight upon completion? Yes ✓ No ____

11. MISCELLANEOUS DATA:

Yield test: 15 Hrs. at 10 GPM.

Depth from surface to water-level: 6 ft.

Water-level when pumping: 18 ft.

Water sample was sent to the state laboratory at: Madison City on Oct-14 1952

Signature Andrew Egofske
Registered Well Driller

R3 Box 89 Waukesha, Wisc
Complete Mail Address

Please do not write in space below

Rec'd OCT 15 1952 No. 19047

Ans'd ____

Interpretation Unsafe

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.	0	0	0	0	0
48 hrs.	+	0	+	+	0
Confirm					
B. Coli	+	0	+	+	0

Examiner ____

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

22

1. County Waukesha { Town ☑ Village ☐ City ☐ } Pewaukee (Check one and give name)

2. Location S.E. 1/4 S.E. 1/4 Sec 35 T7N R19E (Name of street and number of premise or Sec. Tn. and R. numbers)

3. Owner ☑ or Agent ☐ Pettibone Tocher Plant (Name of individual, partnership or firm)

4. Mail Address Waukesha RR 4 (Complete address required)

5. From well to nearest: Building 8 ft; sewer none in at time of drilling ft; drain ft; septic tank ft; dry well or filter bed ft; abandoned well ft.

6. Well is intended to supply water for:

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)
6	0	38 ft.

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind	From (ft.)	To (ft.)
6"	Std Steel	0	35'6"

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Filling	0	5
Sand	5	30
Sandy Gravel	30	38

11. MISCELLANEOUS DATA:

Yield test: 4 Hrs. at 25 GPM.

Depth from surface to water: 8 ft.

Water-level when pumping: 15 ft.

Water sample sent to laboratory at

on 19

Construction of the well was completed on Oct. 27 19 47

The well is terminated 6 inches ☐ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No

Was the well sealed watertight upon completion? Yes ✓ No

Signature H. A. Butler
Registered Well Driller

Delafield Wis.
Complete Mail Address

Wel. 6-30M (6-50)

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

23

NE, SE, SE, Sec. 35 T7N R19E

1. County Waukesha { Town ☐ Village ☐ City ☒ } PEWAUKEE — Check one and give name

2. Location 1500 E. Main St, Waukesha, Wis
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☒ or Agent ☐ Shilbur Graham
Name of individual, partnership or firm

4. Mail Address 415 N. Park ave, Waukesha, Wis
Complete address required

5. From well to nearest: Building 6 ft; sewer 30 ft; drain 30 ft; septic tank 55 ft; dry well or filter bed 60 ft; abandoned well — ft.

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
8	0	30	6	30	62

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Standard Black Steel	0	62

9. GROUT:

Kind	From (ft.)	To (ft.)
Puddled Clay	0	30

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Gravel	0	30
Clay	30	36
Sand	36	58
Gravel	58	62

RECEIVED
DEC 8 1958
ENVIRONMENTAL SANITATION

Construction of the well was completed on: Nov. 22 1958

The well is terminated 8 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No

Was the well sealed watertight upon completion? Yes X No

11. MISCELLANEOUS DATA:

Yield test: 8 Hrs. at 8 GPM.

Depth from surface to water-level: 32 ft.

Water-level when pumping: 32 ft.

Water sample was sent to the state laboratory at: Madison City on Nov. 24 19 58

Signature Donald Weast Registered Well Driller — Edgewood Drilling, 311 N. St. Paul ave. Waukesha Wis. Complete Mail Address

Please do not write in space below

Rec'd [illegible] No. 38173

Ans'd — SAFE

Interpretation

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli	0				

plot

Examiner 783442

State of Wisconsin
Department of Natural Resources
Box 450
Madison, Wisconsin 53701

APR 19 19/6

NOTE:
White Copy – Division's Copy
Green Copy – Driller's Copy
Yellow Copy – Owner's Copy

WELL CONSTRUCTOR'S REPORT 24

Form 3300-15
Rev. 10-75

COUNTY	CHECK (✓) ONE:	Name
Waukesha	☒ Town ☐ Village ☐ City	Pewaukee

2. LOCATION

¼ Section	Section	Township	Range
NE, SE, SE	35, 36	7N	19E

OR – Grid or Street No. | Street Name
S12 W23085 | E. Main Street

AND – If available subdivision name, lot & block No.

3. NAME ☒ OWNER ☐ AGENT AT TIME OF DRILLING CHECK (✓) ONE
Fayette Trucking Corp.

ADDRESS
W234 S5502 Big Bend Road

POST OFFICE
Waukesha

4. Distance in feet from well to nearest: (Record answer in appropriate block)

Building	Sanitary Bldg. Drain		Sanitary Bldg. Sewer		Floor Drain Connected To:		Storm Bldg. Drain		Storm Bldg. Sewer	
	C.I.	Other	C.I.	Other	C.I. Sewer	Other Sewer	C.I.	Other	C.I.	Other
50							63			

Street Sewer		Other Sewers		Foundation Drain Connected to:		Sewage Sump		Clearwater Sump	Septic Tank	Holding Tank	Sewage Absorption Unit
San.	Storm	C.I.	Other	Sewer	Clearwater Dr.	Sewage Sump	Clearwater Sump	C.I. Other			Seepage Pit / Seepage Bed / Seepage Trench
									not in		

Privy	Pet Waste Pit	Pit: Nonconforming Existing	Subsurface Pumproom Nonconforming Existing	Barn Gutter	Animal Barn Pen	Animal Yard	Silo With Pit	Glass Lined Storage Facility	Silo w/o Pit	Earthen Silage Storage Trench Or Pit
		Well / Pump / Tank								

Temporary Manure Stack	Watertight Liquid Manure Tank	Solid Manure Storage Structure	Subsurface Gasoline or Oil Tank	Waste Pond or Land Disposal Unit (Specify Type)	Other (Give Description)

5. Well is intended to supply water for:
small commercial

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	70

CASING, LINER, CURBING AND SCREEN

Dia. (in.)	Material, Weight, Specification & Method of Assembly	From (ft.)	To (ft.)
6	new black steel pipe	Surface	
	welded joints		
	18.97 lbs. ASTM A53		
	Youngstown		60

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
drilling mud	Surface	20

9. FORMATIONS

Kind	From (ft.)	To (ft.)
hardpan	Surface	60
limestone	60	70

10. TYPE OF DRILLING MACHINE USED

☐ Cable Tool
☐ Rotary-air w/drilling mud
☐ Rotary-w/drilling mud
☒ Rotary-hammer w/drilling mud
☐ Rotary-hammer & air
☐ Reverse Rotary
☐ Jetting with Air / Water

Well construction completed on 3-31 19 76

11. MISCELLANEOUS DATA

Yield Test: 7 Hrs. at 25 GPM

Depth from surface to normal water level 8 Ft.

Depth of water level when pumping 15 Ft. Stabilized ☒ Yes ☐ No

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison laboratory on 4-1 19 76

Any opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of finishing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side.

Signature
Richard Boschi Registered Well Driller

Complete Mail Address
12665 W. Lisbon Rd. Brookfield, Wis. 53005

plot
783441

Wel. 6 25

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha Town ☑ Village ☐ City ☐ Pewaukee (Check one and give name)

2. Location NW1 SW 1/4 NW 1/4 Sec 35 7N R19E (Name of street and number of premises or Section, Town and Range numbers)

RECEIVED FEB 1 1955 ENVIRONMENTAL SANITATION

3. Owner ☑ or Agent ☐ W. E. P. Co. (Name of individual, partnership or firm)

4. Mail Address Waukesha (Complete address required)

5. From well to nearest: Building 6 ft; sewer — ft; drain — ft; septic tank — ft; — dry well or filter bed — ft; abandoned well — ft.

6. Well is intended to supply water for: Shop

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6	0	86			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Std Steel		74'11"

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Drift	0	74
Limestone	74	86

11. MISCELLANEOUS DATA:

Yield test: ---- Hrs. at 25 GPM.

Depth from surface to water-level: 54 ft.

Water-level when pumping: 63 ft.

Water sample was sent to the state laboratory at: Madison (City) on ---- 19--

Construction of the well was completed on: ---- 1955

The well is terminated 11 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ----

Was the well sealed watertight upon completion? Yes ✓ No ----

Signature ---- (Registered Well Driller) ---- (Complete Mail Address)

Please do not write in space below

Rec'd ---- No. ----

Ans'd ----

Interpretation ----

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

plot 783439

Examiner ----

SW, NW, NW, Sec 35

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

Wel 6 26

See Instructions on Reverse Side

1. County Waukesha — Town ☒ Pewaukee / Village ☐ / City ☐ (Check one and give name)

2. Location ~~SW 1/4 S 26~~ T 7 N R 19 E
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☒ or Agent ☐ John Pike
Name of individual, partnership or firm

4. Mail Address W239 S 354 Pewaukee Rd.
Complete address required

5. From well to nearest: Building 39 ft; sewer 50 ft; drain 50 ft; septic tank 60 ft; dry well or filter bed 65 ft; abandoned well 30 ft.

6. Well is intended to supply water for: Older Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10"	0	39	6	73	133
7" OD	0	73			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
7" OD	Steel 23 lbs ft	0	73
6"	open Rock hole	73	133

9. GROUT:

Kind	From (ft.)	To (ft.)
Drilling Mud	0	39

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Stoney Red Clay	0	34
Shelf Rock	34	38
Hard Pan	38	57
Shelf Rock	57	60
Hard Pan + Loose Rock	60	73
Brown Lime	73	133

Construction of the well was completed on: Feb 25 19 63

The well is terminated 24" inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No

Was the well sealed watertight upon completion? Yes ✓ No

11. MISCELLANEOUS DATA:

Yield test: 42 Hrs. at 14 GPM.

Depth from surface to water-level: 67 ft.

Water-level when pumping: 70 ft.

Water sample was sent to the state laboratory at: Madison City on Feb 26 19 63

Signature Donald Prom N81 W15151 Appleton Ave Menomonee Falls
Registered Well Driller — Complete Mail Address

FEB 27 1963

Please do not write in space below

Rec'd No. 5849

Ans'd

Interpretation ~~SAFE~~ BACTERIOLOGICALLY

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner

plot

783438

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

27

Pewaukee WK-773-U

RECEIVED
MAR 10 1949
BUREAU
SAN. ENG.

1. County Waukesha { Town ☐ Village ☐ City ☐ } Waukesha
Check one and give name

2. Location SW¼ NW¼ of NW¼ Sec 35 T 7N R 19E
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☑ or Agent ☐ Theodore Tejnas
Name of individual, partnership or firm

4. Mail Address R. 5 Box 594 Waukesha Wis
Complete address required

5. From well to nearest: Building 8 ft; sewer 25 ft; drain 25 ft; septic tank 60 ft;
dry well or filter bed 100 ft; abandoned well none ft.

6. Well is intended to supply water for: Private Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	20			
6	20	132			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind	From (ft.)	To (ft.)
6	Standard Steel	0	98

9. GROUT:

Kind	From (ft.)	To (ft.)
puddled clay	0	98

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
clay	0	4
hard pan	4	95
broken lime stone	95	98
solid lime stone	98	132

Construction of the well was completed on:
Dec 30 1948

The well is terminated 6 inches
☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion?
Yes ✓ No

Was the well sealed watertight upon completion?
Yes ✓ No

11. MISCELLANEOUS DATA:

Yield test: 2B Hrs. at 20 GPM.

Depth from surface to water-level: 90 ft.

Water-level when pumping: 90 ft.

Water sample was sent to the state laboratory at:
Kenosha City on March 10 1949

Signature Fred Kuch Registered Well Driller

Brookfield Wis Complete Mail Address

Please do not write in space below

Rec'd 2-11-49 No. 4111

Ans'd 2-13-49

Interpretation 2nd

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.	0	0	0	0	0
48 hrs.	0	0	0	0	0
Confirm					
B. Coli					

Examiner AHH

plot

783437

NW, NW, NW, Sec. 35

28

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

RECEIVED APR 12 1950 SAN. ENG.

1. County Waukesha — Town ☒ Village ☐ City ☐ (Check one and give name) Pewaukee

2. Location Corner of county trunks F + FT. T7N R19 (Name of street and number of premise or Sec. Tn. and R. numbers)

3. Owner ☒ or Agent ☐ Walter Haaf (Name of individual, partnership or firm)

4. Mail Address R 5 Box 587 Waukesha (Complete address required)

5. From well to nearest: Building 7 ft; sewer 25 ft; drain none ft; septic tank 35 ft; dry well or filter bed 80 ft; abandoned well 30 ft.

6. Well is intended to supply water for: Private Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)
10	0	20
6	20	129

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind	From (ft.)	To (ft.)
6	Standard Steel		

9. GROUT:

Kind	From (ft.)	To (ft.)
puddled clay	0	103

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
clay	0	6
hard pan	6	95
sand + gravel	95	103
lime stone	103	129

11. MISCELLANEOUS DATA:

Yield test: 2 Hrs. at 24 GPM.

Depth from surface to water: 80 ft.

Water-level when pumping: 82 ft.

Water sample sent to laboratory at Kenosha on March 15 1950

Construction of the well was completed on March 1 1950

The well is terminated 6 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No

Was the well sealed watertight upon completion? Yes ✓ No

Signature Fred Kuck (Registered Well Driller) Brookfield Wis (Complete Mail Address)

3-16-50 #4279

plot

(Owner's Copy)

783436

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

29

DEC 7 1947

1. County Waukesha { Town / ~~Village~~ / ~~City~~ Pewaukee

2. Location NE¼NE¼ Sec 35 T 7N R 19E

3. Owner or Agent J. P. Brenner

4. Address Waukesha RR

5. From well to nearest: Building 5 ft; sewer 25 ft; drain 25 ft; septic tank 50 ft; dry well or filter bed ft; abandoned well ft.
Drain runs to river

6. Well is intended to supply water for: residence

7. DRILLHOLE OR EXCAVATION:

Dia. (in.)	From (ft.)	To (ft.)
6	0	98

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind	From (ft.)	To (ft.)
6	Std steel	0	16'10"

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	Thickness (ft.)	Total Depth (ft.)
Gravely H.P.	9	9
Crumbly Limestone	6	15
Limestone	83	98

11. MISCELLANEOUS DATA:

Yield test: 1½ Hrs. at 10 GPM.

Depth from surface to water: 18 ft.

Water-level when pumping: 45 ft.

Water sample sent to laboratory at

_____ on _____ 19____

Signature H. Butler
Registered Well Driller

Construction of the well was completed on 5/31 1947

The well is terminated 6 inches (above) ~~(below)~~ the permanent grade.

Was the well disinfected upon completion?
Yes ✓ No

Was the well sealed watertight upon completion?
Yes ✓ No

Delafield, Wis.
Complete Mail Address

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

Wel 6 30

See Instructions on Reverse Side

1. County Waukesha — Town ☐ / Village ☐ / City ☐ Pewaukee (Check one and give name)

2. Location High. 18 - 2 Blks East of City Limits (Waukesha) T7N R19E W½, Sec. 36
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☑ or Agent ☐ Johnson Sand & Gravel Inc. (Gravel Pit)
Name of individual, partnership or firm

4. Mail Address 2224 S. 65th St. West Allis, Wis.
Complete address required

RECEIVED
MAY 31 1961
SANITARY ENGINEERING

5. From well to nearest: Building 4 ft; sewer — ft; drain — ft; septic tank — ft; dry well or filter bed — ft; abandoned well — ft.

6. Well is intended to supply water for: Repair Shop - Garage

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	20			
Rod	20	105			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
Rod	Steel	0	92

9. GROUT:

Kind	From (ft.)	To (ft.)
drill cuttings	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Sandy clay	0	32
Sand	32	80
Hard pan	80	92
Lime rock	92	105

Construction of the well was completed on: May 22 1961

The well is terminated 8 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No

Was the well sealed watertight upon completion? Yes ✓ No

11. MISCELLANEOUS DATA:

Yield test: 4 Hrs. at 15 GPM.

Depth from surface to water-level: 36 ft.

Water-level when pumping: 39 ft.

Water sample was sent to the state laboratory at: Madison City on May 22 1961

Signature Joseph Kanka (Registered Well Driller) 13671 W. Greenfield Ave. New Berlin, Wis. (Complete Mail Address)

Please do not write in space below

Rec'd May 24, 1961 No. 16846

Ans'd

Interpretation SAFE—BACTERIOLOGICALLY

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli	0				

Examiner

SEC 36 T7N R19E

Wel 6 31

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha — Town ☑ / Village ☐ / City ☐ Pewaukee (Check one and give name)

2. Location SW1/4 SW 1/4 Sec. 36 (Name of street and number of premise or Section, Town and Range number)

RECEIVED
SEP-2-1-1959
ENVIRONMENTAL SANITATION

3. Owner ☑ or Agent ☐ Geo Jesse (Name of individual, partnership or firm)

4. Mail Address Waukesha Wis. (Complete address required)

5. From well to nearest: Building ~~10~~ ft; sewer ~~10~~ ft; drain ____ ft; septic tank ____ ft; dry well or filter bed ____ ft; abandoned well ____ ft.

6. Well is intended to supply water for: farm

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
14"	0	43			
10"	43	139			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
14"	Steel	0	43
10"	4/3rd lb/ft Steel	0	57

9. GROUT:

Kind	From (ft.)	To (ft.)
Cement	0	43

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Clay	0'	5'
Sand & gravel	5'	27'
gravel	27'	49'
Broken Limestone	49'	57'
Limestone	57'	139'

Construction of the well was completed on: Sept. 4 1959

The well is terminated 14 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ____

Was the well sealed watertight upon completion? Yes ✓ No ____

11. MISCELLANEOUS DATA:

Yield test: 6 Hrs. at 60 GPM.

Depth from surface to water-level: 7 ft.

Water-level when pumping: 35 ft.

Water sample was sent to the state laboratory at: Madison (City) on Sept 8 1959

Signature [signature] Registered Well Driller

LIEBAU-LAUN, INC.
ROUTE 4 BOX 271-A
THIENSVILLE, WISCONSIN
Complete Mail Address

Please do not write in space below

Rec'd SEP 10 1959 31521

Ans'd ____

Interpretation SAFE

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner ____

WELL CONSTRUCTOR'S REPORT — WISCONSIN STATE BOARD OF HEALTH — WK-352 — 32 — Wel 6

1. COUNTY: Waukesha | CHECK ONE: ☐ Town ☐ Village ☒ City | NAME: Waukesha

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)
NE½ SW½ ~~SE¼~~; ~~SE¼~~; ~~NW¼~~; Section 36; T7N; R19E. T7N

RECEIVED
MAR 16 1966

OWNER AT TIME OF DRILLING
SPANCRETE INDUSTRIES, INC.

4. OWNER'S COMPLETE MAIL ADDRESS
S11 W22876 E. Main St. Waukesha, Wisconsin

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	SANITARY ENGINEERED WASTE WATER DRAIN C. I.	SANITARY ENGINEERED WASTE WATER DRAIN TILE

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for: industry.

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
14"	Surface	20	8"	95	150
8-5/8"	20	95			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
14"	3/8 Steel	Surface	20
8"	Steel	8"+	95

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Neat cement	Surface	20
	8"+	

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Drift	Surface	95
Limestone	95	150

Well construction completed on: August 19 65

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 6 Hrs. at 61 GPM

Depth from surface to normal water level: 37 ft.

Depth to water level when pumping: 61 ft.

Water sample sent to (upon installation of permanent pump) laboratory on: 19

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: D E Leicht
LAYNE-NORTHWEST CO.
Registered Well Driller

COMPLETE MAIL ADDRESS
6005 W. Martin Drive, Milwaukee, Wis.
March 7, 1966 TEL.s

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
			cc: M.E. Ostrom 3/2/67	plat 783447

33

NW, SW, SW, | T7N R19E S½ sec 36

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

Wel 6

See Instructions on Reverse Side

1. County Waukesha — Town ☒ Village ☐ City ☐ Brookfield (Check one and give name)

RECEIVED JUN 19 1964 SANITAR. ENGINEERING

2. Location S2 W22955 Main Street (Name of street and number of premise or Section, Town and Range numbers)

3. Owner ☒ or Agent ☐ Mrs. Emery Gronvold (Name of individual, partnership or firm)

4. Mail Address S2 W22955 Main Street - Waukesha, Wis. (Complete address required)

5. From well to nearest: Building 15 ft; sewer ___ ft; drain ___ ft; septic tank 55 ft; ___ dry well or filter bed ___ ft; abandoned well ___ ft. Drilled Deeper

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
			7	145	200

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
7	Black Steel Iron Pipe	0	200

9. GROUT:

Kind	From (ft.)	To (ft.)
Drilled Mud	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
~~Gravel (coarse)~~	145	165
~~Clay (blue)~~	165	188
Gravel (coarse)	188	200
Limestone (water) (bearing)	200	230

Construction of the well was completed on: 6/2 19 64

The well is terminated 8 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No ___

Was the well sealed watertight upon completion? Yes x No ___

11. MISCELLANEOUS DATA:

Yield test: 8 Hrs. at 10 GPM.

Depth from surface to water-level: 120 ft.

Water-level when pumping: 125 ft.

Water sample was sent to the state laboratory at: Madison (City) on 6/2 19 64

Signature Nick Palkoski (Registered Well Driller) S.59 W22815 Glengarry Rd Waukesha Wis (Complete Mail Address)

Please do not write in space below

Rec'd ___ No. ___

Ans'd ___

Interpretation ___

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner ___

NW¼SW¼ SEC 36

Wd. 6

34

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha Town ☐ Village ☐ City ☐ Reeseville Check one and give name

2. Location ~~SW¼ NE¼ Sec 35~~ T 7 R 19
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☒ or Agent ☐ Mrs. Dahlgren
Name of individual, partnership or firm

4. Mail Address Waukesha
Complete address required

RECEIVED FEB 18 1955 ENVIRONMENTAL

5. From well to nearest: Building 5 ft; sewer 20 ft; drain 20 ft; septic tank 30 ft; dry well or filter bed 55 ft; abandoned well ____ ft.

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	58			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
~~Drift~~		
Pit	0	5
Drift	5	36
Limestone	36	58

Construction of the well was completed on: Aug 19 46

The well is terminated 48 inches ☐ above, below ☒ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ____

Was the well sealed watertight upon completion? Yes ✓ No ____

11. MISCELLANEOUS DATA:

Yield test: 1 Hrs. at 10 GPM.

Depth from surface to water-level: 23 ft.

Water-level when pumping: 26 ft.

Water sample was sent to the state laboratory at: Madison City on ____ 19____

Signature ____ Registered Well Driller

Complete Mail Address

Please do not write in space below

Rec'd ____ No. ____

Ans'd ____

Interpretation ____

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner ____

35

Wd. 6

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha — Town ☐ Village ☐ City ☐ Pewaukee (Check one and give name)

2. Location NW¼ SW¼ Sec 36 T 7 R 19
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☒ or Agent ☐ F. Dahlgren
Name of individual, partnership or firm

4. Mail Address Waukesha
Complete address required

RECEIVED FEB 18 1955 ENVIRONMENTAL SANITATION

5. From well to nearest: Building 5 ft; sewer 20 ft; drain 20 ft; septic tank 35 ft; dry well or filter bed 50 ft; abandoned well ____ ft.

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6	0	223			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Old Steel	0	194

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Clay	—	—
Drift	0	188
Limestone	188	223

Construction of the well was completed on: Oct 19 48

The well is terminated ____ inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ____

Was the well sealed watertight upon completion? Yes ✓ No ____

11. MISCELLANEOUS DATA:

Yield test: ____ Hrs. at 500 GPM.

Depth from surface to water-level: 110 ft.

Water-level when pumping: 110 ft.

Water sample was sent to the state laboratory at: Waukesha (City) on ____ 19____

Signature ____ Registered Well Driller

____ Complete Mail Address

Please do not write in space below

Rec'd ____ No ____

Ans'd ____

Interpretation ____

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner ____

T7N R 19E

36

WELL CONSTRUCTOR'S REPORT

Wel–6

JAN 2 1970.

APR 27 1970.

WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

COUNTY: WAUKESHA

CHECK ONE: ☒ Town ☐ Village ☐ City

NAME: PEWAUKEE

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)

S.6-W.22887 HWY 18 - NW, NW, SW, sec. 36

3. OWNER AT TIME OF DRILLING

Wilde Pontiac

4. OWNER'S COMPLETE MAIL ADDRESS

S.6-W.22887 Hwy. "18" Waukesha Wisconsin 53186

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
5 ft.			40		40		40	

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
		160			160				

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for:

Auto Sales and Service

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	6	102	200
6.25	20	102			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Blk. 26 lb. F&C.	Surface	102

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Drill mud	Surface	20

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay hardpan	Surface	3
Gravel clay	3	18
Sand clay silt	18	87
Gravel clay hardpan	87	102
Limestone crev.	102	137
Limestone	137	168
Limestone Crev WB	168	198
Limestone	198	200

Well construction completed on May 13 1969

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 6 Hrs. at 30 GPM

Depth from surface to normal water level 45 ft.

Depth to water level when pumping 46 ft.

Water sample sent to Madison laboratory on: 5/14 19 69

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Garber & Son B. J. Garber Registered Well Driller

COMPLETE MAIL ADDRESS: 22386 W. Green Rd Waukesha Wis. 53186

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS

37

NW, NW, SW, T7N R19E SC 36

RECEIVED WK-145-U
NOV 1 1964
SANITARY ENGINEERING

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH
See Instructions on Reverse Side

1. County Waukesha — Town ☑ Village ☐ City ☐ Pewaukee — Check one and give name
2. Location Hy 18 ~~Se 4, Sec 36 T7N R19E~~ So. 6 W. 22993 — Name of street and number of premise or Section, Town and Range numbers
3. Owner ☑ or Agent ☐ R. Frederick — Name of individual, partnership or firm
4. Mail Address 8704 W. Slinger Ave. West Allis — Complete address required
5. From well to nearest: Building 200 ft; sewer ___ ft; drain ___ ft; septic tank 250 ft; dry well or filter bed 250 ft; abandoned well ___ ft.
6. Well is intended to supply water for: concrete mix-plant

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
12	0	20	8	20	~~119~~ 444

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
8	steel-32 lbs ft	0	119

9. GROUT:

Kind	From (ft.)	To (ft.)
Bentonite Mud	0	20
	and deeper	

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Clay & gravel	0	22
sand	22	65
gravel	65	109
Hard-pan	109	119
Limestone	119	444

11. MISCELLANEOUS DATA:

See questionable High Cap file

Yield test: 8 Hrs. at 45 GPM.

Depth from surface to water-level: 84 ft.

Water-level when pumping: 142 ft.

Water sample was sent to the state laboratory at: Madison (City) on Oct. 5 1964

Construction of the well was completed on: July 10 1964

The well is terminated 8 inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ___

Was the well sealed watertight upon completion? Yes ✓ No ___

Signature Alex. Paley, 4535 N. 76 St. Milw. 18, Wisc. — Registered Well Driller — Complete Mail Address

Please do not write in space below

Rec'd OCT 6 1964 No. 47484

Ans'd OCT 8 1964

Interpretation

6.25 ppm DETERGENT PRESENT

SAFE—BACTERIOLOGICALLY

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.	+	0	0	0	0
Confirm	0				
B. Coli	0				

plot 783446

Examiner

38

NOV 30 1971

WELL CONSTRUCTOR'S REPORT
FORM 3300-15

NOTE
WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

PEWAUKEE

1. COUNTY: Waukesha
CHECK ONE: ☒ Town ☐ Village ☐ City
NAME: Waukesha

2. LOCATION — ¼ Section: NE, NW, SW | Section: 36 | Township: 7N | Range: 19E
OR – Grid or street no.: W. 228 S. 707 | Street name: Hwy A
AND – If available subdivision name, lot & block no.:

3. OWNER AT TIME OF DRILLING: Steel Line Builders, Inc.
ADDRESS: 16601 West Dakota, St
POST OFFICE: New Berlin, Wis

4. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
10	50	—	55	—	—	—	—	—

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
—	—	60	—	—	75	—	—	—	—

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

5. Well is intended to supply water for: INDUSTRY, SPORTING GOOD'S STORE

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	30	6 1/8	30	170

7. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
7 OD	New, Blk. Steel T & C, 23#	Surface	115

9. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay	Surface	30
gravel	30	90
Sand	90	115
Limestone	115	170

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Clay Slurry	Surface	30

10. TYPE OF DRILLING MACHINE USED
☒ Cable Tool ☐ Direct Rotary ☐ Reverse Rotary
☐ Rotary – air w/drilling mud ☐ Rotary – hammer with drilling mud & air ☐ Jetting with ☐ Air ☐ Water

Well construction completed on: NOV 13 19 71

11. MISCELLANEOUS DATA
Yield test: 9 Hrs. at 10 GPM
Depth from surface to normal water level: 45 ft.
Depth to water level when pumping: 60 ft.

Well is terminated 8 inches ☒ above ☐ below final grade
Well disinfected upon completion ☒ Yes ☐ No
Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison, Wis laboratory on: Nov 29 19 71

Any opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Henry Hartman Registered Well Driller
COMPLETE MAIL ADDRESS: 5700 N. 56 St. Milw, Wis

Please do not write in space below

COLIFORM TEST RESULT	GAS – 24 HRS.	GAS – 48 HRS.	CONFIRMED	REMARKS

Wel. 6-30M (6-50) 39

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

RECEIVED OCT 14 1952 ENVIRONMENTAL SANITATION

NE, SW, Sec 36 T7N R19E

1. County Waukesha — Town ☒ Village ☐ City ☐ Pewaukee (Check one and give name)
2. Location Highway Y, 1/4 Mile West of Davidson Road, Pewaukee, Wisconsin
   Name of street and number of premise or Section, Town and Range numbers
3. Owner ☒ or Agent ☐ Ethan S. Briggs
   Name of individual, partnership or firm
4. Mail Address Route 4, Waukesha, Wisconsin
   Complete address required
5. From well to nearest: Building 15 ft; sewer -- ft; drain 15 ft; septic tank -- ft; dry well or filter bed -- ft; abandoned well -- ft.
6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	19			
6	19	142			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Steel 19.45	0	142

9. GROUT:

Kind	From (ft.)	To (ft.)
Slurry clay	0	19

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Red clay	0	5
Boulders and gravel	5	28
Gravel	28	60
Hard pan	60	75
Gravel	75	93
Hard pan	93	105
Gravel	105	108
Hard pan	108	129
Sand and gravel	129	133
Hard pan	133	140
Water-bearing Gravel	140	142

Construction of the well was completed on: September 26 1952

The well is terminated 8 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No

Was the well sealed watertight upon completion? Yes X No

11. MISCELLANEOUS DATA:

Yield test: 4 Hrs. at 8 GPM.

Depth from surface to water-level: 110 ft.

Water-level when pumping: 122 ft.

Water sample was sent to the state laboratory at: Kenosha (City) on Sept. 30 1952

Signature E. H. Domeski — Registered Well Driller

1595 Woodland, Pewaukee, Wisconsin — Complete Mail Address

Please do not write in space below

Rec'd 10-3-52 No. 1628

Ans'd 10-5-52

Interpretation Safe

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.	0	0	0	0	0
48 hrs.	0	0	0	0	0
Confirm					
B. Coli					

Examiner R F Cn

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER DF 977

State of Wisconsin
Department of Natural Resources
Private Water Supply — WS/2
Box 7921
Madison, WI 53707

JUL 2 1991

40

Property Owner: Peter Gilsinger
Telephone Number: ( )
Mailing Address: 1601 E. Main st.
City: Waukesha | State: Wi | Zip Code: 53186
County of Well Location: Wauk. | County Well Location Permit No.: W | Well Completion Date: 06/19/91 (MM DD YY)

68

Well Constructor (Business Name): Gibouk Well & Pump | Registration #: 17
Address: 7482 Circle Dr.
City: [illegible] | State: Wi | Zip Code: [illegible]

1. Location (Please type or print using a black pen.)
☐ Town ☒ City ☐ Village of Waukesha | Fire # (if available)
Grid or Street Address or Road Name and Number (if available): 1601 E. Main st.
Subdivision Name | Lot # | Block #
Gov't Lot # ____ or ne ¼ of sw ¼ of Section 36 ; T 7 N; R 19 ☒ E ☐ W

2. Mark well location in correct 40-acre parcel of section. (N / S / E / W grid, marked x)

3. Well Type ☒ New ☐ Replacement ☐ Reconstruction
of unique well # ________ constructed in 19____.
Reason for new, replaced or reconstructed well? new residence

4. Well serves 1 # of homes and/or ________ (ex: barn, restaurant, church, school, industry, etc.)
High Capacity Well? ☐ Yes ☒ No
High Capacity Property? ☐ Yes ☒ No
☒ Drilled ☐ Driven Point ☐ Jetted ☐ Other

5. Well Located on Highest Point of Property, Consistent with the General Layout and Surroundings? ☒ Yes ☐ No If no, explain on back side.
Well Located in Floodplain? ☐ Yes ☒ No
Distance In Feet From Well To Nearest:

	1. Landfill		9. Downspout/Yard Hydrant		17. Wastewater Sump
75	2. Building Overhang		10. Privy		18. Paved Animal Barn Pen
75	3. Septic or Holding Tank		11. Foundation Drain to Clearwater		19. Animal Yard or Shelter
	4. Sewage Absorption Unit		12. Foundation Drain to Sewer		20. Silo — Type
	5. Nonconforming Pit		13. Building Drain ☐ Cast Iron or Plastic ☐ Other		21. Barn Gutter
	6. Buried Home Heating Oil Tank	[illegible]	14. Building Sewer ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other		22. Manure Pipe ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
	7. Buried Petroleum Tank		15. Collector or Street Sewer		23. Other Manure Storage
	8. Shoreline/Swimming Pool		16. Clearwater Sump		Other NR 112 Waste Source 24.

6. Drillhole Dimensions

Dia. (in.)	From (ft.)	To (ft.)
8.75 / 8-3/4	surface	65
6	65	125

Method of constructing upper enlarged drillhole only.
☒ 1. Rotary — Mud Circulation
☐ 2. Rotary — Air
☐ 3. Rotary — Foam
☐ 4. Reverse Rotary
☐ 5. Cable-tool Bit ____ in. dia.
☐ 6. Temp. Outer Casing ____ in. dia. Removed? ☐ Yes ☐ No If no, explain ____
☐ 7. Other ____

9. Geology

DNR USE ONLY	Type, Caving/Noncaving, Color, Hardness, Etc.	From (ft.)	To (ft.)
C	clay	surface	35
GC	gravel and boulders	35	44
Z	clay & gravel	44	65
L	limestone	65	125

7. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Mfg. & Method of Assembly	From (ft.)	To (ft.)
6	ASTM A-53-B P.E. Sawhill	surface	65

Dia. (in.)	screen type and material	From	To

8. Grout or Other Sealing Material
Method ________

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
drilling mud	surface	65	

10. Static Water Level
____ ft. above ground level
24 ft. below ground surface

11. Pump Test
Pumping Level 24 ft. below surface
Pumping at 15 GPM for 2 hours

12. Well Is: 16 in. ☒ Above ☐ Below Grade
Developed? ☒ Yes ☐ No
Disinfected? ☒ Yes ☐ No
Capped? ☒ Yes ☐ No

13. Did you permanently seal all unused, noncomplying, or unsafe wells? ☐ Yes ☒ No If no, explain owner's responsible

14. Signature of Point Driver or Registered Driller [signature] Date Signed 6/28/91
Signature of Drill Rig Operator [signature] DG Date Signed

Make additional comments on reverse side about geology, etc.

DNR

WELL CONSTRUCTION REPORT
Form 3300-77A Rev. 9-88

116

State of Wisconsin
Department of Natural Resources
Private Water Supply
Box 7921
Madison, Wisconsin 53707

NOTE:
White Copy – Division's Copy
Green Copy – Driller's Copy
Yellow Copy – Owner's Copy

WELL CONSTRUCTOR'S REPORT
Form 3300-15 Rev. 2-79

MAR 10 1986

41

1 COUNTY: Waukesha

CHECK (✓) ONE: ☒ Town ☐ Village ☐ City

Name: Pewaukee ✓

2. LOCATION: ¼ Section or Gov't. Lot: SW, NE, SW ✓ | Section: 36 | Township: 7N | Range: 19E

OR – Grid or Street No.: W227 S1020 | Street or Road Name: CTH A (Main St?)

AND – If available subdivision name, lot & block No.:

3. NAME ☒ OWNER ☐ AGENT AT TIME OF DRILLING CHECK (✓) ONE: Link Associates, Inc.

ADDRESS: 200 S. Prairie ✓

POST OFFICE: Waukesha | ZIP CODE:

4. Distance in feet from well to nearest: (Record answer in appropriate block)

Building	Sanitary Bldg. Drain C.I.	Sanitary Bldg. Drain Other	Sanitary Bldg. Sewer C.I.	Sanitary Bldg. Sewer Other	Floor Drain Connected To: C.I. Sewer	Floor Drain Connected To: Other Sewer	Storm Bldg. Drain C.I.	Storm Bldg. Drain Other	Storm Bldg. Sewer C.I.	Storm Bldg. Sewer Other
60										

Street Sewer San.	Street Sewer Storm	Other Sewers C.I.	Other Sewers Other	Foundation Drain Connected to: Sewer	Foundation Drain Connected to: Sewage Sump	Sewage Sump C.I.	Sewage Sump Other	Clearwater Sump	Septic Tank	Holding Tank	Sewage Absorption Unit	Manure Hopper or Retention or Pnuematic Tank
				Clearwater Dr.	Clearwater Sump 70			70		45	Seepage Pit / Seepage Bed / Seepage Trench	

Privy	Pet Waste Pit	Pit: Nonconforming Existing	Subsurface Pumproom Nonconforming Existing	Barn Gutter	Animal Barn Pen	Animal Yard	Silo With Pit	Glass Lined Storage Facility	Silo w/o Pit	Earthen Silage Storage Trench Or Pit	Earthen Manure Basin
		Well / Pump / Tank									

Temporary Manure Stack or Platform	Watertight Liquid Manure Tank or Basin	Manure Pressure Pipe	Subsurface Gasoline or Oil Tank	Waste Pond or Land Disposal Unit (Specify Type)	Manure Storage Basin / Concrete Floor Only / Concrete Floor and Partial Concrete Walls	Other (Describe)

5. Well is intended to supply water for: Office & Show Room

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	255

CASING, LINER, CURBING AND SCREEN
Material, Weight, Specification

(in.)	Mfg. & Method of Assembly	From (ft.)	To (ft.)
6	New Black	Surface	118
	P.E. A53 A53		
	19# (persico)		

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Clay Slurry	Surface	20
Premixed, Set by pump Thru Conductor		

9. FORMATIONS

Kind	From (ft.)	To (ft.)
Sand	Surface	67
Hardpan	67	103
Gravel	103	118
Limestone	118	255

10. TYPE OF DRILLING MACHINE USED

☒ Cable Tool ☐ Rotary-hammer w/drilling mud & air ☐ Jetting with
☒ Rotary-air w/drilling mud ☐ Rotary-hammer & air ☐ Air
☐ Rotary-w/drilling mud ☐ Reverse Rotary ☐ Water

Well construction completed on Jan. 29 19 86

11. MISCELLANEOUS DATA

Yield Test: 18 Hrs. at 60 GPM

Depth from surface to normal water level 50 Ft.

Depth of water level when pumping 55 Ft. Stabilized ☒ Yes ☐ No

Well is terminated _____ inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison laboratory on 2-24 19 86

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of ing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side.

HARTMAN WELL DRILLING & PUMP SE

Name of Registered Well Driller: Steven L. Hartman

Business Name and Complete Mailing Address: New Berlin, WI 53151

547-5222

State of Wisconsin
Department of Natural Resources
Private Water Supply
Box 7921
Madison, Wisconsin 53707

NOTE:
White Copy – Division's Copy
Green Copy – Driller's Copy
Yellow Copy – Owner's Copy

WELL CONSTRUCTOR'S REPORT
Form 3300–15 Rev. 2-79

42

SEP 27 1985

1. COUNTY: Waukesha
CHECK (✓) ONE: ☐ Town ☐ Village ☒ City
Name: Pewaukee

2. LOCATION
¼ Section or Gov't Lot # | Section | Township | Range
SE, NE, SW | 36 | 7N | 19E
OR – Grid or Street No. | Street or Road Name
S9 W22525 | Main Street
AND – If available subdivision name, lot & block No.

3. NAME ☐ OWNER ☒ AGENT AT TIME OF DRILLING CHECK (✓) ONE
Burkhart Const. Co.
ADDRESS
N60 W15128 Bobolink Ave.
POST OFFICE | ZIP CODE
Menomonee Falls | 53051

4. Distance in feet from well to nearest: (Record answer in appropriate block)

Building	Sanitary Bldg. Drain		Sanitary Bldg. Sewer		Floor Drain Connected To:		Storm Bldg. Drain		Storm Bldg. Sewer	
	C.I.	Other	C.I.	Other	C.I. Sewer	Other Sewer	C.I.	Other	C.I.	Other
18										

Street Sewer		Other Sewers		Foundation Drain Connected to:		Sewage Sump		Clearwater Sump	Septic Tank	Holding Tank	Sewage Absorption Unit	Manure Hopper or Retention or Pnuematic Tank
San.	Storm	C.I.	Other	Sewer	Sewage Sump	C.I.	Other				Seepage Pit	
				Clearwater Dr.	Clearwater Sump				not in		Seepage Bed	
											Seepage Trench	

Privy	Pet Waste Pit	Pit: Nonconforming Existing			Subsurface Pumproom	Barn Gutter	Animal Barn Pen	Animal Yard	Silo With Pit	Glass Lined Storage Facility	Silo w/o Pit	Earthen Silage Storage Trench Or Pit	Earthen Manure Basin
		Well	Pump	Tank	Nonconforming Existing								

Temporary Manure Stack or Platform	Watertight Liquid Manure Tank or Basin	Manure Pressure Pipe	Subsurface Gasoline or Oil Tank	Waste Pond or Land Disposal Unit (Specify Type)	Manure Storage Basin	Other (Describe)
					Concrete Floor Only	
					Concrete Floor and Partial Concrete Walls	

5. Well is intended to supply water for: ~~house~~ OFFICE

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20	6	20	245

[redacted]ASING, LINER, CURBING AND SCREEN
Material, Weight, Specification

(in.)	Mfg. & Method of Assembly	From (ft.)	To (ft.)
6"	black steel pipe welded joints 18.97 lb. ASTM A120 1200 psi Valley Steel	Surface	153

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
drilling mud	Surface	20

9. FORMATIONS

Kind	From (ft.)	To (ft.)
stoney clay	Surface	90
hardpan	90	130
stoney clay	130	153
limestone	153	245

10. TYPE OF DRILLING MACHINE USED
☐ Cable Tool ☒ Rotary-hammer w/drilling mud & ~~xxx~~ ☐ Jetting with
☐ Rotary-air w/drilling mud ☐ Rotary-hammer & air ☐ Air ☐ Water
☐ Rotary-w/drilling mud ☐ Reverse Rotary

Well construction completed on 9-20 19 85

11. MISCELLANEOUS DATA
Yield Test: 4 Hrs. at 20 GPM
Depth from surface to normal water level 97 Ft.
Depth of water level when pumping 118 Ft. Stabilized ☒ Yes ☐ No

Well is terminated 8 inches ☒ above ☐ below final grade
Well disinfected upon completion ☒ Yes ☐ No
Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison laboratory on 9-30 19 85

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of [redacted]ing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side.

plot

[redacted]ature
Richard Roschi
Registered Well Driller

Business Name and Complete Mailing Address
Roschi Bros. Well Drilling & Pumps, Inc.
12665 W. Lisbon Rd. Brookfield, Wis. 53005

723449

STATE OF WISCONSIN

WELL CONSTRUCTOR'S REPORT — DEPARTMENT OF RESOURCE DEVELOPMENT

N-8=67
R-28-67
Wel 6

1. COUNTY: Waukesha

CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Waukesha

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)

SE, NW¼ S1 T6N R19E

NEAR AT TIME OF DRILLING

Standard Theatres Inc.

4. OWNER'S COMPLETE MAIL ADDRESS

725 E. Michigan St., Mil.

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
10								

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
		80			80				

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for: Drive-in Theatre

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
12	Surface	50	7 7/8	94	182
8	50	94			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
12"	3/8 Wall - Steel	Surface	50
8"	5/16 Wall - Steel	0	94

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Cement grout (neat)	Surface	50

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Sand - fill	Surface	5
Dump - old city	5	15
Hardpan	15	25
Hardpan, gravel, (fine)	25	70
Hardpan, gravel (coarse)	70	80
Gravel, coarse	80	90
Gravel, fine	90	94
Limestone	94	182

Well construction completed on July 3 19 67

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 8 Hrs. at 70 GPM

Depth from surface to normal water level 27 ft.

Depth to water level when pumping 42 ft.

Water sample sent to Madison laboratory on: July 27 19 67

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Donald J. Prom — Registered Well Driller

COMPLETE MAIL ADDRESS: N81 W15151 Appleton Ave., Meno Falls

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS

WK-650-U Wel. 6-30M-(6-50)

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha — Town ☒ / Village ☐ / City ☐ Waukesha (Check one and give name)

2. Location 1325 Ellis St. Waukesha Wis. (Name of street and number of premise or Section, Town and Range numbers) SE Sec 2 Pur USGS T6N R19E

3. Owner ☒ or Agent ☐ A.M. Gigous & Sons excvting cntrs. (Name of individual, partnership or firm)

4. Mail Address 805 N. Grand Ave. Waukesha Wis. (Complete address required)

5. From well to nearest: Building 10 ft; sewer 30 ft; drain 30 ft; septic tank 50 ft; dry well or filter bed 60 ft; abandoned well ____ ft.

6. Well is intended to supply water for: Garage

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	30	6	30	98

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Black Steel	0	71

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Gravel	0	40
Clay	40	70
limestone	71	98

RECEIVED
JUL 17 1957
ENVIRONMENTAL SANITATION

Construction of the well was completed on: June 7 19 57

The well is terminated 8 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No

Was the well sealed watertight upon completion? Yes X No

11. MISCELLANEOUS DATA:

Yield test: 8 Hrs. at 8 GPM.

Depth from surface to water-level: 40 ft.

Water-level when pumping: 80 ft.

Water sample was sent to the state laboratory at: Madison (City) on June 9 1957

Signature Donald Keast (Registered Well Driller) 311 W. St. Paul Ave. Waukesha Wis. (Complete Mail Address)

Please do not write in space below

Rec'd JUL 9 1957 No. 2016

Ans'd

Interpretation SAFE

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli	0				

Examiner

Wel. 6

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha — Town ☐ / Village ☐ / City ☐ Waukesha — Check one and print name

SW, Sec 1, or SE, Sec 2

2. Location Pearl St. T6N R19E

Name of street and number of premise or Section, Town and Range numbers

3. Owner ☐ or Agent ☐ Waukesha Tool Co.

Name of individual, partnership or firm

4. Mail Address Pearl St Waukesha

Complete address required

5. From well to nearest: Building 10 ft; sewer ___ ft; drain ___ ft; septic tank ___ ft; dry well or filter bed ___ ft; abandoned well ___ ft.

6. Well is intended to supply water for: Shop.

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	0	25			
6	25	160			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6"	Std Steel	0	978

9. GROUT:

Kind	From (ft.)	To (ft.)
Clay	0	25

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Drift	0	94½
Limestone	94½	160

Construction of the well was completed on: Sept. 19 55

The well is terminated 10 inches ☐ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No ___

Was the well sealed watertight upon completion? Yes ✓ No ___

11. MISCELLANEOUS DATA:

Yield test: ___ Hrs. at 30 GPM.

Depth from surface to water-level: 40 ft.

Water-level when pumping: 40 ft.

Water sample was sent to the state laboratory at: Madison City on Sept 19 55

H. A. [illegible]
WELL CONTRACTOR
BRLAFIELD, WIS.

Signature ___ Registered Well Driller — Complete Mail Address

Please do not write in space below

Rec'd ___ No. ___

Ans'd ___

Interpretation ___

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner ___

APPENDIX B

SOIL BORING LOGS

RMT Field Soil Boring Log Information

RMT Project No: 3777.01 — Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar International	8 Apr 96	11 Apr 96	NPZ-1

Boring Drilled By	Drilling Method
Boart/Longyear/Randy Radke	HSA/Rock Core/Air Hammer

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
BK-66				6 1/4 Inches

Boring Location — State Plane — Easting — Northing

SE 1/4 of SW 1/4 of Section 35 T 7 N,R 19E

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

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

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
				Blind drill to 18 feet: Gravelly (maybe weathered Dolomite) from 7' to 18'.					
			18	Auger Refusal					
				Weathered Dolomite (Tricone-Air)					
Run 1	58.5" 98%	NA	20	Gray Dolomite, hairline (nonbroken) fractures, some vugs, horizontal fractures or partings with some staining near 19, 21, 23, 26.5, 27.3, 29, 30.5, 32, 34, 35, 36, and 37.5 feet.	RK Core				RQD=43
Run 2	116.3 97%	NA	25, 30	Crisco on core @ 24' Core wet	〃				RQD=79
Run 3	95 88%	NA	35, 40	Produced a large amount of water from 34'-43'	〃				RQD=8
			45	End of Boring 43.5 Feet					

Logged By: Craig O. Bartholomew (signature)

Checked By: (signature) 4/18/96

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No: 3777.01 Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar International	8Apr96	10Apr96	NPZ-2

Boring Drilled By: Boart/Longyear/Randy Radke

Drilling Method: HSA/Rock Core/Air Hammer

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
BK-66				6¼ Inches

Boring Location: State Plane — Easting — Northing

SE 1/4 of SW 1/4 of Section 35 T 7 N,R 19E

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

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

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
				Blind Drill to 23 feet. Gravelly (may be weathered dolomite) 5' to 23' Wet at 21 feet. Auger Refusal at 23 feet					
Run 1	48 80%	NA	23 25	Gray Dolomite, hairline (nonbroken) vertical fractures some vugs, horizontal fractures or partings with some staining near 23.4, 25, 25.5, 26, 27, 29, 31, 32, 33, 35, 40.5, 42, and 38.5 feet. ✓	RK core				RQD=64%
Run 2	113 94%	NA	30 35	Produced approximately 50 gallons of water from 23 to 28 feet, very vuggy 39.3 to 43 feet. w secondary calcite precipitation in vugs.	11				RQD=77%
Run 3	61 100%	NA	40 45 50	End of Boring 43.5 Feet	11				RQD=86%

Logged By: Craig O'Boyle

Checked By: Bleib 4/18/96

F-2048 (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-25-96	3-25-96	GP-1

Boring Drilled By	Drilling Method
SDI Brian Sauter	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location State Plane	Easting	Northing	Local Grid Location (If applicable)
1/4 of	1/4 of Section	T N,R	Feet ☐ N ☐ S Feet ☐ E ☐ W

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Asphalt					
1	14	NA	3	Fill, sandy lean clay, CL, plastic, brown 10YR 5/3, dry, stiff, tr foundry sand.		<2			
2	8	NA	5			<2			
3	9	NA	7	SAA trace gravel		<2			Lab
4	8	NA	9	clayey sand with gravel, brown 10YR 5/3, moist, med loose.		<2			
5	9	NA	11			<2			
6	7	NA	13	EOB @ 12' probe refusal		<2			

Logged By: Bryan J. K

Checked By:

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-25-96	3-25-96	GP-2

Boring Drilled By	Drilling Method
SDI Brian	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location State Plane	Easting	Northing	Local Grid Location (If applicable)
1/4 of	1/4 of Section T N,R		☐ N ☐ E Feet ☐ S Feet ☐ W

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Asphalt					
1	12	NA	3	Sandy Lean clay with Gravel, CL, low plastic, brown 10YR5/3, dry, stiff.		<2			
2	7	NA	5			<2			
3	10	NA	7			<2			Log
4	14	NA	9	clayey sand with gravel, brown 10YR 5/3, moist, med loose		<2			
5	9	NA	11			<2			
6	12	NA	13			<2			
7	8	NA	15	EOB @ 14 probe refusal		<2			

Logged By: Gregory J. [illegible]

Checked By:

F-2048 (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Project Name	Start Date	End Date	Boring Number
Navistar	3-25-96	3-25-96	GP-3

Boring Drilled By	Drilling Method
SDI Brian	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location — State Plane — 1/4 of — 1/4 of Section — T — N,R — Easting — Northing

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Asphalt					
1	4	NA	3	SANDY LEAN CLAY WITH GRAVEL, low plastic, dark brown, dry, stiff		<2			
2	16	NA	5			<2			Lab
3	0	NA	7			NA			
4	6	NA	9			<2			
5			11	EOB @ 8 probe refusal					
			13						

Logged By: Gregory J. [illegible]

Checked By:

F-2048 (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-25-96	3-25-96	GP-4

Boring Drilled By	Drilling Method
SDI Brian	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location
State Plane Easting Northing
1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Asphalt					
1	17	NA	3	Sandy Lean clay with gravel, CL, low plastic, black, dry, stiff, trace foundry sand.		<2			
2	13	NA	5			<2			Lab
3	15	NA	7	Clayey sand with gravel, SC, brown 10YR 5/3, moist, med loose		<2			
4	0	NA	9	EOB @ 8' probe refusal		NA			
5			11						
			13						

Logged By: Gregory J. Yo

Checked By:

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-25-96		GP-5

Boring Drilled By	Drilling Method
SDI Brian	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location — State Plane: Easting / Northing; 1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	ROD/ Comments
				Asphalt					
			1	Sandy Lean clay with gravel, low plastic, brown 10YR5/3, dry, stiff, lt. foundry sand.		3			Lab
1	17	NA				<2			
2	20	NA	3			<2			
			5						Lab
3	15	NA				<2			
			7						
4	4	NA				<2			
			9	Clayey sand with gravel, SC, brown 10YR5/3 moist ~~stiff~~ med loose					
5	8	NA				NA			
			11						
6	0	NA							
			13			<2			
7	14	NA		SAA but wet					
			15			<2			
8	5	NA							
			17	EOB @ 17' prone refusal,					

Logged By: Gregory J. K

Checked By:

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-25-96	3-25-96	GP-6

Boring Drilled By	Drilling Method
SDI Brian	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location
State Plane Easting Northing
1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Asphalt					
1	4	NA	3	Sandy Lean clay with gravel, CL, low plastic, brown 10YR5/3, dry, stiff		<2			
2	22	NA	5			3			Lab
3	18	NA	7			<2			
4	20	NA	9	Clayey sand, ~~SC~~, with gravel, SC, brown 10YR 5/3, moist, med loose		<2			Lab
5	10	NA	11			<2			
6			13	EOB @ 11 probe refusal					

Logged By: Gregory J. K

Checked By:

F-2048 (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-26-96		GP-7

Boring Drilled By	Drilling Method
SDI Adam	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location State Plane	Easting	Northing	Local Grid Location (If applicable)
1/4 of	1/4 of Section T N,R		☐ N ☐ E Feet ☐ S Feet ☐ W

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	ROD/ Comments
				Limestone aggregate					
1	6	NA	1	Sandy Lean Silt with gravel, CL, plastic		<2			
			3	brown 10YR 5/3, dry, stiff					
2	5	NA				<2			
			5						
3	9	NA		Silty		<2			
			7	~~Clayey~~ sand with gravel, SC, brown					
4	6	NA		10YR 5/3, dry, med dense		<2			
			9						
5	5	NA				<2			
			11						
6	10	NA				<2			Lab
			13						
7	11	NA		wet @ 14.5'		<2			
			15	EOB @ 14.8'					

Logged By: Gregory J. K

Checked By: Dan Rybicki

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-26-96		GP-8

Boring Drilled By	Drilling Method
SDI Adam	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location
State Plane Easting Northing
1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Limestone aggregate - (basement excavated area)					
1	18	NA	3	Silty Sand & Gravel (fill)		<2			
2	14	NA	5			<2			
3	0	NA	7			NA			
4	0	NA	9			NA			
5	2	NA	11	SAA but wet @ 11'		<2			
6	0	NA	13	Silty		NA			
7	14	NA	15	~~Clayey~~ Sand with gravel, brown 10YR 5/3, wet, med dense. Fill		5			Lab
8	12	NA	17	Black and petro-like odor @ 14.8'		5			
				EOB @ 16 probe refusal					

Logged By:

Checked By:

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Project Name	Start Date	End Date	Boring Number
Navistar	3-29-96		GP-9

Boring Drilled By	Drilling Method
SDI Adam	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location State Plane Easting Northing 1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
				Fill Limestone Aggregate					
1	11	NA	1	Poorly Graded Gravel with some Silt, Sand, and clay, brown 10YR5/3, dry, med dense.		<2			
2	8	NA	3			<2			
3	4	NA	5			<2			
4	7	NA	7	SAA but abundant sand f to c		<2			Lab
5	Ø	NA	9	Angular dolostone fragments.		NA			
6	3	NA	11	Appears to be weathered bedrock		<2			
7	4	NA	13	EOB @ 13.5' probe refusal		<2			
			15						
			17						

Logged By: Gregory J. [signature]

Checked By: [signature]

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-29-96		GP-10

Boring Drilled By	Drilling Method
SDF Adam Sauter	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			(Inches

Boring Location
State Plane Easting Northing
1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Limestone-aggregate					
1	10	NA	3	Poorly Graded sand with gravel, SP, brown 10YR5/3, dry, loose, (fill)		<2			
2	15	NA	5			<2			
3	12	NA	7	~~SAND but some clay~~ Poorly Sorted Silt, Sand, and clay with Some gravel		<2			Lob
4	4	NA	9	Silt Plastic		<2			
5	18	NA	11	Sandy Lean Clay, CL, gray 10YR4/1, wet, stiff		<2			
				EOB @ 11'					

Logged By: Gregory J. K

Checked By:

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-27-96		GP-11

Boring Drilled By	Drilling Method
SDF Adam Sauter	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location State Plane	Easting	Northing	Local Grid Location (If applicable)
1/4 of	1/4 of Section	T N,R	☐ N ☐ E Feet ☐ S Feet ☐ W

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
			1	Limestone aggregate					
1	14	NA	3	Poorly Graded Sand with gravel, dry, brown 10YR 5/3, med dense		<2			
2	19	NA	5	sandy fill Sandy Lean clay, CL, plastic, brown, moist, stiff		<2			
3	16	NA	7			<2			
4	15	NA	9	Poorly Sorted Silt, Sand & gravel/ Clayey Silt w/ angular gravel, wet		<2			Lab
5	17	NA	11	~~SAA but wet~~		<2			
				EOB @ 11'					

Logged By: Gregory

Checked By: Dan Koplish

F-2048 (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

[redacted] Project Name	Start Date	End Date	Boring Number
Navistar	3-29-96		GP-12

Boring Drilled By	Drilling Method
SDF Adam	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	WA			1 Inches

Boring Location
State Plane Easting Northing
1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	*Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)*	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
				Limestone Aggregate					
1	20	NA	1	Poorly Graded sand with gravel, SP, brown 10YR 5/3, dry, med dense, fill		5			Lab
2	18	NA	3			<2			
3	15	NA	5	Sandy Lean Clay, CL, ~~plastic~~, brown 10YR5/3, moist, stiff		<2			Lab
4	15	NA	7	Silty Sand & gravel		<2			
5	13	NA	9	SAA but wet Clayey Silt-gray, wet		<2			
			11	EOB @ 11'					

Logged By: Gregory J. [signature]

Checked By: [signature]

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

[redacted]Project Name: Navistar	Start Date: 3-29-96	End Date:	Boring Number: GP-13
Boring Drilled By: SDI Adam	Drilling Method: Geoprobe		

Drill Rig: Simco	Common Well Name: NA	Initial Water Level:	Surface Elevation:	Borehole Diameter: 1 Inches	

Boring Location State Plane	Easting	Northing	Local Grid Location (If applicable) ☐ N ☐ E
1/4 of	1/4 of Section	T N,R	Feet ☐ S Feet ☐ W

County: Waukesha	State: WI	DNR County Code:	Civil Town/City/ or Village: Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	*Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)*	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
				Limestone Aggregate					
1	19	NA	1, 3	SANDY LEAN CLAY WITH GRAVEL, CL, plastic, brown 10YR 5/3, dry, stiff		<2			
2	20	NA	5	SAA but no sand fill		<2			
3	17	NA				<2			Lab
4	5	NA	7	Silty Sand & gravel		<2			
5	14	NA	9, 11	Clayey Silt, 6104 ~~SAA but~~ wet @ gray		<2			
				EOB @ 11					

Logged By: Gregory J. [illegible]

Checked By: [illegible]

F-204B (R 12-94)

RMT Field Soil Boring Log Information

RMT Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Navistar	3-29-96		GP-14

Boring Drilled By	Drilling Method
SDI Adam Sauter	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
Simco	NA			1 Inches

Boring Location State Plane Easting Northing; 1/4 of 1/4 of Section T N,R

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

County	State	DNR County Code	Civil Town/City/ or Village
Waukesha	WI		Waukesha

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
				Limestone Aggregate					
1	18	NA	1	SANDY LEAN CLAY WITH GRAVEL, CL, plastic, brown 10YR 5/3, dry, stiff		<2			
2	14	NA	3			<2			
3	15	NA	5	SAA but moist		<2			Lab
4	17	NA	7	Silty Sand & gravel		<2			
5	12	NA	9	~~SAA but~~ wet clayey silt, gray		<2			
			11	EOB @ 11 probe refusal					

Logged By: Gregory J [signature]

Checked By: [signature]

F-204B (R 12-94)

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
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Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Navistar		GP-15

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
SDI Adam Sauter	03/29/96 (MM DD YY)	__/__/__ (MM DD YY)	Geoprobe

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		NA	______ Feet MSL	______ Feet MSL	1 inches

Boring Location
State Plane ______ N, ______ E S/C/N | Lat ______ | Long ______
____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ E/W

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

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

Sample Number	Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				Limestone Aggregate										
1	13	NA	1–3	SANDY LEAN CLAY WITH GRAVEL, CL, plastic, black 10YR 2/1, dry, stiff. tr. slag.				<2						
2	3	NA	3–5					<2						
3	23	NA	5–7	SAA but brown & moist				<2						Lab
4	4	NA	7–9	Silty Sand & Gravel				<2						
5	11	NA	9–11	SAA but wet				<2						
				EOB @ 11										

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

Signature: Gregory [signature] Firm: RMT Checked by [signature]

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	_____	NMW-8

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (M M D D Y Y)	Date Drilling Completed (M M D D Y Y)	Drilling Method
SDI Tony	03/21/96	03/21/96	HSA/Air rotary

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___	_____	NMW-8	_____ Feet MSL	_____ Feet MSL	10.3 inches

Boring Location
State Plane _____ N, _____ E S/C/N Lat ___ ___ ___
___ 1/4 of ___ 1/4 of Section ___, T ___ N, R ___ E/W Long ___ ___ ___

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

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

Sample Number	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				Blind drilled from 6¼" ID HSA to 14'										
			14	Bedrock started Air rotary										
				EOB @ 24.0'										

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

Signature Gregory A. [illegible] Firm RMT, Inc.

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

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Navistar	_____	NMW-8

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM/DD/YY)	Date Drilling Completed (MM/DD/YY)	Drilling Method
SDI Tony	03/21/96	03/22/96	HSA/Air rotary

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___	_____	NMW-8	_____ Feet MSL	_____ Feet MSL	10.3 inches

Boring Location
State Plane _____ N, _____ E S/C/N | Lat ___ ___ ___
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W | Long ___ ___ ___

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

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

Sample Number	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				6 1/4" ID HSA no sampling										
			20	Bedrock switched to air rotary										
			24	EOB @ 24'										

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

Signature: Gregory J. [illegible] Firm: RMT, Inc

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

State of Wisconsin
Department of Natural Resources

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

SOIL BORING LOG INFORMATION
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Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Navistar	_ _ _ _ _ _ _	NMW-9

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM/DD/YY)	Date Drilling Completed (MM/DD/YY)	Drilling Method
SDI Terry	03/20/96	03/20/96	HSA/Air rotary

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _	_ _ _ _ _ _ _		_____ Feet MSL	_____ Feet MSL	10.3 inches

Boring Location
State Plane _____ N, _____ E S/C/N
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____ E/W
Lat _ _ _ _ _ _
Long _ _ _ _ _ _

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

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

Sample Number	Sample Length Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
				blind drilled to 22.5' with 6¼ ID HSA. ~~Bedrock~~										
			22.5	Bedrock Air rotary to 26'										
			24	EOB @ 26'										

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

Signature: Gregory J. K... Firm: RMT, Inc.

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

State of Wisconsin
Department of Natural Resources

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

Soil Boring Log Information
Form 4400-122 7-91

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Navistar		**NMW-10**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Boart Longyear-Randy Radke	**5/16/96**	**5/16/96**	**HSA/Rotary**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		NMW-10	Feet MSL	Feet MSL	**10.0** Inches

Boring Location
State Plane N, 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	GRAVEL Fill										
			2	EARTH DRILL										
			3	Br Gry CLAY										
			4											
			5											
			6											
			7											
			8											
			9	Weathered DOLOMITE										
			10											
			11											
			12											

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

Signature

Firm BOART LONGYEAR
101 Alderson Schofield, WI 54476-0109
Tel: (715) 359-7090 Fax: (715) 355-5715

State of Wisconsin
Department of Natural Resources

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

Boring Number **NMW-10** Use only as an attachment to Form 4400-122. Page **2** of **2**

Sample									Soil Properties					
Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
			13											
			14	DOLOMITE Bedrock										
			15											
			16											
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26	EOB 26.0 Well Set 25.0										

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		NMW-11

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Boart Longyear-Randy Radke	5/17/96	5/17/96	HSA/Rotary

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		NMW-11	Feet MSL	Feet MSL	10.0 Inches

Boring Location
State Plane N, 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	GRAVEL Fill										
			2	EARTH DRILL										
			3	Br CLAY										
			4											
			5											
			6											
			7											
			8											
			9											
			10											
			11	Weathered DOLOMITE										
			12											

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

Signature

Firm BOART LONGYEAR
101 Alderson Schofield, WI 54476-0109
Tel: (715) 359-7090 Fax: (715) 355-5715

State of Wisconsin
Department of Natural Resources

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

Boring Number **NMW-11** Use only as an attachment to Form 4400-122. Page 2 of 2

Sample									Soil Properties					
Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	RQD/ Comments
			13											
			14											
			15											
			16	DOLOMITE Bedrock										
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26	EOB 26.0 Well Set 25.0										

APPENDIX C

MONITORING WELL CONSTRUCTION LOGS

Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 8-89

Facility/Project Name: Navistar	Grid Location: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: NMW-8
Facility License, Permit or Monitoring Number: _____	Wis. Unique Well Number: _____	DNR Well Numb: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location: ____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ ☐ E ☐ W	Date Well Installed: 03/21/96 (m m d d y y)
Distance Well Is From Waste/Source Boundary: ____ ft.	Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☒ Downgradient ☐ Not Known	Well Installed By: (Person's Name and Firm): SDI; Tony
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or ____ 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: NA

Source of water (attach analysis): NA

E. Bentonite seal, top _____ ft. MSL or 75 ft.

F. Fine sand, top _____ ft. MSL or 95 ft.

G. Filter pack, top _____ ft. MSL or 115 ft.

H. Well screen, top _____ ft. MSL or 135 ft.

I. Well screen, bottom _____ ft. MSL or 235 ft.

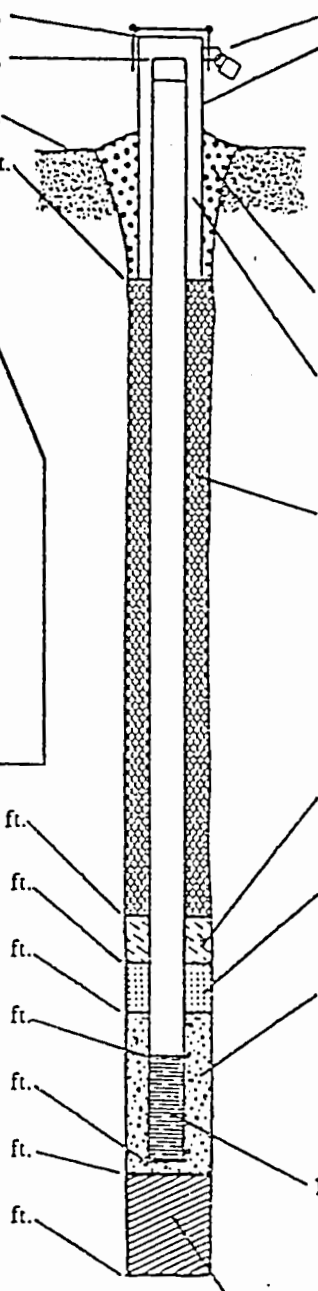
J. Filter pack, bottom _____ ft. MSL or 235 ft.

K. Borehole, bottom _____ ft. MSL or 240 ft.

L. Borehole, diameter 10.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 12.0 in.
b. Length: 10.0 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 ☒ sand ____

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

6. Bentonite seal: Bentonite granules ☒ 33
☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
____ Other ☐ ____

7. Fine sand material: Manufacturer, product name and mesh size: Red Flint 40-60
Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name and mesh size: Red Flint #30
Volume added 11-bags ft^3

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

10. Screen material: PVC sch40
Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
Manufacturer: Johnson
Slot size: 0.010 in.
Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☐; Other ☒ cave in

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

Sign: Gregory J. [illegible] Firm: RMT, Inc.

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

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

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 8-89

Facility/Project Name	Grid Location	Well Name
Navistar	______ ft. ☐ N. ☐ S.	NMW-8
Facility License, Permit or Monitoring Number	______ ft. ☐ E. ☐ W.	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location: ___ 1/4 of ___ 1/4 of Section ___, T ___ N, R ___ ☐ E ☐ W	Date Well Installed: 03/22/96 (mm/dd/yy)
[redacted]nce Well Is From Waste/Source Boundary ___ ft.	Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☒ Downgradient ☐ Not Known	Well Installed By: (Person's Name and Firm) SDI Tony
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		

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

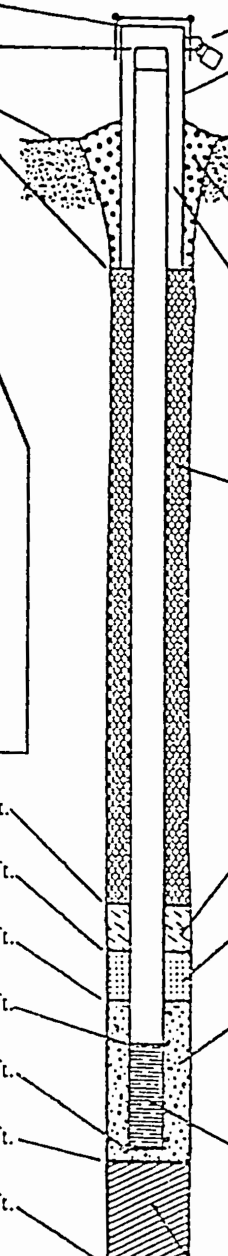
15. Drilling fluid used: Water ☐ 02; Air ☒ 01; Drilling Mud ☐ 03; None ☐ 99

16. Drilling additives used? ☐ Yes ☒ No

[redacted]escribe NA

[redacted]ource of water (attach analysis): NA

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. Well screen, top ______ ft. MSL or 14.0 ft.
I. Well screen, bottom ______ ft. MSL or 24.0 ft.
J. Filter pack, bottom ______ ft. MSL or 24.0 ft.
K. Borehole, bottom ______ ft. MSL or 24.0 ft.
L. Borehole, diameter 10.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
   a. Inside diameter: 12.0 in.
   b. Length: ±1.0 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 ☐; Sand Other ☒
5. Annular space seal: Granular Bentonite ☒ 33
   ___ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
   ___ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
   ___ % Bentonite . . . . . Bentonite-cement grout ☐ 50
   ___ Ft^3 volume added for any of the above
   How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: Bentonite granules ☒ 33
   ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
   Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
   Red Flint 40-60
   Volume added ______ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
   Red Flint #30
   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
    Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐
    Manufacturer: Johnson
    Slot size: 0.010 in.
    Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒; Other ☐

I [redacted]y certify that the information on this form is true and correct to the best of my knowledge.

Si[redacted]	Firm
[signature]	RMT, Inc.

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

Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 8-89

Facility/Project Name: Navistar	Grid Location: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: NMW-9
Facility License, Permit or Monitoring Number: _____		Wis. Unique Well Number: _____ DNR Well Numb: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location: ____ 1/4 of ____ 1/4 of Section ____, T ____ N, R ____ ☐ E ☐ W	Date Well Installed: 03/20/96 (m m d d y y)
ance Well Is From Waste/Source Boundary: ____ ft.		Well Installed By: (Person's Name and Firm): SDI; Tony
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☒ Downgradient ☐ Not Known	

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

Source of water (attach analysis): NA

E. Bentonite seal, top _____ ft. MSL or 10 ft.
F. Fine sand, top _____ ft. MSL or 12.0 ft.
G. Filter pack, top _____ ft. MSL or 14.0 ft.
H. Well screen, top _____ ft. MSL or 16.0 ft.
I. Well screen, bottom _____ ft. MSL or 26.0 ft.
J. Filter pack, bottom _____ ft. MSL or 26.0 ft.
K. Borehole, bottom _____ ft. MSL or 26.0 ft.
L. Borehole, diameter 10.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.07 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 12.0 in
b. Length: 1.0 ft
c. Material: Steel ☒ 0; 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 ☒ ____
Sand
5. Annular space seal: Granular Bentonite ☒ 33
____ Lbs/gal mud weight ... Bentonite-sand slurry ☐ 35
____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
____ % Bentonite .... Bentonite-cement grout ☐ 50
____ Ft^3 volume added for any of the above
How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: Bentonite granules ☒ 33
☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
Other ☐ ____
7. Fine sand material: Manufacturer, product name and mesh size: Red Flint 40-60
Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size: Red Flint #30
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
Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
Manufacturer: Johnson
Slot size: 0.010 in.
Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒; Other ☐ ____

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

Sign: _____ Firm: RMT, Inc.

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

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-10
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: 05/16/96
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) Randy Radke; Boart Longyear
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation -0.50 ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

12. USC 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; HSA and Air Rotary; Other ☒

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

16. Drilling additives used? ☐ Yes ☐ No

Describe _____

. . Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 11.0 ft.

G. Filter pack, top _____ ft. MSL or 13.0 ft.

H. Screen joint, top _____ ft. MSL or 15.0 ft.

I. Well bottom _____ ft. MSL or 25.0 ft.

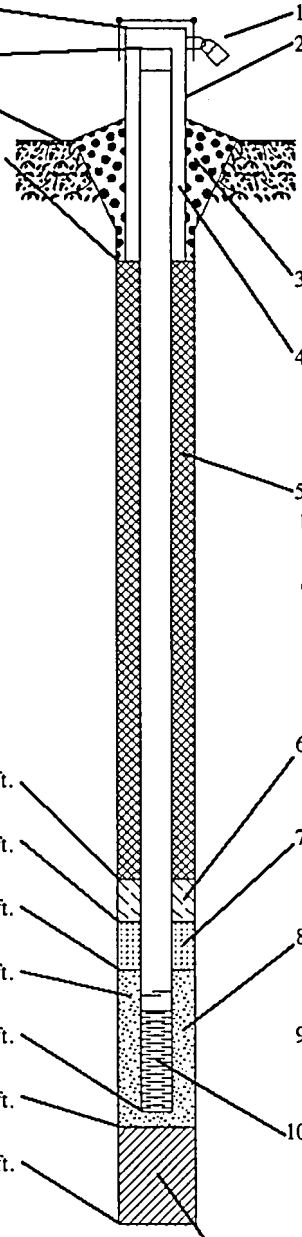
J. Filter pack, bottom _____ ft. MSL or 26.0 ft.

K. Borehole, bottom _____ ft. MSL or 26.0 ft.

L. Borehole, diameter 10.0 in.

M. O.D. well casing 2.37 in.

N. I.D. well casing 2.06 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
   a. Inside diameter: 9.0 in.
   b. Length: 1.0 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 ☐; #30 American Material 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. _____ Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
   a. #7 Badger
   b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
   a. #30 American Material
   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
    a. Screen Type: Factory cut ☒ 11; Continuous slot ☐ 01; _____ Other ☐
    b. Manufacturer Boart Longyear
    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: Boart Longyear, 101 Alderson Street — Tel: (715) 359-7090, Fax: (715) 355-5715

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

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: ☐N. ☐S. _____ft. ☐E. ☐W. _____ft.	Well Name: NMW-11
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: 05/17/96
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): Randy Radke; Boart Longyear
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation -0.50 ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

12. USC 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; HSA and Air Rotary; Other ☒

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

16. Drilling additives used? ☐ Yes ☐ No

Describe _____

17. Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 11.0 ft.

G. Filter pack, top _____ ft. MSL or 13.0 ft.

H. Screen joint, top _____ ft. MSL or 15.0 ft.

I. Well bottom _____ ft. MSL or 25.0 ft.

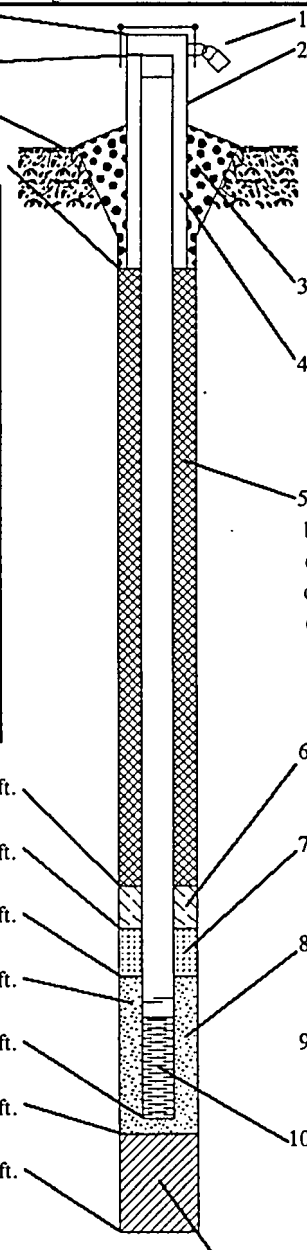
J. Filter pack, bottom _____ ft. MSL or 26.0 ft.

K. Borehole, bottom _____ ft. MSL or 26.0 ft.

L. Borehole, diameter 10.0 in.

M. O.D. well casing 2.37 in.

N. I.D. well casing 2.06 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 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 ☐; #30 American Material 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. _____ Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
a. #7 Badger
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. #30 American Material
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
a. Screen Type: Factory cut ☒ 11; Continuous slot ☐ 01; _____ Other ☐
b. Manufacturer Boart Longyear
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: Boart Longyear, 101 Alderson Street

Tel: (715) 359-7090
Fax: (715) 355-5715

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.

APPENDIX D

MONITORING WELL DEVELOPMENT LOGS

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT
Form 4400-113B 8-89

Facility/Project Name: Navistar

Well Name: NMW-7

License, Permit or Monitoring Number: _____

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

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

2. Well development method

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

3. Time spent developing well: 66 min.

4. Depth of well (from top of well casisng): 23.1 ft.

5. Inside diameter of well: 2.07 in.

6. Volume of water in filter pack and well casing: 6.9 gal.

7. Volume of water removed from well: 16.0 gal.

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

9. Source of water added: NA

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)	15.48 ft.	22.70 ft.
Date	03/22/96 (m m d d y y)	03/22/96 (m m d d y y)
Time	9:58 ☒ a.m. ☐ p.m.	11:04 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.5 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) very turbid brown	Clear ☐ 20 Turbid ☒ 25 (Describe) very turbid brown
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

Additional comments on development:

The Was slowly pumped dry three times

Well developed by: Person's Name and Firm

Name: Greg Kitson

Firm: RMT, Inc.

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

Signature: Greg Kitson

Firm: RMT, Inc.

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

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B 8-89

Facility/Project Name: Navistar

Well Name: NMW-8

License, Permit or Monitoring Number: _____

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

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

2. Well development method

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

3. Time spent developing well: 100 min.

4. Depth of well (from top of well casisng): 24.8 ft.

5. Inside diameter of well: 2.07 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): 0.0 gal.

9. Source of water added: NA

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)	17.86 ft.	17.96 ft.
Date	03/22/96 (m m d d y y)	03/22/96 (m m d d y y)
Time	11:15 ☒ a.m. ☐ p.m.	12:55 ☐ a.m. ☐ p.m.
12. Sediment in well bottom	.0 inches	0. inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) very turbid brown	Clear ☒ 20 Turbid ☐ 25 (Describe)
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Additional comments on development:

Well developed by: Person's Name and Firm

Name: Greg Kitson

Firm: RMT, Inc.

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

Signature: Greg Kitson

Firm: RMT, Inc.

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

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B 8-89

Facility/Project Name	Well Name
Wavistar	NMW-9
License, Permit or Monitoring Number	Wis. Unique Well Number / DNR Well Number

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

2. Well development method

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

3. Time spent developing well 120 min.

4. Depth of well (from top of well casisng) 25.9 ft.

5. Inside diameter of well 2.7 in.

6. Volume of water in filter pack and well casing 6.6 gal.

7. Volume of water removed from well 70.0 gal.

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

9. Source of water added _____

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

	Before Development	After Development
11. Depth to Water (from top of well casing)	18.62 ft.	16.62 ft.
Date	03/22/96 (m m d d y y)	03/22/96 (m m d d y y)
Time	7:25 ☒ a.m. ☐ p.m.	9:25 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) brown very turbid	Clear ☐ 20 Turbid ☐ 25 (Describe) tan slight 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

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: Greg Kitsan	Signature: Gregory J. Kitsan
Firm: RMT, Inc	Firm: RMT, Inc.

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

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name	County	Well Name
Navistar	Waukesha	NMW-10
Facility License, Permit or Monitoring Number	County Code: 68	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 Whale Pump ☒

3. Time spent developing well: 90 min.

4. Depth of well (from top of well casing): 24.9 ft.

5. Inside diameter of well: 2.06 in.

6. Volume of water in filter pack and well casing: 12.8 gal.

7. Volume of water removed from well: 105.0 gal.

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

9. Source of water added: _____

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

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	10.50 ft.	13.10 ft.
Date b.	05/17/96	05/17/96
Time c.	☐ a.m. ☐ p.m.	☐ 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)	Turbid Lt Brown	Clear

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

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

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: Mike Oppelt

Firm: Boart Longyear

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

Signature: [signature]

Print Initials: BET

Firm: Boart Longyear

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

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	Well Name
Navistar	Waukesha	NMW-11
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well Number**
	68	

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

2. Well development method:

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

3. Time spent developing well: 90 min.

4. Depth of well (from top of well casing): 25.0 ft.

5. Inside diameter of well: 2.06 in.

6. Volume of water in filter pack and well casing: 13.7 gal.

7. Volume of water removed from well: 100.0 gal.

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

9. Source of water added: _____

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

		Before Development	After Development
11. Depth to Water (from top of well casing)	a.	9.50 ft.	12.10 ft.
Date	b.	05/17/96	05/17/96
Time	c.	11:45 ☒ a.m. ☐ p.m.	1:15 ☐ a.m. ☒ p.m.
12. Sediment in well bottom		0.0 inches	0.0 inches
13. Water clarity		Clear ☐ 10 Turbid ☒ 15 (Describe) Turbid Lt Brown	Clear ☒ 20 Turbid ☐ 25 (Describe) Clear

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

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

16. Additional comments on development:

Well developed by: Person's Name and Firm

Name: Mike Oppelt

Firm: Boart Longyear

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

Signature: [signature]

Print Initials: BET

Firm: Boart Longyear

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

WATER SAMPLE LOG

RMT
20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: CAB	Date: 9Apr96	By: [illegible]	Date: 4/15/96	3277.01

SAMPLE NO.: Nmw-1 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other ____
WELL MATERIAL: ☒ PVC ☐ SS ☐ Iron ☐ Other ____
SAMPLE TYPE: ☒ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other ____

Well flushmount, Cap + Lock in Good shape

PURGING

TIME: 1349 Purge 1015 10Apr96 DEPTH TO WATER: 17.09+ T/ PVC
WELL VOLUME: 0,8 gallons 3,2 DEPTH TO BOTTOM: 21.87+ 0.22 T/ PVC
TOTAL VOLUME REMOVED: 3.2 gallons METHOD: ☒ Bailer, ____ ☐ Pump, ____
ODOR: ☒ None ☐ Other ____ COLOR: tan TURBIDITY: ☐ None ☒ Slight ☐ Moderate ☐ Very
DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other ____

SAMPLE

DATE: 4/10/96 TIME: 10:30a
ODOR: ☒ None ☐ Other ____ COLOR: tan TURBIDITY: ☐ None ☒ Slight ☐ Moderate ☐ Very
pH: 6.64 CONDUCTIVITY: 125x10 umhos/cm TEMPERATURE: 12 °C
COMMENTS: ____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1580

FILTRATE (0.45 µm)

☒ NOT APPLICABLE
ODOR: ☐ None ☐ Other ____ COLOR: ____ COMMENTS: ____

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B - HNO3 C - H_2SO_4 D - NaOH E - HCL F- ____

Number	Size	Type	Preservative*	Filtered	Number	Size	Type	Preservative*	Filtered
3	40ml	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12Apr96 METHOD: Enchem PicKup
AIRBILL NUMBER: NA SIGNED: Craig O'Bartholomew DATE: 12Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: [illegible]	Date: 4/19/96	3777.01

SAMPLE NO.: NMW-2 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well, Cap, Flush mount Lock (one bolt stripped) in good shape

PURGING

TIME: 1405 purge 0930 10Apr96 DEPTH TO WATER: 15.74 T/ PVC

WELL VOLUME: 1.3 gallons 5.2 DEPTH TO BOTTOM: 23.44 0.22 T/ PVC

TOTAL VOLUME REMOVED: 5+ gallons to dry METHOD: ☒ Bailer, _____ ☐ Pump, _____

ODOR: ☒ None ☐ Other _____ COLOR: Brown TURBIDITY: ☐ None ☐ Slight ☒ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other _____

SAMPLE

DATE: 4/6/96 TIME: 945

ODOR: ☒ None ☐ Other _____ COLOR: Brown TURBIDITY: ☐ None ☐ Slight ☒ Moderate ☐ Very

pH: 6.40 CONDUCTIVITY: 145 x 10 µmhos/cm TEMPERATURE: 9 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1910

FILTRATE (0.45 µm)

☐ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12Apr96 METHOD: Enchem Pickup

AIRBILL NUMBER: NA SIGNED: Craig Baddeley DATE: Apr17/96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COZ	Date: 9Apr96	By: Reid	Date: 4/18/96	3222.01

SAMPLE NO.: NMW-3 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well flush mount & lock in good shape

PURGING

TIME: 1327 purge 0900 10Apr96 DEPTH TO WATER: 8.98+ T/ PVC

WELL VOLUME: 1.4 gallons 5.6 ✓ DEPTH TO BOTTOM: 17.15+0.22 T/ PVC

TOTAL VOLUME REMOVED: 6 gallons ✓ METHOD: ☒ Bailer, _____ ☐ Pump, _____

ODOR: ☒ None ☐ Other _____ COLOR: tan TURBIDITY: ☐ None ☐ Moderate ☒ Slight ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other _____

SAMPLE

DATE: 4/10/96 TIME: 915a

ODOR: ☒ None ☐ Other _____ COLOR: tan TURBIDITY: ☐ None ☐ Moderate ☒ Slight ☐ Very

pH: 6.32 CONDUCTIVITY: 515x10 µmhos/cm TEMPERATURE: 10 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 2020

FILTRATE (0.45 µm)

☒ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40ml	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12Apr96 METHOD: Enchem Courier

AIRBILL NUMBER: NA SIGNED: Craig O Bartholomew DATE: 12Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: [illegible]	Date: 4/18/96	3777.01

SAMPLE NO.: NMW-4 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well in Good shape (Protap)

PURGING

TIME: 13:19 Purged 10Apr96 @1006 DEPTH TO WATER: 13.83+ T/ PVC

WELL VOLUME: 1.1 gallons 4.4 DEPTH TO BOTTOM: 20.18+0.22 T/ PVC

TOTAL VOLUME REMOVED: 5 gallons METHOD: ☑ Bailer, _____ ☐ Pump, _____

ODOR: ☐ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: 10Apr96 TIME: 0840

ODOR: ☐ None ☐ Other _____ COLOR: brown TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☐ Very

pH: 6.7 CONDUCTIVITY: 240 X10 µmhos/cm TEMPERATURE: 11 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 3070

FILTRATE (0.45 µm)

☐ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12Apr96 METHOD: EnChem Carrier

AIRBILL NUMBER: NA SIGNED: Craig A Baldwin DATE: 17Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: Cleo	Date: 4/18/96	3777.01

SAMPLE NO.: NMW-5 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other

WELL MATERIAL: ☐ PVC ☐ SS ☐ Iron ☐ Other

SAMPLE TYPE: ☒ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other

Baited H2O out of flush mount
Well, Flush mount, Cap & lock in good shape.

PURGING

TIME: 1440 DEPTH TO WATER: 15.21+ T/ PVC

Purge 1200 10Apr96

WELL VOLUME: 0.95 gallons 3.4 DEPTH TO BOTTOM: 20.30+ 0.22 T/ PVC

TOTAL VOLUME REMOVED: 4 gallons METHOD: ☒ Bailer, ____ ☐ Pump, ____

ODOR: ☒ None ☐ Other COLOR: gray TURBIDITY: ☐ None ☐ Moderate ☒ Slight ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other

SAMPLE

DATE: 11o1a6 TIME: 1220P

ODOR: ☒ None ☐ Other COLOR: gray TURBIDITY: ☒ None ☐ Moderate ☒ Slight ☐ Very

pH: 6.89 CONDUCTIVITY: 1507.10 µmhos/cm TEMPERATURE: 12 °C

COMMENTS: CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1890

FILTRATE (0.45 µm)

☒ NOT APPLICABLE

ODOR: ☐ None ☐ Other COLOR: ____ COMMENTS: ____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- ____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12Apr96 METHOD: Enclean Pickup

AIRBILL NUMBER: NA SIGNED: Craig O'Ballweber DATE: 17Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: [illegible]	Date: 4/18/96	3777.01

SAMPLE NO.: NMW-6 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☒ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☒ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Need to cut old lock & replace

Well, Cap & flushmount in good shape

PURGING

TIME: 1430 DEPTH TO WATER: 14.63+ T/ PVC

purged 1445 10Apr96

WELL VOLUME: 1.0 gallons 4 DEPTH TO BOTTOM: 20.58+ 0.22 T/ PVC

TOTAL VOLUME REMOVED: 4 gallons METHOD: ☒ Bailer, _____ ☐ Pump, _____

ODOR: ☒ None ☐ Other _____ COLOR: Brown TURBIDITY: ☐ None ☐ Moderate ☒ Slight ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other _____

SAMPLE

DATE: 4/10/96 TIME: 1200 P

ODOR: ☒ None ☐ Other _____ COLOR: Brown TURBIDITY: ☐ None ☐ Moderate ☒ Slight ☐ Very

pH: 6.90 CONDUCTIVITY: 1110 x 10 µmhos/cm TEMPERATURE: 12 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 13910

FILTRATE (0.45 µm)

☒ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40 ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12 Apr 96 METHOD: En Chem Pickup

AIRBILL NUMBER: NA SIGNED: Craig D Beaubien DATE: 12 Apr 96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: Reid	Date: 4/18/96	3777.01

SAMPLE NO.: MW-7 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well Cap, Lock, Flushmount all in good shape

PURGING

TIME: 1356 Purge 1030 10Apr96 DEPTH TO WATER: 15.45+ T/ PVC

WELL VOLUME: 1.2 gallons 4.9 DEPTH TO BOTTOM: 22.80± 0.22 T/ PVC

TOTAL VOLUME REMOVED: 5 gallons METHOD: ☒ Bailer, _____ ☐ Pump, _____

ODOR: ☒ None ☐ Other _____ COLOR: brown TURBIDITY: ☐ None ☐ Slight ☒ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other _____

SAMPLE

DATE: 4/10/96 TIME: 1045

ODOR: ☒ None ☐ Other _____ COLOR brown TURBIDITY: ☐ None ☐ Slight ☒ Moderate ☐ Very

pH: 6.56 CONDUCTIVITY: 125 X 10 µmhos/cm TEMPERATURE: 17 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1450

FILTRATE (0.45 µm)

☒ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12Apr96 METHOD: EnChem Pick Up

AIRBILL NUMBER: N.A. SIGNED: Craig Bartleson DATE: 17Apr96

WATER SAMPLE LOG

RMT INC
20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9 Apr 96	By: [illegible]	Date: 4/18/96	3727.01

SAMPLE NO.: MW-8 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other
WELL MATERIAL: ☒ PVC ☐ SS ☐ Iron ☐ Other
SAMPLE TYPE: ☒ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other

Well, Flushmount, Lock & Cap in good shape

PURGING

TIME: 1340 Purge 1045 10Apr96 DEPTH TO WATER: 17.96+ T/PVC
WELL VOLUME: 1.1 gallons 4.4 DEPTH TO BOTTOM: 24.50 0.2 T/PVC
TOTAL VOLUME REMOVED: ____ gallons METHOD: ☒ Bailer, ☐ Pump,
ODOR: ☒ None ☐ Other COLOR: brown TURBIDITY: ☐ None ☒ Slight ☐ Moderate ☐ Very
DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other

SAMPLE

DATE: 4/10/96 TIME: 11am
ODOR: ☒ None ☐ Other COLOR: brown TURBIDITY: ☐ None ☒ Slight ☐ Moderate ☐ Very
pH: 6.68 CONDUCTIVITY: 80 x 10 µmhos/cm TEMPERATURE: 16 °C
COMMENTS: CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 940

FILTRATE (0.45 µm)

☒ NOT APPLICABLE
ODOR: ☐ None ☐ Other COLOR: COMMENTS:

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B - HNO3 C - H_2SO4 D - NaOH E - HCL F-

Number	Size	Type	Preservative*	Filtered	Number	Size	Type	Preservative*	Filtered
3	40 ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061778 DATE SHIPPED: 12 Apr 96 METHOD: EnChem Pickup
AIRBILL NUMBER: NA SIGNED: Craig Bartholomew DATE: 12Apr96

WATER SAMPLE LOG

RMT, Inc. 10900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: CDB	Date: 9Apr96	By: Herd	Date:	3777.01

SAMPLE NO.: NMW-9 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Everything in Good shape

PURGING

TIME: 1543 purge 0925 11Apr96 DEPTH TO WATER: 18.78+ T/ PVC

WELL VOLUME: 1.1 gallons 4.4 DEPTH TO BOTTOM: 25.61+0.22 T/ PVC

TOTAL VOLUME REMOVED: 5 gallons METHOD: ☑ Bailer, _____ ☐ Pump, _____

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: ~~12~~ 11Apr96 TIME: 0235

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

pH: 7 Test papers CONDUCTIVITY: 145X10 µmhos/cm TEMPERATURE: 12.2 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1830

FILTRATE (0.45 µm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12Apr96 METHOD: Enchem Pickup

AIRBILL NUMBER: N/A SIGNED: Craig DB Battelle DATE: 17Apr96

WATER SAMPLE LOG

150 N. Patrick Blvd. Brookfield, WI 53045 (414) 879-1212 FAX: (414) 879-1220

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
NAVISTAR	By: SCD	Date: 5/21/96	By:	Date:	3777.01

SAMPLE NO.: NMW-10 WELL DIAMETER: ■ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ■ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ■ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

PURGING

TIME: 11:10 DEPTH TO WATER: 10.03 + 0.00 T/PVC

WELL VOLUME: 9.63 gallons DEPTH TO BOTTOM: 27.90 - 3.14 T/PVC

TOTAL VOLUME REMOVED: 10 gallons METHOD: ■ Bailer, AK ☐ Pump, _____

ODOR: ■ None ☐ Other _____ COLOR: ☐ Black ☐ Grey ■ Brown ☐ Tan ☐ _____ TURBIDITY: ☐ None ☐ Slight ☐ Moderate ■ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ■ Drum ☐ Other _____

COMMENTS: NONE

SAMPLE

DATE: 5-21-96 TIME: 11:50

ODOR: ■ None ☐ Other _____ COLOR: ☐ Black ☐ Grey ☐ Brown ■ Tan ☐ _____ TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☐ Very

pH: N/A CONDUCTIVITY: N/A µmhos/cm TEMPERATURE: N/A °C

COMMENTS: NONE CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): —

FILTRATE (0.45 µm)

■ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: ☐ Black ☐ Grey ☐ Brown ☐ Tan ☐ _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative*	Filtered	Number	Size	Type	Preservative*	Filtered
3	40mL	GL	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 059332 DATE SHIPPED: 5-22-96 METHOD: DUNHAM'S

AIRBILL NUMBER: — SIGNED: [signature] DATE: 5-22-96

WATER SAMPLE LOG

150 N. Patrick Blvd. Brookfield, WI 53045 (414) 879-1212 FAX: (414) 879-1220

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
NAVISTAR	By: SCD	Date: 5/21/96	By:	Date:	3777.01

SAMPLE NO.: NMW-11 WELL DIAMETER: ■ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ■ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ■ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

PURGING

TIME: 10:40 DEPTH TO WATER: 7.87 + 0.00 T/PVC

WELL VOLUME: 11 gallons DEPTH TO BOTTOM: 27.80 - 3.14 T/PVC

TOTAL VOLUME REMOVED: 12 gallons METHOD: ■ Bailer, PVC ☐ Pump, _____

ODOR: ■ None ☐ Other _____ COLOR: ☐ Black ☐ Grey ☐ Brown ■ Tan ☐ _____ TURBIDITY: ☐ None ☐ Moderate ☐ Slight ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ■ Drum ☐ Other _____

COMMENTS: NONE

SAMPLE

DATE: 5-21-96 TIME: 11:40

ODOR: ■ None ☐ Other _____ COLOR: ☐ Black ☐ Grey ■ Brown ☐ Tan ☐ _____ TURBIDITY: ☐ None ■ Moderate ☐ Slight ☐ Very

pH: NA CONDUCTIVITY: NA µmhos/cm TEMPERATURE: NA °C

COMMENTS: NONE CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): —

FILTRATE (0.45 µm)

■ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: ☐ Black ☐ Grey ☐ Brown ☐ Tan ☐ _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	GL	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 059332 DATE SHIPPED: 5-22-96 METHOD: DUNHAM'S

AIRBILL NUMBER: — SIGNED: [signature] DATE: 5-22-96

WATER SAMPLE LOG

RMT, Inc. 0900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: CDB	Date: 4/16/96	By: Reid	Date: 4/18/96	3777.01

SAMPLE NO.: NPZ-1 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

PURGING

TIME: 1600 purged as part of dev. DEPTH TO WATER: 18.60+ T/ PVC

WELL VOLUME: 4.0 gallons 1" Cleared quickly DEPTH TO BOTTOM: 42.80 T/ PVC

TOTAL VOLUME REMOVED: 45 gallons METHOD: ☐ Bailer, _____ ☑ Pump, _____

ODOR: ☑ None ☐ Other _____ COLOR: None TURBIDITY: ☑ None ☐ Slight ☐ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: 11Apr96 TIME: ~~1615~~ 1715

ODOR: ☑ None ☐ Other _____ COLOR: None TURBIDITY: ☑ None ☐ Slight ☐ Moderate ☐ Very

pH: 7 test paper CONDUCTIVITY: 109X10 µmhos/cm TEMPERATURE: 15.5 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1310

FILTRATE (0.45 µm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40ml	vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: D61777 DATE SHIPPED: 12Apr96 METHOD: Enchem Pickup

AIRBILL NUMBER: NA SIGNED: Craig O'Brien DATE: 17Apr96

RMT INC.

WATER SAMPLE LOG

Sheet 18 of 27

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 11Apr96	By: [illegible]	Date: 4/16/96	3777.01

SAMPLE NO.: NPZ-2 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other ____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other ____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other ____

PURGING

TIME: 0759 DEPTH TO WATER: 17.90 T/ PVC

purge - As part of Development

WELL VOLUME: 4.0 gallons 16 ~~80~~ 95 gals DEPTH TO BOTTOM: 42.52 0.22 T/ PVC

TOTAL VOLUME REMOVED: 80 gallons METHOD: ☐ Bailer, ____ ☑ Pump, ____

ODOR: ☑ None ☐ Other ____ COLOR: Clear TURBIDITY: ☑ None ☐ Slight ☐ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other ____

SAMPLE

DATE: 11Apr96 TIME: 1610

ODOR: ☑ None ☐ Other ____ COLOR: Clear TURBIDITY: ☑ None ☐ Slight ☐ Moderate ☐ Very

pH: 7 CONDUCTIVITY: 138X10 umhos/cm TEMPERATURE: 15 °C

COMMENTS: ____ CORRECTED CONDUCTIVITY (μmhos/cm @ 25°C): 1660

FILTRATE (0.45 μm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other ____ COLOR: ____ COMMENTS: ____

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B - HNO3 C - H_2SO_4 D - NaOH E - HCL F- ____

Number	Size	Type	Preservative*	Filtered	Number	Size	Type	Preservative*	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12Apr96 METHOD: Enchem Pickup

AIRBILL NUMBER: NA SIGNED: Craig OBattista DATE: 17Apr96

RMT INC.

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr-96	By: [illegible]	Date: 4/18/96	3777.01

SAMPLE NO.: MW-2 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other

Cap Flushmount & well in good shape Need to cut old lock off.

PURGING

TIME: 1416 Purge 1115 10Apr96 DEPTH TO WATER: 7.63+ T/PVC

WELL VOLUME: 1.1 gallons 4.4 DEPTH TO BOTTOM: 14.40 0.22 T/PVC

TOTAL VOLUME REMOVED: 3 gallons to dry METHOD: ☒ Bailer, ☐ Pump,

ODOR: ☒ None ☐ Other COLOR: orange TURBIDITY: ☐ None ☐ Slight ☒ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other

SAMPLE

DATE: 4/10/96 TIME: 11:30a

ODOR: ☒ None ☐ Other COLOR: orange TURBIDITY: ☐ None ☐ Slight ☒ Moderate ☐ Very

pH: 7 CONDUCTIVITY: 100 x 10 μmhos/cm TEMPERATURE: 15 °C

COMMENTS: CORRECTED CONDUCTIVITY (μmhos/cm @ 25°C): 1200

FILTRATE (0.45 μm)

☒ NOT APPLICABLE

ODOR: ☐ None ☐ Other COLOR: COMMENTS:

BOTTLES FILLED

*PRESERVATIVE CODES: A - None B - HNO3 C - H_2SO4 D - NaOH E - HCL F-

Number	Size	Type	Preservative*	Filtered	Number	Size	Type	Preservative*	Filtered
3	40ml	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: ~~067177061~~ 778 DATE SHIPPED: 12 Apr 96 METHOD: Enchem Pick up

AIRBILL NUMBER: ~~[illegible]~~ NA SIGNED: Craig O'B[illegible] DATE: 12Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: [illegible]	Date: 4/18/96	3772.01

SAMPLE NO.: MW-6 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☒ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☒ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Cannot be used - consider abandoning.

MW-6 Flush mount destroyed, well plugged at 0.56' BTC, H2O on to

PURGING

TIME: _____ DEPTH TO WATER: _____ + _____ T/ PVC

WELL VOLUME: _____ gallons DEPTH TO BOTTOM: _____ + _____ T/ PVC

TOTAL VOLUME REMOVED: _____ gallons METHOD: ☐ Bailer, _____ ☐ Pump, _____

ODOR: ☐ None ☐ Other _____ COLOR: _____ TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☐ Drum ☐ Other _____

SAMPLE

DATE: _____ TIME: _____

ODOR: ☐ None ☐ Other _____ COLOR: _____ TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☐ Very

pH: _____ CONDUCTIVITY: _____ µmhos/cm TEMPERATURE: _____ °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): _____

FILTRATE (0.45 µm)

☐ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: NA DATE SHIPPED: NA METHOD: NA

AIRBILL NUMBER: NA SIGNED: Craig O'Barr DATE: 12Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9 Apr 96	By: [illegible]	Date: 4/18/96	3777.01

SAMPLE NO.: MW-11 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

~~Lock needs to be replaced~~ SRB - well OK

Cannot open flush mount (Triangle-type) - broke it open to replace will need

PURGING

TIME: 1514 DEPTH TO WATER: 18.12+ T/ PVC

Purged 1315 10 Apr 96

WELL VOLUME: 0.4 gallons 1.6 DEPTH TO BOTTOM: 20.33 0.22 T/ PVC

TOTAL VOLUME REMOVED: 5 gallons METHOD: ☐ Bailer, _____ ☐ Pump, _____

ODOR: ☑ None ☐ Other _____ COLOR: brown TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☐ Drum ☐ Other _____

SAMPLE

DATE: 10 Apr 96 TIME: 1330

ODOR: ☐ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☑ Slight ☐ Moderate ☐ Very

pH: 6.9 CONDUCTIVITY: 150 X 10 umhos/cm TEMPERATURE: 6 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 2090

FILTRATE (0.45 µm)

☒ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12 Apr 96 METHOD: Enchem Pickup

AIRBILL NUMBER: NA SIGNED: Craig D Bethke DATE: 17 Apr 96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: Dlend	Date: 4/18/96	3773.01

SAMPLE NO.: MW-12 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well, flushmount, cap & Lock OK ~ New Cap would be Nice

PURGING

TIME: 1506 purge 1320 11Apr96 DEPTH TO WATER: 17.89+ T/ PVC

WELL VOLUME: 0.8 gallons 3.2 DEPTH TO BOTTOM: 23.48 ± 0.32 T/ PVC

TOTAL VOLUME REMOVED: _____ gallons METHOD: ☐ Bailer, _____ ☐ Pump, _____

ODOR: ☒ None ☐ Other _____ COLOR: Brown TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☒ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: 11Apr96 TIME: 1325

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☒ Very

pH: 7 w/test paper CONDUCTIVITY: 105 X 10 µmhos/cm TEMPERATURE: 13.7 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1050

FILTRATE (0.45 µm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40 mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12Apr96 METHOD: EnChem Pickup

AIRBILL NUMBER: NA SIGNED: Craig O Bardelson DATE: 17Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: CDB	Date: 9 Apr-96	By: Blind	Date: 4/18/96	3777.01

SAMPLE NO.: MW-13 WELL DIAMETER: ☒ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☒ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☒ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Flush mount must be replaced, Needs New Cap. top of PVC Rough shape.

PURGING

TIME: 1530 purge 1000 11Apr-96 DEPTH TO WATER: 18.43+ T/ PVC

WELL VOLUME: 1.2 gallons 4.8 DEPTH TO BOTTOM: 25.72 0.22 T/ PVC

TOTAL VOLUME REMOVED: ~~X~~ 5 gallons METHOD: ☐ Bailer, _____ ☐ Pump, _____

ODOR: ~~☒ None~~ ☐ Other _____ COLOR: brown TURBIDITY: ☐ None ~~☒ Slight~~ ☐ Moderate ☒ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☒ Drum ☐ Other _____

SAMPLE

DATE: ~~4/10/96~~ 11Apr96 TIME: ~~1330~~ 1010

ODOR: ~~☒ None~~ ☐ Other _____ COLOR: ~~brn~~ TURBIDITY: ☐ None ☒ Moderate ~~☐ Slight~~ ☐ Very

pH: ~~6.25~~ T. Test paper CONDUCTIVITY: ~~150X10~~ 120X10 umhos/cm TEMPERATURE: ~~12.5~~ 12.5 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1490

FILTRATE (0.45 µm)

~~☒~~ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12Apr96 METHOD: Enchem Pick up

AIRBILL NUMBER: NA SIGNED: Craig O'Bannon DATE: 12Apr96

WATER SAMPLE LOG

Sheet 24 of 27

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: Alex	Date: 4/18/96	By:	Date:	

SAMPLE NO.: MW-15 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well, Cap & Lock in good shape
Flush mount Cap destroyed - must be replaced

PURGING

TIME: 1449 purge 0855 11 Apr 96 DEPTH TO WATER: 18.67+ T/ PVC

WELL VOLUME: 1.1 gallons 4.4 DEPTH TO BOTTOM: 25.30+0.22 T/ PVC

TOTAL VOLUME REMOVED: 5 gallons METHOD: ☑ Bailer, _____ ☐ Pump, _____

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: 11 Apr 96 TIME: 0910

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

pH: 7 pH test paper CONDUCTIVITY: 138 X10 µmhos/cm TEMPERATURE: 11.9 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1740

FILTRATE (0.45 µm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40 mL	Vials	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12 Apr 96 METHOD: Enchem Pick up

AIRBILL NUMBER: NA SIGNED: Craig O'Bradovich DATE: 17 Apr 96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 11Apr96	By: [illegible]	Date: 4/18/96	3777.01

SAMPLE NO.: MW-16 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

All OK

PURGING

TIME: ~~1115~~ DEPTH TO WATER: ~~18.42~~ T/ PVC

WELL VOLUME: 1.3 gallons 5.2 DEPTH TO BOTTOM: 26.40 0.22 T/ PVC

TOTAL VOLUME REMOVED: 5.2 gallons METHOD: ☑ Bailer, _____ ☐ Pump, _____

ODOR: ☑ None ☐ Other _____ COLOR: Brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: 11Apr96 TIME: 1125

ODOR: ☑ None ☐ Other _____ COLOR: Brn TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☑ Very

pH: 7 pH Test paper CONDUCTIVITY: 152 X10 umhos/cm TEMPERATURE: 13 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 1880

FILTRATE (0.45 µm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12Apr96 METHOD: Enchem Pickup

AIRBILL NUMBER: NA SIGNED: Craig O'Bannon DATE: 12Apr96

WATER SAMPLE LOG

20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: 9Apr96	By: Dlend	Date: 4/18/96	3777.01

SAMPLE NO.: MW-19 WELL DIAMETER: ☑ 2" ☐ 4" ☐ Other _____

WELL MATERIAL: ☑ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DW ☐ Leachate ☐ Other _____

Well flushmount, cap & lock in good shape

PURGING

TIME: 1525 purge 1340 11Apr96 DEPTH TO WATER: 13.62 + T/ PVC

WELL VOLUME: 4 gallons 16 DEPTH TO BOTTOM: 42.52 + 0.22 T/ PVC

TOTAL VOLUME REMOVED: 4.5 gallons Dry METHOD: ☐ Bailer, _____ ☐ Pump, _____

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☑ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☑ Drum ☐ Other _____

SAMPLE

DATE: 11Apr96 TIME: 1400

ODOR: ☑ None ☐ Other _____ COLOR: brn TURBIDITY: ☐ None ☐ Slight ☑ Moderate ☐ Very

pH: 7 w/test paper CONDUCTIVITY: 45X10 µmhos/cm TEMPERATURE: 15.5 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): 540

FILTRATE (0.45 µm)

☑ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	40mL	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 061777 DATE SHIPPED: 12Apr96 METHOD: Enchem Pickup

AIRBILL NUMBER: NA SIGNED: Craig O'Brien DATE: 17Apr96

WATER SAMPLE LOG

RMT, INC. 20900 Swenson Drive Suite 100 Waukesha, WI 53186-4050 (414) 798-9550 FAX: (414) 798-9551

PROJECT NAME	PREPARED		CHECKED		PROJECT NO.
Navistar	By: COB	Date: Apr 10, 96	By: [illegible]	Date: 4/15/96	3777.31

SAMPLE NO.: FB-1 WELL DIAMETER: ☐ 2" ☐ 4" ☒ Other _____

WELL MATERIAL: ☐ PVC ☐ SS ☐ Iron ☐ Other _____

SAMPLE TYPE: ☐ GW ☐ WW ☐ SW ☒ DW ☐ Leachate ☐ Other _____

PURGING

TIME: _____ DEPTH TO WATER: _____ + _____ T/ PVC

WELL VOLUME: _____ gallons DEPTH TO BOTTOM: _____ + _____ T/ PVC

TOTAL VOLUME REMOVED: _____ gallons METHOD: ☐ Bailer, _____ ☐ Pump, _____

ODOR: ☐ None ☐ Other _____ COLOR: _____ TURBIDITY: ☐ None ☐ Slight ☐ Moderate ☐ Very

DISPOSAL METHOD: ☐ Ground ☐ POTW ☐ Drum ☐ Other _____

SAMPLE

DATE: 18Apr96 TIME: 0825

ODOR: ☒ None ☐ Other _____ COLOR: Clear TURBIDITY: ☒ None ☐ Slight ☐ Moderate ☐ Very

pH: 4.3 CONDUCTIVITY: <10 µmhos/cm TEMPERATURE: 21.5 °C

COMMENTS: _____ CORRECTED CONDUCTIVITY (µmhos/cm @ 25°C): <10

FILTRATE (0.45 µm)

☐ NOT APPLICABLE

ODOR: ☐ None ☐ Other _____ COLOR: _____ COMMENTS: _____

BOTTLES FILLED

PRESERVATIVE CODES: A - None B - HNO_3 C - H_2SO_4 D - NaOH E - HCL F- _____

Number	Size	Type	Preservative	Filtered	Number	Size	Type	Preservative	Filtered
3	4 ML	Vial	E	Y (N)					Y N
				Y N					Y N
				Y N					Y N
				Y N					Y N

CHAIN-OF-CUSTODY NUMBER: 26178 DATE SHIPPED: 12Apr96 METHOD: Enclosure Pickup

AIRBILL NUMBER: NA SIGNED: Craig O'Sullivan DATE: 12Apr96

APPENDIX E

SOIL SAMPLE AND HYDRAULIC OIL SAMPLE ANALYTICAL RESULTS

RMT INC. LABORATORIES

ROT

CHAIN OF CUSTODY RECORD № 061778

RA

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.: 3777.01

Project/Client: Navistar

Project Manager/Contact Person: Dan Peplinski / Greg Kitsen

Filtered (Yes/No): N

Preserved (Code): E

Analyses Requested: 40 ML Vial - VOCs method 8260 CONO Ford

PRESERVED CODES
A - NONE
B - HNO$_3$
C - H_2SO_4
D - NaOH
E - HCl
F - METHANOL
G - ___

Lab No.	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	40 ML Vial-VOCs method 8260								Comments:
	4/10	0825	FB-1	3-40ml	GW	3								#177515
	4/10	0840	NMW-4	3	"	3								177516
	4/10	0915	NMW-3	3	"	3								177517
	4/10	0945	NMW-2	3	"	3								177518
	4/10	1030	NMW-1	3	"	3								177519
	4/10	1045	NMW-7	3	"	3			1 w/Bubble					177520
	4/10	1100	NMW-8	3	"	3			1 w/Bubble					177521
	4/10	1130	MW-2	3	"	3			1 w/Bubble					177522
	4/10	1200	NMW-6	3	"	3								177523
	4/10	1220	NMW-5	3	"	3								177524

SPECIAL INSTRUCTIONS: Trip Blank 1-40ml — 177525

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Craig O'Battle [signature]	11 Apr 96 1730	[signature]	4/11/96 5:45
Relinquished by (Sig.) Terry Steinert [signature]	11:57 4-12-96	Received by (Sig.) Bernice Kempen [signature]	4-12-96 11:57 am
Relinquished by (Sig.) Bernice Kempen [signature]	4-12-96 345/pm	Received by (Sig.) [signature]	4-12-96 1545

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

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) ___

Turn Around (circle one) Normal Rush

Report Due ___

(For Lab Use Only)

Receipt Temp:
Temp Blank Y N

Receipt pH (Wet/Metals)

F-268 (R6/95) #960428Z

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

RMT INC. LABORATORIES

RJI

CHAIN OF CUSTODY RECORD № 061777

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.: 3777.01

Project/Client: Navistar

Project Manager/Contact Person: Dan Peplinski / Greg Kitsen

Filtered (Yes/No): N

Preserved (Code): E

Analyses Requested: 40ML Vial cond good

Lab No.	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	40ML Vial	Comments
	4/10	1330	MW-11	3-40ml	GW	3-40ml	#177526
	4/11	0910	MW-15	3	"	3	177527
	4/11	0935	NMW-9	3	"	3	177528
	4/11	1010	MW-13	3	"	3	177529
	4/11	1125	MW-16	3	"	3	177530
	4/11	1325	MW-12	3	"	3	177531
	4/11	1400	MW-19	3	"	3	177532
	4/11	1610	NPZ-2	3	"	3	177533
	4/11	1715	NPZ-1	3	"	3	177534
			Trip Blank	1-40ml			177535

PRESERVED CODES:
A - NONE
B - HNO_3
C - H_2SO_4
D - NaOH
E - HCl
F - METHANOL
G - ______

SPECIAL INSTRUCTIONS: Please Analyze Trip Blank
Analyze All for VOCs - ~~8260~~ 8260 - GC/MS 8260

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Craig O Bartholomew	11Apr96 / 1730	Dan Peplinski	4/11/96 5:45
Relinquished by (Sig.): Terry Steinert	11:57 4-12-96	Received by (Sig.): Bernie Kempen	4-12-96 11:57 AM
Relinquished by (Sig.): Bernie Kempen	4-12-97 3:45PM	Received by (Sig.): [illegible]	4-12-96 15:41

HAZARDS ASSOCIATED WITH SAMPLES
☐ Flammable
☐ Corrosive
☐ Highly Toxic
☐ Other (list)

Turn Around (circle one) Normal Rush

Report Due ______

(For Lab Use Only)

Receipt Temp:
Temp Blank Y N

Receipt pH (Wet/Metals)

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

F-268 (R6/95) # 9604182 GD

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

EN CHEM INC.

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1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : FB-2
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177515 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	ND	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	ND	ug/l	1.0					
	cis-1,2-Dichloroethene	ND	ug/l	1.0					
	trans-1,2-Dichloroethene	ND	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : FB-2
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177515 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	ND	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	ND	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

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Green Bay, WI 54302
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FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-4
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177516 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	ND	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	ND	ug/l	1.0					
	cis-1,2-Dichloroethene	2.0	ug/l	1.0					
	trans-1,2-Dichloroethene	ND	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-4
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177516 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	ND	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	17	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

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1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-3
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177517 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	7.3	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	6.7	ug/l	1.0					
	cis-1,2-Dichloroethene	11	ug/l	1.0					
	trans-1,2-Dichloroethene	1.2	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-3
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177517 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
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Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	60	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	200	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-2
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177518 Date Reported : 04/18/1996

Report to: RMT, INC
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Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	1.2	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	Bromobenzene	ND	ug/l	2.0					
	Bromochloromethane	ND	ug/l	2.0					
	Bromodichloromethane	ND	ug/l	2.0					
	Bromoform	ND	ug/l	2.0					
	Bromomethane	ND	ug/l	2.0					
	n-Butylbenzene	ND	ug/l	2.0					
	sec-Butylbenzene	ND	ug/l	2.0					
	tert-Butylbenzene	ND	ug/l	2.0					
	Carbon tetrachloride	ND	ug/l	2.0					
	Chlorobenzene	ND	ug/l	2.0					
	Chlorodibromomethane	ND	ug/l	2.0					
	Chloroethane	ND	ug/l	2.0					
	Chloroform	ND	ug/l	2.0					
	Chloromethane	ND	ug/l	2.0					
	2-Chlorotoluene	ND	ug/l	2.0					
	4-Chlorotoluene	ND	ug/l	2.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	2.0					
	1,2-Dibromoethane	ND	ug/l	2.0					
	Dibromomethane	ND	ug/l	2.0					
	1,2-Dichlorobenzene	ND	ug/l	2.0					
	1,3-Dichlorobenzene	ND	ug/l	2.0					
	1,4-Dichlorobenzene	ND	ug/l	2.0					
	Dichlorodifluoromethane	ND	ug/l	2.0					
	1,1-Dichloroethane	4.4	ug/l	2.0					
	1,2-Dichloroethane	ND	ug/l	2.0					
	1,1-Dichloroethene	5.7	ug/l	2.0					
	cis-1,2-Dichloroethene	28	ug/l	2.0					
	trans-1,2-Dichloroethene	6.4	ug/l	2.0					
	1,2-Dichloropropane	ND	ug/l	2.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-2
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177518 Date Reported : 04/18/1996

Report to: RMT, INC
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Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	2.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	2,2-Dichloropropane	ND	ug/l	2.0					
	1,1-Dichloropropene	ND	ug/l	2.0					
	Di-isopropyl ether	ND	ug/l	2.0					
	Ethyl Benzene	ND	ug/l	2.0					
	Hexachlorobutadiene	ND	ug/l	2.0					
	Isopropylbenzene	ND	ug/l	2.0					
	p-Isopropyltoluene	ND	ug/l	2.0					
	Methylene chloride	ND	ug/l	2.0					
	Methyl-tert-butyl-ether	ND	ug/l	2.0					
	Naphthalene	ND	ug/l	2.0					
	n-Propylbenzene	ND	ug/l	2.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	2.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	2.0					
	Styrene	ND	ug/l	2.0					
	Tetrachloroethene	ND	ug/l	2.0					
	Toluene	ND	ug/l	2.0					
	1,2,3-Trichlorobenzene	ND	ug/l	2.0					
	1,2,4-Trichlorobenzene	ND	ug/l	2.0					
	1,1,1-Trichloroethane	32	ug/l	2.0					
	1,1,2-Trichloroethane	ND	ug/l	2.0					
	Trichloroethene	250	ug/l	2.0					
	Trichlorofluoromethane	ND	ug/l	2.0					
	1,2,3-Trichloropropane	ND	ug/l	2.0					
	1,2,4-Trimethylbenzene	ND	ug/l	2.0					
	1,3,5-Trimethylbenzene	ND	ug/l	2.0					
	Vinyl chloride	ND	ug/l	2.0					
	Xylenes, m + p	ND	ug/l	2.0					
	Xylene, o	ND	ug/l	2.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-1
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177519 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	6.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	Bromobenzene	ND	ug/l	10					
	Bromochloromethane	ND	ug/l	10					
	Bromodichloromethane	ND	ug/l	10					
	Bromoform	ND	ug/l	10					
	Bromomethane	ND	ug/l	10					
	n-Butylbenzene	ND	ug/l	10					
	sec-Butylbenzene	ND	ug/l	10					
	tert-Butylbenzene	ND	ug/l	10					
	Carbon tetrachloride	ND	ug/l	10					
	Chlorobenzene	ND	ug/l	10					
	Chlorodibromomethane	ND	ug/l	10					
	Chloroethane	ND	ug/l	10					
	Chloroform	ND	ug/l	10					
	Chloromethane	ND	ug/l	10					
	2-Chlorotoluene	ND	ug/l	10					
	4-Chlorotoluene	ND	ug/l	10					
	1,2-Dibromo-3-chloropropane	ND	ug/l	10					
	1,2-Dibromoethane	ND	ug/l	10					
	Dibromomethane	ND	ug/l	10					
	1,2-Dichlorobenzene	ND	ug/l	10					
	1,3-Dichlorobenzene	ND	ug/l	10					
	1,4-Dichlorobenzene	ND	ug/l	10					
	Dichlorodifluoromethane	ND	ug/l	10					
	1,1-Dichloroethane	11	ug/l	10					
	1,2-Dichloroethane	ND	ug/l	10					
	1,1-Dichloroethene	29	ug/l	10					
	cis-1,2-Dichloroethene	ND	ug/l	10					
	trans-1,2-Dichloroethene	ND	ug/l	10					
	1,2-Dichloropropane	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-1
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177519 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	10	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	2,2-Dichloropropane	ND	ug/l	10					
	1,1-Dichloropropene	ND	ug/l	10					
	Di-isopropyl ether	ND	ug/l	10					
	Ethyl Benzene	ND	ug/l	10					
	Hexachlorobutadiene	ND	ug/l	10					
	Isopropylbenzene	ND	ug/l	10					
	p-Isopropyltoluene	ND	ug/l	10					
	Methylene chloride	ND	ug/l	10					
	Methyl-tert-butyl-ether	ND	ug/l	10					
	Naphthalene	ND	ug/l	10					
	n-Propylbenzene	ND	ug/l	10					
	1,1,1,2-Tetrachloroethane	ND	ug/l	10					
	1,1,2,2-Tetrachloroethane	ND	ug/l	10					
	Styrene	ND	ug/l	10					
	Tetrachloroethene	ND	ug/l	10					
	Toluene	ND	ug/l	10					
	1,2,3-Trichlorobenzene	ND	ug/l	10					
	1,2,4-Trichlorobenzene	ND	ug/l	10					
	1,1,1-Trichloroethane	300	ug/l	10					
	1,1,2-Trichloroethane	ND	ug/l	10					
	Trichloroethene	870	ug/l	10					
	Trichlorofluoromethane	ND	ug/l	10					
	1,2,3-Trichloropropane	ND	ug/l	10					
	1,2,4-Trimethylbenzene	ND	ug/l	10					
	1,3,5-Trimethylbenzene	ND	ug/l	10					
	Vinyl chloride	ND	ug/l	10					
	Xylenes, m + p	ND	ug/l	10					
	Xylene, o	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-7
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177520 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	3.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	Bromobenzene	ND	ug/l	5.0					
	Bromochloromethane	ND	ug/l	5.0					
	Bromodichloromethane	ND	ug/l	5.0					
	Bromoform	ND	ug/l	5.0					
	Bromomethane	ND	ug/l	5.0					
	n-Butylbenzene	ND	ug/l	5.0					
	sec-Butylbenzene	ND	ug/l	5.0					
	tert-Butylbenzene	ND	ug/l	5.0					
	Carbon tetrachloride	ND	ug/l	5.0					
	Chlorobenzene	ND	ug/l	5.0					
	Chlorodibromomethane	ND	ug/l	5.0					
	Chloroethane	ND	ug/l	5.0					
	Chloroform	ND	ug/l	5.0					
	Chloromethane	ND	ug/l	5.0					
	2-Chlorotoluene	ND	ug/l	5.0					
	4-Chlorotoluene	ND	ug/l	5.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	5.0					
	1,2-Dibromoethane	ND	ug/l	5.0					
	Dibromomethane	ND	ug/l	5.0					
	1,2-Dichlorobenzene	ND	ug/l	5.0					
	1,3-Dichlorobenzene	ND	ug/l	5.0					
	1,4-Dichlorobenzene	ND	ug/l	5.0					
	Dichlorodifluoromethane	ND	ug/l	5.0					
	1,1-Dichloroethane	6.1	ug/l	5.0					
	1,2-Dichloroethane	ND	ug/l	5.0					
	1,1-Dichloroethene	18	ug/l	5.0					
	cis-1,2-Dichloroethene	ND	ug/l	5.0					
	trans-1,2-Dichloroethene	ND	ug/l	5.0					
	1,2-Dichloropropane	ND	ug/l	5.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-7
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177520 Date Reported : 04/18/1996

Report to: RMT, INC
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Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	5.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	2,2-Dichloropropane	ND	ug/l	5.0					
	1,1-Dichloropropene	ND	ug/l	5.0					
	Di-isopropyl ether	ND	ug/l	5.0					
	Ethyl Benzene	ND	ug/l	5.0					
	Hexachlorobutadiene	ND	ug/l	5.0					
	Isopropylbenzene	ND	ug/l	5.0					
	p-Isopropyltoluene	ND	ug/l	5.0					
	Methylene chloride	ND	ug/l	5.0					
	Methyl-tert-butyl-ether	ND	ug/l	5.0					
	Naphthalene	ND	ug/l	5.0					
	n-Propylbenzene	ND	ug/l	5.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	5.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	5.0					
	Styrene	ND	ug/l	5.0					
	Tetrachloroethene	ND	ug/l	5.0					
	Toluene	ND	ug/l	5.0					
	1,2,3-Trichlorobenzene	ND	ug/l	5.0					
	1,2,4-Trichlorobenzene	ND	ug/l	5.0					
	1,1,1-Trichloroethane	150	ug/l	5.0					
	1,1,2-Trichloroethane	ND	ug/l	5.0					
	Trichloroethene	420	ug/l	5.0					
	Trichlorofluoromethane	ND	ug/l	5.0					
	1,2,3-Trichloropropane	ND	ug/l	5.0					
	1,2,4-Trimethylbenzene	ND	ug/l	5.0					
	1,3,5-Trimethylbenzene	ND	ug/l	5.0					
	Vinyl chloride	ND	ug/l	5.0					
	Xylenes, m + p	ND	ug/l	5.0					
	Xylene, o	ND	ug/l	5.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-8
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177521 Date Reported : 04/18/1996

Report to: RMT, INC
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MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	3.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	Bromobenzene	ND	ug/l	5.0					
	Bromochloromethane	ND	ug/l	5.0					
	Bromodichloromethane	ND	ug/l	5.0					
	Bromoform	ND	ug/l	5.0					
	Bromomethane	ND	ug/l	5.0					
	n-Butylbenzene	ND	ug/l	5.0					
	sec-Butylbenzene	ND	ug/l	5.0					
	tert-Butylbenzene	ND	ug/l	5.0					
	Carbon tetrachloride	ND	ug/l	5.0					
	Chlorobenzene	ND	ug/l	5.0					
	Chlorodibromomethane	ND	ug/l	5.0					
	Chloroethane	ND	ug/l	5.0					
	Chloroform	ND	ug/l	5.0					
	Chloromethane	ND	ug/l	5.0					
	2-Chlorotoluene	ND	ug/l	5.0					
	4-Chlorotoluene	ND	ug/l	5.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	5.0					
	1,2-Dibromoethane	ND	ug/l	5.0					
	Dibromomethane	ND	ug/l	5.0					
	1,2-Dichlorobenzene	ND	ug/l	5.0					
	1,3-Dichlorobenzene	ND	ug/l	5.0					
	1,4-Dichlorobenzene	ND	ug/l	5.0					
	Dichlorodifluoromethane	ND	ug/l	5.0					
	1,1-Dichloroethane	11	ug/l	5.0					
	1,2-Dichloroethane	ND	ug/l	5.0					
	1,1-Dichloroethene	25	ug/l	5.0					
	cis-1,2-Dichloroethene	ND	ug/l	5.0					
	trans-1,2-Dichloroethene	ND	ug/l	5.0					
	1,2-Dichloropropane	ND	ug/l	5.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-8
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177521 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	5.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	2,2-Dichloropropane	ND	ug/l	5.0					
	1,1-Dichloropropene	ND	ug/l	5.0					
	Di-isopropyl ether	ND	ug/l	5.0					
	Ethyl Benzene	ND	ug/l	5.0					
	Hexachlorobutadiene	ND	ug/l	5.0					
	Isopropylbenzene	ND	ug/l	5.0					
	p-Isopropyltoluene	ND	ug/l	5.0					
	Methylene chloride	ND	ug/l	5.0					
	Methyl-tert-butyl-ether	ND	ug/l	5.0					
	Naphthalene	ND	ug/l	5.0					
	n-Propylbenzene	ND	ug/l	5.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	5.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	5.0					
	Styrene	ND	ug/l	5.0					
	Tetrachloroethene	ND	ug/l	5.0					
	Toluene	ND	ug/l	5.0					
	1,2,3-Trichlorobenzene	ND	ug/l	5.0					
	1,2,4-Trichlorobenzene	ND	ug/l	5.0					
	1,1,1-Trichloroethane	230	ug/l	5.0					
	1,1,2-Trichloroethane	ND	ug/l	5.0					
	Trichloroethene	600	ug/l	5.0					
	Trichlorofluoromethane	ND	ug/l	5.0					
	1,2,3-Trichloropropane	ND	ug/l	5.0					
	1,2,4-Trimethylbenzene	ND	ug/l	5.0					
	1,3,5-Trimethylbenzene	ND	ug/l	5.0					
	Vinyl chloride	ND	ug/l	5.0					
	Xylenes, m + p	ND	ug/l	5.0					
	Xylene, o	ND	ug/l	5.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

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1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-2
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177522 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	ND	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	ND	ug/l	1.0					
	cis-1,2-Dichloroethene	ND	ug/l	1.0					
	trans-1,2-Dichloroethene	ND	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-2
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177522 Date Reported : 04/17/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	ND	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	ND	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-6
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177523 Date Reported : 04/18/1996

Report to: RMT, INC
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MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	60	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	Bromobenzene	ND	ug/l	100					
	Bromochloromethane	ND	ug/l	100					
	Bromodichloromethane	ND	ug/l	100					
	Bromoform	ND	ug/l	100					
	Bromomethane	ND	ug/l	100					
	n-Butylbenzene	ND	ug/l	100					
	sec-Butylbenzene	ND	ug/l	100					
	tert-Butylbenzene	ND	ug/l	100					
	Carbon tetrachloride	ND	ug/l	100					
	Chlorobenzene	ND	ug/l	100					
	Chlorodibromomethane	ND	ug/l	100					
	Chloroethane	ND	ug/l	100					
	Chloroform	ND	ug/l	100					
	Chloromethane	ND	ug/l	100					
	2-Chlorotoluene	ND	ug/l	100					
	4-Chlorotoluene	ND	ug/l	100					
	1,2-Dibromo-3-chloropropane	ND	ug/l	100					
	1,2-Dibromoethane	ND	ug/l	100					
	Dibromomethane	ND	ug/l	100					
	1,2-Dichlorobenzene	ND	ug/l	100					
	1,3-Dichlorobenzene	ND	ug/l	100					
	1,4-Dichlorobenzene	ND	ug/l	100					
	Dichlorodifluoromethane	ND	ug/l	100					
	1,1-Dichloroethane	150	ug/l	100					
	1,2-Dichloroethane	ND	ug/l	100					
	1,1-Dichloroethene	260	ug/l	100					
	cis-1,2-Dichloroethene	ND	ug/l	100					
	trans-1,2-Dichloroethene	ND	ug/l	100					
	1,2-Dichloropropane	ND	ug/l	100					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-6
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177523 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	100	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	2,2-Dichloropropane	ND	ug/l	100					
	1,1-Dichloropropene	ND	ug/l	100					
	Di-isopropyl ether	ND	ug/l	100					
	Ethyl Benzene	ND	ug/l	100					
	Hexachlorobutadiene	ND	ug/l	100					
	Isopropylbenzene	ND	ug/l	100					
	p-Isopropyltoluene	ND	ug/l	100					
	Methylene chloride	ND	ug/l	100					
	Methyl-tert-butyl-ether	ND	ug/l	100					
	Naphthalene	ND	ug/l	100					
	n-Propylbenzene	ND	ug/l	100					
	1,1,1,2-Tetrachloroethane	ND	ug/l	100					
	1,1,2,2-Tetrachloroethane	ND	ug/l	100					
	Styrene	ND	ug/l	100					
	Tetrachloroethene	ND	ug/l	100					
	Toluene	ND	ug/l	100					
	1,2,3-Trichlorobenzene	ND	ug/l	100					
	1,2,4-Trichlorobenzene	ND	ug/l	100					
	1,1,1-Trichloroethane	1500	ug/l	100					
	1,1,2-Trichloroethane	ND	ug/l	100					
	Trichloroethene	12000	ug/l	100					
	Trichlorofluoromethane	ND	ug/l	100					
	1,2,3-Trichloropropane	ND	ug/l	100					
	1,2,4-Trimethylbenzene	ND	ug/l	100					
	1,3,5-Trimethylbenzene	ND	ug/l	100					
	Vinyl chloride	ND	ug/l	100					
	Xylenes, m + p	ND	ug/l	100					
	Xylene, o	ND	ug/l	100					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-5
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177524 Date Reported : 04/18/1996

Report to: RMT, INC
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MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	6.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	Bromobenzene	ND	ug/l	10					
	Bromochloromethane	ND	ug/l	10					
	Bromodichloromethane	ND	ug/l	10					
	Bromoform	ND	ug/l	10					
	Bromomethane	ND	ug/l	10					
	n-Butylbenzene	ND	ug/l	10					
	sec-Butylbenzene	ND	ug/l	10					
	tert-Butylbenzene	ND	ug/l	10					
	Carbon tetrachloride	ND	ug/l	10					
	Chlorobenzene	ND	ug/l	10					
	Chlorodibromomethane	ND	ug/l	10					
	Chloroethane	ND	ug/l	10					
	Chloroform	ND	ug/l	10					
	Chloromethane	ND	ug/l	10					
	2-Chlorotoluene	ND	ug/l	10					
	4-Chlorotoluene	ND	ug/l	10					
	1,2-Dibromo-3-chloropropane	ND	ug/l	10					
	1,2-Dibromoethane	ND	ug/l	10					
	Dibromomethane	ND	ug/l	10					
	1,2-Dichlorobenzene	ND	ug/l	10					
	1,3-Dichlorobenzene	ND	ug/l	10					
	1,4-Dichlorobenzene	ND	ug/l	10					
	Dichlorodifluoromethane	ND	ug/l	10					
	1,1-Dichloroethane	28	ug/l	10					
	1,2-Dichloroethane	ND	ug/l	10					
	1,1-Dichloroethene	30	ug/l	10					
	cis-1,2-Dichloroethene	470	ug/l	10					
	trans-1,2-Dichloroethene	ND	ug/l	10					
	1,2-Dichloropropane	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-5
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177524 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	10	SW846 5030	04/17/1996	SW846 8260	04/17/1996	HW
	2,2-Dichloropropane	ND	ug/l	10					
	1,1-Dichloropropene	ND	ug/l	10					
	Di-isopropyl ether	ND	ug/l	10					
	Ethyl Benzene	ND	ug/l	10					
	Hexachlorobutadiene	ND	ug/l	10					
	Isopropylbenzene	ND	ug/l	10					
	p-Isopropyltoluene	ND	ug/l	10					
	Methylene chloride	ND	ug/l	10					
	Methyl-tert-butyl-ether	ND	ug/l	10					
	Naphthalene	ND	ug/l	10					
	n-Propylbenzene	ND	ug/l	10					
	1,1,1,2-Tetrachloroethane	ND	ug/l	10					
	1,1,2,2-Tetrachloroethane	ND	ug/l	10					
	Styrene	ND	ug/l	10					
	Tetrachloroethene	ND	ug/l	10					
	Toluene	ND	ug/l	10					
	1,2,3-Trichlorobenzene	ND	ug/l	10					
	1,2,4-Trichlorobenzene	ND	ug/l	10					
	1,1,1-Trichloroethane	110	ug/l	10					
	1,1,2-Trichloroethane	ND	ug/l	10					
	Trichloroethene	590	ug/l	10					
	Trichlorofluoromethane	ND	ug/l	10					
	1,2,3-Trichloropropane	ND	ug/l	10					
	1,2,4-Trimethylbenzene	ND	ug/l	10					
	1,3,5-Trimethylbenzene	ND	ug/l	10					
	Vinyl chloride	94	ug/l	10					
	Xylenes, m + p	ND	ug/l	10					
	Xylene, o	ND	ug/l	10					

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FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : TRIP BLANK
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177525 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	ND	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	ND	ug/l	1.0					
	cis-1,2-Dichloroethene	ND	ug/l	1.0					
	trans-1,2-Dichloroethene	ND	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : TRIP BLANK
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177525 Date Reported : 04/17/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	HW
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	ND	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	ND	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

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These results have been reviewed and their authenticity verified by:

Peter Kelly

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-11
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177526 Date Reported : 04/19/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	12	SW846 5030	04/18/1996	SW846 8260	04/18/1996	HW
	Bromobenzene	ND	ug/l	20					
	Bromochloromethane	ND	ug/l	20					
	Bromodichloromethane	ND	ug/l	20					
	Bromoform	ND	ug/l	20					
	Bromomethane	ND	ug/l	20					
	n-Butylbenzene	ND	ug/l	20					
	sec-Butylbenzene	ND	ug/l	20					
	tert-Butylbenzene	ND	ug/l	20					
	Carbon tetrachloride	ND	ug/l	20					
	Chlorobenzene	ND	ug/l	20					
	Chlorodibromomethane	ND	ug/l	20					
	Chloroethane	ND	ug/l	20					
	Chloroform	ND	ug/l	20					
	Chloromethane	ND	ug/l	20					
	2-Chlorotoluene	ND	ug/l	20					
	4-Chlorotoluene	ND	ug/l	20					
	1,2-Dibromo-3-chloropropane	ND	ug/l	20					
	1,2-Dibromoethane	ND	ug/l	20					
	Dibromomethane	ND	ug/l	20					
	1,2-Dichlorobenzene	ND	ug/l	20					
	1,3-Dichlorobenzene	ND	ug/l	20					
	1,4-Dichlorobenzene	ND	ug/l	20					
	Dichlorodifluoromethane	ND	ug/l	20					
	1,1-Dichloroethane	29	ug/l	20					
	1,2-Dichloroethane	ND	ug/l	20					
	1,1-Dichloroethene	32	ug/l	20					
	cis-1,2-Dichloroethene	180	ug/l	20					
	trans-1,2-Dichloroethene	ND	ug/l	20					
	1,2-Dichloropropane	ND	ug/l	20					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-11
Sample Matrix : WATER Date Collected: 04/10/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177526 Date Reported : 04/19/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	20	SW846 5030	04/18/1996	SW846 8260	04/18/1996	HW
	2,2-Dichloropropane	ND	ug/l	20					
	1,1-Dichloropropene	ND	ug/l	20					
	Di-isopropyl ether	ND	ug/l	20					
	Ethyl Benzene	ND	ug/l	20					
	Hexachlorobutadiene	ND	ug/l	20					
	Isopropylbenzene	ND	ug/l	20					
	p-Isopropyltoluene	ND	ug/l	20					
	Methylene chloride	ND	ug/l	20					
	Methyl-tert-butyl-ether	ND	ug/l	20					
	Naphthalene	ND	ug/l	20					
	n-Propylbenzene	ND	ug/l	20					
	1,1,1,2-Tetrachloroethane	ND	ug/l	20					
	1,1,2,2-Tetrachloroethane	ND	ug/l	20					
	Styrene	ND	ug/l	20					
	Tetrachloroethene	ND	ug/l	20					
	Toluene	ND	ug/l	20					
	1,2,3-Trichlorobenzene	ND	ug/l	20					
	1,2,4-Trichlorobenzene	ND	ug/l	20					
	1,1,1-Trichloroethane	200	ug/l	20					
	1,1,2-Trichloroethane	ND	ug/l	20					
	Trichloroethene	1700	ug/l	20					
	Trichlorofluoromethane	ND	ug/l	20					
	1,2,3-Trichloropropane	ND	ug/l	20					
	1,2,4-Trimethylbenzene	ND	ug/l	20					
	1,3,5-Trimethylbenzene	ND	ug/l	20					
	Vinyl chloride	ND	ug/l	20					
	Xylenes, m + p	ND	ug/l	20					
	Xylene, o	ND	ug/l	20					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

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1795 Industrial Drive
Green Bay, WI 54302
414-469-2436
800-7-ENCHEM
FAX:414-469-8827

Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-15
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177527 Date Reported : 04/18/1996

Report to: RMT, INC
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P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	6.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	Bromobenzene	ND	ug/l	10					
	Bromochloromethane	ND	ug/l	10					
	Bromodichloromethane	ND	ug/l	10					
	Bromoform	ND	ug/l	10					
	Bromomethane	ND	ug/l	10					
	n-Butylbenzene	ND	ug/l	10					
	sec-Butylbenzene	ND	ug/l	10					
	tert-Butylbenzene	ND	ug/l	10					
	Carbon tetrachloride	ND	ug/l	10					
	Chlorobenzene	ND	ug/l	10					
	Chlorodibromomethane	ND	ug/l	10					
	Chloroethane	ND	ug/l	10					
	Chloroform	ND	ug/l	10					
	Chloromethane	ND	ug/l	10					
	2-Chlorotoluene	ND	ug/l	10					
	4-Chlorotoluene	ND	ug/l	10					
	1,2-Dibromo-3-chloropropane	ND	ug/l	10					
	1,2-Dibromoethane	ND	ug/l	10					
	Dibromomethane	ND	ug/l	10					
	1,2-Dichlorobenzene	ND	ug/l	10					
	1,3-Dichlorobenzene	ND	ug/l	10					
	1,4-Dichlorobenzene	ND	ug/l	10					
	Dichlorodifluoromethane	ND	ug/l	10					
	1,1-Dichloroethane	23	ug/l	10					
	1,2-Dichloroethane	ND	ug/l	10					
	1,1-Dichloroethene	27	ug/l	10					
	cis-1,2-Dichloroethene	140	ug/l	10					
	trans-1,2-Dichloroethene	ND	ug/l	10					
	1,2-Dichloropropane	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-15
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177527 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
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MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	10	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	2,2-Dichloropropane	ND	ug/l	10					
	1,1-Dichloropropene	ND	ug/l	10					
	Di-isopropyl ether	ND	ug/l	10					
	Ethyl Benzene	ND	ug/l	10					
	Hexachlorobutadiene	ND	ug/l	10					
	Isopropylbenzene	ND	ug/l	10					
	p-Isopropyltoluene	ND	ug/l	10					
	Methylene chloride	ND	ug/l	10					
	Methyl-tert-butyl-ether	ND	ug/l	10					
	Naphthalene	ND	ug/l	10					
	n-Propylbenzene	ND	ug/l	10					
	1,1,1,2-Tetrachloroethane	ND	ug/l	10					
	1,1,2,2-Tetrachloroethane	ND	ug/l	10					
	Styrene	ND	ug/l	10					
	Tetrachloroethene	ND	ug/l	10					
	Toluene	ND	ug/l	10					
	1,2,3-Trichlorobenzene	ND	ug/l	10					
	1,2,4-Trichlorobenzene	ND	ug/l	10					
	1,1,1-Trichloroethane	200	ug/l	10					
	1,1,2-Trichloroethane	ND	ug/l	10					
	Trichloroethene	1400	ug/l	10					
	Trichlorofluoromethane	ND	ug/l	10					
	1,2,3-Trichloropropane	ND	ug/l	10					
	1,2,4-Trimethylbenzene	ND	ug/l	10					
	1,3,5-Trimethylbenzene	ND	ug/l	10					
	Vinyl chloride	ND	ug/l	10					
	Xylenes, m + p	ND	ug/l	10					
	Xylene, o	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-9
Sample Matrix : WATER — Date Collected: 04/11/1996
En Chem Proj# : 9604282 — Date Received : 04/12/1996
En Chem Lab # : 177528 — Date Reported : 04/18/1996

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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	6.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	Bromobenzene	ND	ug/l	10					
	Bromochloromethane	ND	ug/l	10					
	Bromodichloromethane	ND	ug/l	10					
	Bromoform	ND	ug/l	10					
	Bromomethane	ND	ug/l	10					
	n-Butylbenzene	ND	ug/l	10					
	sec-Butylbenzene	ND	ug/l	10					
	tert-Butylbenzene	ND	ug/l	10					
	Carbon tetrachloride	ND	ug/l	10					
	Chlorobenzene	ND	ug/l	10					
	Chlorodibromomethane	ND	ug/l	10					
	Chloroethane	ND	ug/l	10					
	Chloroform	ND	ug/l	10					
	Chloromethane	ND	ug/l	10					
	2-Chlorotoluene	ND	ug/l	10					
	4-Chlorotoluene	ND	ug/l	10					
	1,2-Dibromo-3-chloropropane	ND	ug/l	10					
	1,2-Dibromoethane	ND	ug/l	10					
	Dibromomethane	ND	ug/l	10					
	1,2-Dichlorobenzene	ND	ug/l	10					
	1,3-Dichlorobenzene	ND	ug/l	10					
	1,4-Dichlorobenzene	ND	ug/l	10					
	Dichlorodifluoromethane	ND	ug/l	10					
	1,1-Dichloroethane	20	ug/l	10					
	1,2-Dichloroethane	ND	ug/l	10					
	1,1-Dichloroethene	21	ug/l	10					
	cis-1,2-Dichloroethene	200	ug/l	10					
	trans-1,2-Dichloroethene	ND	ug/l	10					
	1,2-Dichloropropane	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NMW-9
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177528 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	10	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	2,2-Dichloropropane	ND	ug/l	10					
	1,1-Dichloropropene	ND	ug/l	10					
	Di-isopropyl ether	ND	ug/l	10					
	Ethyl Benzene	ND	ug/l	10					
	Hexachlorobutadiene	ND	ug/l	10					
	Isopropylbenzene	ND	ug/l	10					
	p-Isopropyltoluene	ND	ug/l	10					
	Methylene chloride	ND	ug/l	10					
	Methyl-tert-butyl-ether	ND	ug/l	10					
	Naphthalene	ND	ug/l	10					
	n-Propylbenzene	ND	ug/l	10					
	1,1,1,2-Tetrachloroethane	ND	ug/l	10					
	1,1,2,2-Tetrachloroethane	ND	ug/l	10					
	Styrene	ND	ug/l	10					
	Tetrachloroethene	ND	ug/l	10					
	Toluene	ND	ug/l	10					
	1,2,3-Trichlorobenzene	ND	ug/l	10					
	1,2,4-Trichlorobenzene	ND	ug/l	10					
	1,1,1-Trichloroethane	160	ug/l	10					
	1,1,2-Trichloroethane	ND	ug/l	10					
	Trichloroethene	1000	ug/l	10					
	Trichlorofluoromethane	ND	ug/l	10					
	1,2,3-Trichloropropane	ND	ug/l	10					
	1,2,4-Trimethylbenzene	ND	ug/l	10					
	1,3,5-Trimethylbenzene	ND	ug/l	10					
	Vinyl chloride	ND	ug/l	10					
	Xylenes, m + p	ND	ug/l	10					
	Xylene, o	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-13
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177529 Date Reported : 04/18/1996

Report to: RMT, INC
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MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	12	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	Bromobenzene	ND	ug/l	20					
	Bromochloromethane	ND	ug/l	20					
	Bromodichloromethane	ND	ug/l	20					
	Bromoform	ND	ug/l	20					
	Bromomethane	ND	ug/l	20					
	n-Butylbenzene	ND	ug/l	20					
	sec-Butylbenzene	ND	ug/l	20					
	tert-Butylbenzene	ND	ug/l	20					
	Carbon tetrachloride	ND	ug/l	20					
	Chlorobenzene	ND	ug/l	20					
	Chlorodibromomethane	ND	ug/l	20					
	Chloroethane	ND	ug/l	20					
	Chloroform	ND	ug/l	20					
	Chloromethane	ND	ug/l	20					
	2-Chlorotoluene	ND	ug/l	20					
	4-Chlorotoluene	ND	ug/l	20					
	1,2-Dibromo-3-chloropropane	ND	ug/l	20					
	1,2-Dibromoethane	ND	ug/l	20					
	Dibromomethane	ND	ug/l	20					
	1,2-Dichlorobenzene	ND	ug/l	20					
	1,3-Dichlorobenzene	ND	ug/l	20					
	1,4-Dichlorobenzene	ND	ug/l	20					
	Dichlorodifluoromethane	ND	ug/l	20					
	1,1-Dichloroethane	37	ug/l	20					
	1,2-Dichloroethane	ND	ug/l	20					
	1,1-Dichloroethene	58	ug/l	20					
	cis-1,2-Dichloroethene	300	ug/l	20					
	trans-1,2-Dichloroethene	ND	ug/l	20					
	1,2-Dichloropropane	ND	ug/l	20					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-13
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177529 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	20	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	2,2-Dichloropropane	ND	ug/l	20					
	1,1-Dichloropropene	ND	ug/l	20					
	Di-isopropyl ether	ND	ug/l	20					
	Ethyl Benzene	ND	ug/l	20					
	Hexachlorobutadiene	ND	ug/l	20					
	Isopropylbenzene	ND	ug/l	20					
	p-Isopropyltoluene	ND	ug/l	20					
	Methylene chloride	ND	ug/l	20					
	Methyl-tert-butyl-ether	ND	ug/l	20					
	Naphthalene	ND	ug/l	20					
	n-Propylbenzene	ND	ug/l	20					
	1,1,1,2-Tetrachloroethane	ND	ug/l	20					
	1,1,2,2-Tetrachloroethane	ND	ug/l	20					
	Styrene	ND	ug/l	20					
	Tetrachloroethene	ND	ug/l	20					
	Toluene	ND	ug/l	20					
	1,2,3-Trichlorobenzene	ND	ug/l	20					
	1,2,4-Trichlorobenzene	ND	ug/l	20					
	1,1,1-Trichloroethane	420	ug/l	20					
	1,1,2-Trichloroethane	ND	ug/l	20					
	Trichloroethene	2500	ug/l	20					
	Trichlorofluoromethane	ND	ug/l	20					
	1,2,3-Trichloropropane	ND	ug/l	20					
	1,2,4-Trimethylbenzene	ND	ug/l	20					
	1,3,5-Trimethylbenzene	ND	ug/l	20					
	Vinyl chloride	ND	ug/l	20					
	Xylenes, m + p	ND	ug/l	20					
	Xylene, o	ND	ug/l	20					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-16
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177530 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	3.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	Bromobenzene	ND	ug/l	5.0					
	Bromochloromethane	ND	ug/l	5.0					
	Bromodichloromethane	ND	ug/l	5.0					
	Bromoform	ND	ug/l	5.0					
	Bromomethane	ND	ug/l	5.0					
	n-Butylbenzene	ND	ug/l	5.0					
	sec-Butylbenzene	ND	ug/l	5.0					
	tert-Butylbenzene	ND	ug/l	5.0					
	Carbon tetrachloride	ND	ug/l	5.0					
	Chlorobenzene	ND	ug/l	5.0					
	Chlorodibromomethane	ND	ug/l	5.0					
	Chloroethane	ND	ug/l	5.0					
	Chloroform	ND	ug/l	5.0					
	Chloromethane	ND	ug/l	5.0					
	2-Chlorotoluene	ND	ug/l	5.0					
	4-Chlorotoluene	ND	ug/l	5.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	5.0					
	1,2-Dibromoethane	ND	ug/l	5.0					
	Dibromomethane	ND	ug/l	5.0					
	1,2-Dichlorobenzene	ND	ug/l	5.0					
	1,3-Dichlorobenzene	ND	ug/l	5.0					
	1,4-Dichlorobenzene	ND	ug/l	5.0					
	Dichlorodifluoromethane	ND	ug/l	5.0					
	1,1-Dichloroethane	5.3	ug/l	5.0					
	1,2-Dichloroethane	ND	ug/l	5.0					
	1,1-Dichloroethene	9.4	ug/l	5.0					
	cis-1,2-Dichloroethene	8.4	ug/l	5.0					
	trans-1,2-Dichloroethene	ND	ug/l	5.0					
	1,2-Dichloropropane	ND	ug/l	5.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-16
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177530 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	5.0	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	2,2-Dichloropropane	ND	ug/l	5.0					
	1,1-Dichloropropene	ND	ug/l	5.0					
	Di-isopropyl ether	ND	ug/l	5.0					
	Ethyl Benzene	ND	ug/l	5.0					
	Hexachlorobutadiene	ND	ug/l	5.0					
	Isopropylbenzene	ND	ug/l	5.0					
	p-Isopropyltoluene	ND	ug/l	5.0					
	Methylene chloride	ND	ug/l	5.0					
	Methyl-tert-butyl-ether	ND	ug/l	5.0					
	Naphthalene	ND	ug/l	5.0					
	n-Propylbenzene	ND	ug/l	5.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	5.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	5.0					
	Styrene	ND	ug/l	5.0					
	Tetrachloroethene	ND	ug/l	5.0					
	Toluene	ND	ug/l	5.0					
	1,2,3-Trichlorobenzene	ND	ug/l	5.0					
	1,2,4-Trichlorobenzene	ND	ug/l	5.0					
	1,1,1-Trichloroethane	99	ug/l	5.0					
	1,1,2-Trichloroethane	ND	ug/l	5.0					
	Trichloroethene	540	ug/l	5.0					
	Trichlorofluoromethane	ND	ug/l	5.0					
	1,2,3-Trichloropropane	ND	ug/l	5.0					
	1,2,4-Trimethylbenzene	ND	ug/l	5.0					
	1,3,5-Trimethylbenzene	ND	ug/l	5.0					
	Vinyl chloride	ND	ug/l	5.0					
	Xylenes, m + p	ND	ug/l	5.0					
	Xylene, o	ND	ug/l	5.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-12
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177531 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	15	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	Bromobenzene	ND	ug/l	25					
	Bromochloromethane	ND	ug/l	25					
	Bromodichloromethane	ND	ug/l	25					
	Bromoform	ND	ug/l	25					
	Bromomethane	ND	ug/l	25					
	n-Butylbenzene	ND	ug/l	25					
	sec-Butylbenzene	ND	ug/l	25					
	tert-Butylbenzene	ND	ug/l	25					
	Carbon tetrachloride	ND	ug/l	25					
	Chlorobenzene	ND	ug/l	25					
	Chlorodibromomethane	ND	ug/l	25					
	Chloroethane	ND	ug/l	25					
	Chloroform	ND	ug/l	25					
	Chloromethane	ND	ug/l	25					
	2-Chlorotoluene	ND	ug/l	25					
	4-Chlorotoluene	ND	ug/l	25					
	1,2-Dibromo-3-chloropropane	ND	ug/l	25					
	1,2-Dibromoethane	ND	ug/l	25					
	Dibromomethane	ND	ug/l	25					
	1,2-Dichlorobenzene	ND	ug/l	25					
	1,3-Dichlorobenzene	ND	ug/l	25					
	1,4-Dichlorobenzene	ND	ug/l	25					
	Dichlorodifluoromethane	ND	ug/l	25					
	1,1-Dichloroethane	46	ug/l	25					
	1,2-Dichloroethane	ND	ug/l	25					
	1,1-Dichloroethene	71	ug/l	25					
	cis-1,2-Dichloroethene	600	ug/l	25					
	trans-1,2-Dichloroethene	ND	ug/l	25					
	1,2-Dichloropropane	ND	ug/l	25					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-12
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177531 Date Reported : 04/18/1996

Report to: RMT, INC
744 HEARTLAND TRAIL
P.O. BOX 8923
MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	25	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	2,2-Dichloropropane	ND	ug/l	25					
	1,1-Dichloropropene	ND	ug/l	25					
	Di-isopropyl ether	ND	ug/l	25					
	Ethyl Benzene	ND	ug/l	25					
	Hexachlorobutadiene	ND	ug/l	25					
	Isopropylbenzene	ND	ug/l	25					
	p-Isopropyltoluene	ND	ug/l	25					
	Methylene chloride	ND	ug/l	25					
	Methyl-tert-butyl-ether	ND	ug/l	25					
	Naphthalene	ND	ug/l	25					
	n-Propylbenzene	ND	ug/l	25					
	1,1,1,2-Tetrachloroethane	ND	ug/l	25					
	1,1,2,2-Tetrachloroethane	ND	ug/l	25					
	Styrene	ND	ug/l	25					
	Tetrachloroethene	ND	ug/l	25					
	Toluene	ND	ug/l	25					
	1,2,3-Trichlorobenzene	ND	ug/l	25					
	1,2,4-Trichlorobenzene	ND	ug/l	25					
	1,1,1-Trichloroethane	490	ug/l	25					
	1,1,2-Trichloroethane	ND	ug/l	25					
	Trichloroethene	2600	ug/l	25					
	Trichlorofluoromethane	ND	ug/l	25					
	1,2,3-Trichloropropane	ND	ug/l	25					
	1,2,4-Trimethylbenzene	ND	ug/l	25					
	1,3,5-Trimethylbenzene	ND	ug/l	25					
	Vinyl chloride	ND	ug/l	25					
	Xylenes, m + p	ND	ug/l	25					
	Xylene, o	ND	ug/l	25					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-19
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177532 Date Reported : 04/17/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	JJB
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	2.1	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	3.6	ug/l	1.0					
	cis-1,2-Dichloroethene	4.7	ug/l	1.0					
	trans-1,2-Dichloroethene	ND	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : MW-19
Sample Matrix : WATER — Date Collected: 04/11/1996
En Chem Proj# : 9604282 — Date Received : 04/12/1996
En Chem Lab # : 177532 — Date Reported : 04/17/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	JJB
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	12	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	170	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NP7-2
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177533 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	12	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	Bromobenzene	ND	ug/l	20					
	Bromochloromethane	ND	ug/l	20					
	Bromodichloromethane	ND	ug/l	20					
	Bromoform	ND	ug/l	20					
	Bromomethane	ND	ug/l	20					
	n-Butylbenzene	ND	ug/l	20					
	sec-Butylbenzene	ND	ug/l	20					
	tert-Butylbenzene	ND	ug/l	20					
	Carbon tetrachloride	ND	ug/l	20					
	Chlorobenzene	ND	ug/l	20					
	Chlorodibromomethane	ND	ug/l	20					
	Chloroethane	ND	ug/l	20					
	Chloroform	ND	ug/l	20					
	Chloromethane	ND	ug/l	20					
	2-Chlorotoluene	ND	ug/l	20					
	4-Chlorotoluene	ND	ug/l	20					
	1,2-Dibromo-3-chloropropane	ND	ug/l	20					
	1,2-Dibromoethane	ND	ug/l	20					
	Dibromomethane	ND	ug/l	20					
	1,2-Dichlorobenzene	ND	ug/l	20					
	1,3-Dichlorobenzene	ND	ug/l	20					
	1,4-Dichlorobenzene	ND	ug/l	20					
	Dichlorodifluoromethane	ND	ug/l	20					
	1,1-Dichloroethane	31	ug/l	20					
	1,2-Dichloroethane	ND	ug/l	20					
	1,1-Dichloroethene	44	ug/l	20					
	cis-1,2-Dichloroethene	90	ug/l	20					
	trans-1,2-Dichloroethene	ND	ug/l	20					
	1,2-Dichloropropane	ND	ug/l	20					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NP7-2
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177533 Date Reported : 04/18/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	20	SW846 5030	04/17/1996	SW846 8260	04/17/1996	JJB
	2,2-Dichloropropane	ND	ug/l	20					
	1,1-Dichloropropene	ND	ug/l	20					
	Di-isopropyl ether	ND	ug/l	20					
	Ethyl Benzene	ND	ug/l	20					
	Hexachlorobutadiene	ND	ug/l	20					
	Isopropylbenzene	ND	ug/l	20					
	p-Isopropyltoluene	ND	ug/l	20					
	Methylene chloride	ND	ug/l	20					
	Methyl-tert-butyl-ether	ND	ug/l	20					
	Naphthalene	ND	ug/l	20					
	n-Propylbenzene	ND	ug/l	20					
	1,1,1,2-Tetrachloroethane	ND	ug/l	20					
	1,1,2,2-Tetrachloroethane	ND	ug/l	20					
	Styrene	ND	ug/l	20					
	Tetrachloroethene	ND	ug/l	20					
	Toluene	ND	ug/l	20					
	1,2,3-Trichlorobenzene	ND	ug/l	20					
	1,2,4-Trichlorobenzene	ND	ug/l	20					
	1,1,1-Trichloroethane	250	ug/l	20					
	1,1,2-Trichloroethane	ND	ug/l	20					
	Trichloroethene	1900	ug/l	20					
	Trichlorofluoromethane	ND	ug/l	20					
	1,2,3-Trichloropropane	ND	ug/l	20					
	1,2,4-Trimethylbenzene	ND	ug/l	20					
	1,3,5-Trimethylbenzene	ND	ug/l	20					
	Vinyl chloride	ND	ug/l	20					
	Xylenes, m + p	ND	ug/l	20					
	Xylene, o	ND	ug/l	20					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NPZ-1
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177534 Date Reported : 04/22/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	6.0	SW846 5030	04/19/1996	SW846 8260	04/19/1996	JJB
	Bromobenzene	ND	ug/l	10					
	Bromochloromethane	ND	ug/l	10					
	Bromodichloromethane	ND	ug/l	10					
	Bromoform	ND	ug/l	10					
	Bromomethane	ND	ug/l	10					
	n-Butylbenzene	ND	ug/l	10					
	sec-Butylbenzene	ND	ug/l	10					
	tert-Butylbenzene	ND	ug/l	10					
	Carbon tetrachloride	ND	ug/l	10					
	Chlorobenzene	ND	ug/l	10					
	Chlorodibromomethane	ND	ug/l	10					
	Chloroethane	ND	ug/l	10					
	Chloroform	ND	ug/l	10					
	Chloromethane	ND	ug/l	10					
	2-Chlorotoluene	ND	ug/l	10					
	4-Chlorotoluene	ND	ug/l	10					
	1,2-Dibromo-3-chloropropane	ND	ug/l	10					
	1,2-Dibromoethane	ND	ug/l	10					
	Dibromomethane	ND	ug/l	10					
	1,2-Dichlorobenzene	ND	ug/l	10					
	1,3-Dichlorobenzene	ND	ug/l	10					
	1,4-Dichlorobenzene	ND	ug/l	10					
	Dichlorodifluoromethane	ND	ug/l	10					
	1,1-Dichloroethane	23	ug/l	10					
	1,2-Dichloroethane	ND	ug/l	10					
	1,1-Dichloroethene	42	ug/l	10					
	cis-1,2-Dichloroethene	ND	ug/l	10					
	trans-1,2-Dichloroethene	ND	ug/l	10					
	1,2-Dichloropropane	ND	ug/l	10					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : NPZ-1
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177534 Date Reported : 04/22/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	10	SW846 5030	04/19/1996	SW846 8260	04/19/1996	JJB
	2,2-Dichloropropane	ND	ug/l	10					
	1,1-Dichloropropene	ND	ug/l	10					
	Di-isopropyl ether	ND	ug/l	10					
	Ethyl Benzene	ND	ug/l	10					
	Hexachlorobutadiene	ND	ug/l	10					
	Isopropylbenzene	ND	ug/l	10					
	p-Isopropyltoluene	ND	ug/l	10					
	Methylene chloride	ND	ug/l	10					
	Methyl-tert-butyl-ether	ND	ug/l	10					
	Naphthalene	ND	ug/l	10					
	n-Propylbenzene	ND	ug/l	10					
	1,1,1,2-Tetrachloroethane	ND	ug/l	10					
	1,1,2,2-Tetrachloroethane	ND	ug/l	10					
	Styrene	ND	ug/l	10					
	Tetrachloroethene	ND	ug/l	10					
	Toluene	ND	ug/l	10					
	1,2,3-Trichlorobenzene	ND	ug/l	10					
	1,2,4-Trichlorobenzene	ND	ug/l	10					
	1,1,1-Trichloroethane	370	ug/l	10					
	1,1,2-Trichloroethane	ND	ug/l	10					
	Trichloroethene	1400	ug/l	10					
	Trichlorofluoromethane	ND	ug/l	10					
	1,2,3-Trichloropropane	ND	ug/l	10					
	1,2,4-Trimethylbenzene	ND	ug/l	10					
	1,3,5-Trimethylbenzene	ND	ug/l	10					
	Vinyl chloride	ND	ug/l	10					
	Xylenes, m + p	ND	ug/l	10					
	Xylene, o	ND	ug/l	10					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : TRIP BLANK
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177535 Date Reported : 04/17/1996

Report to: RMT, INC
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Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	Benzene	ND	ug/l	0.6	SW846 5030	04/16/1996	SW846 8260	04/16/1996	JJB
	Bromobenzene	ND	ug/l	1.0					
	Bromochloromethane	ND	ug/l	1.0					
	Bromodichloromethane	ND	ug/l	1.0					
	Bromoform	ND	ug/l	1.0					
	Bromomethane	ND	ug/l	1.0					
	n-Butylbenzene	ND	ug/l	1.0					
	sec-Butylbenzene	ND	ug/l	1.0					
	tert-Butylbenzene	ND	ug/l	1.0					
	Carbon tetrachloride	ND	ug/l	1.0					
	Chlorobenzene	ND	ug/l	1.0					
	Chlorodibromomethane	ND	ug/l	1.0					
	Chloroethane	ND	ug/l	1.0					
	Chloroform	ND	ug/l	1.0					
	Chloromethane	ND	ug/l	1.0					
	2-Chlorotoluene	ND	ug/l	1.0					
	4-Chlorotoluene	ND	ug/l	1.0					
	1,2-Dibromo-3-chloropropane	ND	ug/l	1.0					
	1,2-Dibromoethane	ND	ug/l	1.0					
	Dibromomethane	ND	ug/l	1.0					
	1,2-Dichlorobenzene	ND	ug/l	1.0					
	1,3-Dichlorobenzene	ND	ug/l	1.0					
	1,4-Dichlorobenzene	ND	ug/l	1.0					
	Dichlorodifluoromethane	ND	ug/l	1.0					
	1,1-Dichloroethane	ND	ug/l	1.0					
	1,2-Dichloroethane	ND	ug/l	1.0					
	1,1-Dichloroethene	ND	ug/l	1.0					
	cis-1,2-Dichloroethene	ND	ug/l	1.0					
	trans-1,2-Dichloroethene	ND	ug/l	1.0					
	1,2-Dichloropropane	ND	ug/l	1.0					

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Lab Certification No. 405132750
Location : NAVISTAR PRJ#3777.01
Your Sample ID:
Sample Desc. : TRIP BLANK
Sample Matrix : WATER Date Collected: 04/11/1996
En Chem Proj# : 9604282 Date Received : 04/12/1996
En Chem Lab # : 177535 Date Reported : 04/17/1996

Report to: RMT, INC
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MADISON, WI 53708-8923

Bill to: EN CHEM,INC.

Analysis	Parameter	Result	Units	Detection Limit	Prep Method	Prep Date	Analysis Method	Analysis Date	Analyzed By
8260+	1,3-Dichloropropane	ND	ug/l	1.0	SW846 5030	04/16/1996	SW846 8260	04/16/1996	JJB
	2,2-Dichloropropane	ND	ug/l	1.0					
	1,1-Dichloropropene	ND	ug/l	1.0					
	Di-isopropyl ether	ND	ug/l	1.0					
	Ethyl Benzene	ND	ug/l	1.0					
	Hexachlorobutadiene	ND	ug/l	1.0					
	Isopropylbenzene	ND	ug/l	1.0					
	p-Isopropyltoluene	ND	ug/l	1.0					
	Methylene chloride	ND	ug/l	1.0					
	Methyl-tert-butyl-ether	ND	ug/l	1.0					
	Naphthalene	ND	ug/l	1.0					
	n-Propylbenzene	ND	ug/l	1.0					
	1,1,1,2-Tetrachloroethane	ND	ug/l	1.0					
	1,1,2,2-Tetrachloroethane	ND	ug/l	1.0					
	Styrene	ND	ug/l	1.0					
	Tetrachloroethene	ND	ug/l	1.0					
	Toluene	ND	ug/l	1.0					
	1,2,3-Trichlorobenzene	ND	ug/l	1.0					
	1,2,4-Trichlorobenzene	ND	ug/l	1.0					
	1,1,1-Trichloroethane	ND	ug/l	1.0					
	1,1,2-Trichloroethane	ND	ug/l	1.0					
	Trichloroethene	ND	ug/l	1.0					
	Trichlorofluoromethane	ND	ug/l	1.0					
	1,2,3-Trichloropropane	ND	ug/l	1.0					
	1,2,4-Trimethylbenzene	ND	ug/l	1.0					
	1,3,5-Trimethylbenzene	ND	ug/l	1.0					
	Vinyl chloride	ND	ug/l	1.0					
	Xylenes, m + p	ND	ug/l	1.0					
	Xylene, o	ND	ug/l	1.0					

"ND" Indicates no detectable analyte at or above the listed detection limit. All results reported on a dry weight basis. All subcontracted analyses are performed by Wisconsin DNR certified laboratories.

These results have been reviewed and their authenticity verified by:

RMT INC. LABORATORIES

CHAIN OF CUSTODY RECORD № 059332

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.: 3777.01

Project/Client: NAVISTAR

Project Manager/Contact Person: DAN PEPLINSKI

Filtered (Yes/No): No.

Preserved (Code): E

Analyses Requested: VOC's 8021

Lab No. 1085	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	VOC's 8021								Comments
001	5-21	1150	NMW-10	3	GW	X								
002	5-21	1140	NMW-11	3	GW	X								
003			Trip blank	2										

PRESERVED CODES
- A - NONE
- B - HNO_3
- C - H_2SO_4
- D - NaOH
- E - HCl
- F - METHANOL
- G - ____________

SPECIAL INSTRUCTIONS

Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
SAMPLER: [signature]	5-22-96 10:40	Terry Steinert	10:40 5-22-96
Terry Steinert	5/22/96	Jerald Torkelson	5/22/96
Dunkum	5/22/96 530 p	Burchard	5/22/96 530 p.

Custody Seal: Present/Absent (Absent circled) Intact/Not Intact Seal #'s

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list)

Turn Around (circle one) Normal (circled) Rush

Report Due ____________

(For Lab Use Only)

Receipt Temp: Iced

Temp Blank Y N

Receipt pH (Wet/Metals) N/A

F-268 (R6/95)

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

Madison Office & Laboratory
802 Deming Way
Madison, WI 53717
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1-888-5-ENCHEM

EN CHEM INC.

Corporate Office & Laboratory
1795 Industrial Drive
Green Bay, WI 54302
414-469-2436 • Fax: 414-469-8827
1-800-7-ENCHEM

PROJECT NAME: NAVISTAR
PROJECT NO: 03777.01
WORK ORDER NO: 1085

REPORT DATE:06/06/96

SAMPLE NO.	STATION ID	COLL. DATE	SAMPLE NO.	STATION ID	COLL. DATE
1085-001	NMW-10	05/21/96			
1085-002	NMW-11	05/21/96			
1085-003	TRIP BLANK	05/21/96			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by Laboratory management, as is verified by the following signature.

Kevin P. Mer
Approval Signature

6/6/96
Date

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Green Bay, WI 54302
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1-800-7-ENCHEM

PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 1085-001
STATION ID: NMW-10
WI DNR LAB ID: 113138520

REPORT DATE: 06/06/96
COLLECTION DATE: 05/21/96
ANALYSIS DATE: 06/04/96
METHOD: 8021

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<100	100		ug/L
Chloromethane	<50	50		ug/L
Vinyl chloride	<50	50		ug/L
Chloroethane	<50	50		ug/L
Fluorotrichloromethane	<50	50		ug/L
1,1-Dichloroethene	100	50		ug/L
Methylene chloride	<50	50		ug/L
trans-1,2-Dichloroethene	<50	50		ug/L
1,1-Dichloroethane	<50	50		ug/L
2,2-Dichloropropane	<100	100		ug/L
cis-1,2-Dichloroethene	71	50		ug/L
Chloroform	<50	50		ug/L
1,1,1-Trichloroethane	1400	500	D	ug/L
Carbon tetrachloride	<50	50		ug/L
Methyl-tert-butyl-ether	<50	50		ug/L
Di-isopropyl ether	<100	100		ug/L
1,2-Dichloroethane	<50	50		ug/L
Benzene	<50	50		ug/L
Trichloroethene	7900	500	D	ug/L
1,2-Dichloropropane	<50	50		ug/L
Bromodichloromethane	<50	50		ug/L
Toluene	<50	50		ug/L
1,1,2-Trichloroethane	<50	50		ug/L
Tetrachloroethene	<100	100		ug/L
1,3-Dichloropropane	<100	100		ug/L
Chlorodibromomethane	<50	50		ug/L
1,2-Dibromoethane	<50	50		ug/L
Chlorobenzene	<50	50		ug/L
Ethylbenzene	<50	50		ug/L
Xylene, total	<150	150		ug/L
Isopropylbenzene	<50	50		ug/L
1,1,2,2-Tetrachloroethane	<50	50		ug/L
n-Propylbenzene	<50	50		ug/L
Bromobenzene	<50	50		ug/L
1,3,5-Trimethylbenzene	<50	50		ug/L
2-Chlorotoluene	<50	50		ug/L
4-Chlorotoluene	<50	50		ug/L
tert-Butylbenzene	<100	100		ug/L
1,2,4-Trimethylbenzene	<50	50		ug/L
sec-Butylbenzene	<50	50		ug/L
p-Isopropyltoluene	<50	50		ug/L

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 1085-001
STATION ID: NMW-10
WI DNR LAB ID: 113138520

REPORT DATE: 06/06/96
COLLECTION DATE: 05/21/96
ANALYSIS DATE: 06/04/96
METHOD: 8021

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
1,3-Dichlorobenzene	<50	50		ug/L
1,4-Dichlorobenzene	<50	50		ug/L
n-Butylbenzene	<50	50		ug/L
1,2-Dichlorobenzene	<50	50		ug/L
1,2-Dibromo-3-chloropropane	<50	50		ug/L
1,2,4-Trichlorobenzene	<50	50		ug/L
Hexachlorobutadiene	<50	50		ug/L
Naphthalene	<250	250		ug/L
1,2,3-Trichlorobenzene	<50	50		ug/L

D = Analyte value from diluted analysis dated 06/04/96.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 1085-002
STATION ID: NMW-11
WI DNR LAB ID: 113138520

REPORT DATE: 06/06/96
COLLECTION DATE: 05/21/96
ANALYSIS DATE: 06/04/96
METHOD: 8021

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<100	100		ug/L
Chloromethane	<50	50		ug/L
Vinyl chloride	<50	50		ug/L
Chloroethane	<50	50		ug/L
Fluorotrichloromethane	<50	50		ug/L
1,1-Dichloroethene	81	50		ug/L
Methylene chloride	<50	50		ug/L
trans-1,2-Dichloroethene	<50	50		ug/L
1,1-Dichloroethane	<50	50		ug/L
2,2-Dichloropropane	<100	100		ug/L
cis-1,2-Dichloroethene	84	50		ug/L
Chloroform	<50	50		ug/L
1,1,1-Trichloroethane	1000	500	D	ug/L
Carbon tetrachloride	<50	50		ug/L
Methyl-tert-butyl-ether	<50	50		ug/L
Di-isopropyl ether	<100	100		ug/L
1,2-Dichloroethane	<50	50		ug/L
Benzene	<50	50		ug/L
Trichloroethene	4600	500	D	ug/L
1,2-Dichloropropane	<50	50		ug/L
Bromodichloromethane	<50	50		ug/L
Toluene	<50	50		ug/L
1,1,2-Trichloroethane	<50	50		ug/L
Tetrachloroethene	<100	100		ug/L
1,3-Dichloropropane	<100	100		ug/L
Chlorodibromomethane	<50	50		ug/L
1,2-Dibromoethane	<50	50		ug/L
Chlorobenzene	<50	50		ug/L
Ethylbenzene	<50	50		ug/L
Xylene, total	<150	150		ug/L
Isopropylbenzene	<50	50		ug/L
1,1,2,2-Tetrachloroethane	<50	50		ug/L
n-Propylbenzene	<50	50		ug/L
Bromobenzene	<50	50		ug/L
1,3,5-Trimethylbenzene	<50	50		ug/L
2-Chlorotoluene	<50	50		ug/L
4-Chlorotoluene	<50	50		ug/L
tert-Butylbenzene	<100	100		ug/L
1,2,4-Trimethylbenzene	<50	50		ug/L
sec-Butylbenzene	<50	50		ug/L
p-Isopropyltoluene	<50	50		ug/L

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 1085-002
STATION ID: NMW-11
WI DNR LAB ID: 113138520

REPORT DATE: 06/06/96
COLLECTION DATE: 05/21/96
ANALYSIS DATE: 06/04/96
METHOD: 8021

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
1,3-Dichlorobenzene	<50	50		ug/L
1,4-Dichlorobenzene	<50	50		ug/L
n-Butylbenzene	<50	50		ug/L
1,2-Dichlorobenzene	<50	50		ug/L
1,2-Dibromo-3-chloropropane	<50	50		ug/L
1,2,4-Trichlorobenzene	<50	50		ug/L
Hexachlorobutadiene	<50	50		ug/L
Naphthalene	<250	250		ug/L
1,2,3-Trichlorobenzene	<50	50		ug/L

D = Analyte value from diluted analysis dated 06/06/96.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 1085-003
STATION ID: TRIP BLANK
WI DNR LAB ID: 113138520

REPORT DATE: 06/06/96
COLLECTION DATE: 05/21/96
ANALYSIS DATE: 05/31/96
METHOD: 8021

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
1,3-Dichlorobenzene	<1.0	1.0		ug/L
1,4-Dichlorobenzene	<1.0	1.0		ug/L
n-Butylbenzene	<1.0	1.0		ug/L
1,2-Dichlorobenzene	<1.0	1.0		ug/L
1,2-Dibromo-3-chloropropane	<1.0	1.0		ug/L
1,2,4-Trichlorobenzene	<1.0	1.0		ug/L
Hexachlorobutadiene	<1.0	1.0		ug/L
Naphthalene	<5.0	5.0		ug/L
1,2,3-Trichlorobenzene	<1.0	1.0		ug/L

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 1085-003
STATION ID: TRIP BLANK
WI DNR LAB ID: 113138520

REPORT DATE: 06/06/96
COLLECTION DATE: 05/21/96
ANALYSIS DATE: 05/31/96
METHOD: 8021

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<2.0	2.0		ug/L
Chloromethane	<1.0	1.0		ug/L
Vinyl chloride	<1.0	1.0		ug/L
Chloroethane	<1.0	1.0		ug/L
Fluorotrichloromethane	<1.0	1.0		ug/L
1,1-Dichloroethene	<1.0	1.0		ug/L
Methylene chloride	<1.0	1.0		ug/L
trans-1,2-Dichloroethene	<1.0	1.0		ug/L
1,1-Dichloroethane	<1.0	1.0		ug/L
2,2-Dichloropropane	<2.0	2.0		ug/L
cis-1,2-Dichloroethene	<1.0	1.0		ug/L
Chloroform	<1.0	1.0		ug/L
1,1,1-Trichloroethane	<1.0	1.0		ug/L
Carbon tetrachloride	<1.0	1.0		ug/L
Methyl-tert-butyl-ether	<1.0	1.0		ug/L
Di-isopropyl ether	<2.0	2.0		ug/L
1,2-Dichloroethane	<1.0	1.0		ug/L
Benzene	<1.0	1.0		ug/L
Trichloroethene	<1.0	1.0		ug/L
1,2-Dichloropropane	<1.0	1.0		ug/L
Bromodichloromethane	<1.0	1.0		ug/L
Toluene	<1.0	1.0		ug/L
1,1,2-Trichloroethane	<1.0	1.0		ug/L
Tetrachloroethene	<2.0	2.0		ug/L
1,3-Dichloropropane	<2.0	2.0		ug/L
Chlorodibromomethane	<1.0	1.0		ug/L
1,2-Dibromoethane	<1.0	1.0		ug/L
Chlorobenzene	<1.0	1.0		ug/L
Ethylbenzene	<1.0	1.0		ug/L
Xylene, total	<3.0	3.0		ug/L
Isopropylbenzene	<1.0	1.0		ug/L
1,1,2,2-Tetrachloroethane	<1.0	1.0		ug/L
n-Propylbenzene	<1.0	1.0		ug/L
Bromobenzene	<1.0	1.0		ug/L
1,3,5-Trimethylbenzene	<1.0	1.0		ug/L
2-Chlorotoluene	<1.0	1.0		ug/L
4-Chlorotoluene	<1.0	1.0		ug/L
tert-Butylbenzene	<2.0	2.0		ug/L
1,2,4-Trimethylbenzene	<1.0	1.0		ug/L
sec-Butylbenzene	<1.0	1.0		ug/L
p-Isopropyltoluene	<1.0	1.0		ug/L

APPENDIX F

GROUNDWATER SAMPLE ANALYTICAL RESULTS

U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab # 246027660

Method 8021 Volatile Organic Compounds

DAN PEPLINSKI
R M T
150 N PATRICK BLVD
BROOKFIELD WI 53045

Report Date: 04-Sep-96
Analyzed By: M. Ricker

Project #: 3777.01
Project : Navistar/Waukesha, WI
Sample ID: WCL Oil
Lab Code: 5014265A
Sample Type: Oil
Sample Date: 23-Aug-96
Date Analyzed: 30-Aug-96

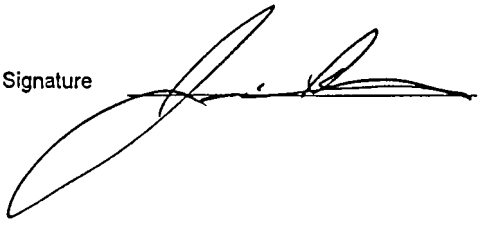
ANALYTE	RESULT	MDL UG/KG	PQL UG/KG
Benzene	1900	10	32
Bromobenzene	< 30	9	30
Bromodichloromethane	< 14	4	14
n-Butylbenzene	3700	17	56
sec-Butylbenzene	2300	19	61
tert-Butylbenzene	< 50	15	50
Carbon Tetrachloride	< 62	20	62
Chlorobenzene	< 33	11	33
Chloroethane	< 62	48	161
Chloroform	< 27	9	27
Chloromethane	< 120	109	384
2-Chlorotoluene	< 81	26	81
4-Chlorotoluene	< 24	7	24
1,2-Dibromo-3-Chloropropane	< 120	103	335
Dibromochloromethane	< 11	3	11
1,2-Dichlorobenzene	< 14	4	14
1,3-Dichlorobenzene	< 100	29	103
1,4-Dichlorobenzene	< 16	5	16
Dichlorodifluoromethane	< 670	211	670
1,1-Dichloroethane	< 460	15	46
1,2-Dichloroethane	< 110	33	107
1,1-Dichloroethene	< 33	10	33
cis-1,2-Dichloroethene	< 36	11	36
trans-1,2-Dichloroethene	< 29	9	29
1,2-Dichloropropane	< 19	6	19
1,3-DCP,Tetrachlorethene	< 69	21	69

ANALYTE	RESULT	MDL UG/KG	PQL UG/KG
cis-1,2-DCE, 2,2-Dichloropropane	< 120	78	273
Di-Isopropyl Ether	< 47	15	47
Ethylbenzene	1600	12	40
EDB (1,2-Dibromoethane)	< 10	3	10
Hexachlorobutadiene	< 43	14	43
Isopropylbenzene	960	14	45
p-Isopropyltoluene	620	19	57
Methylene Chloride	810	36	113
MTBE	< 27	9	27
Naphthalene	970	16	51
n-Propylbenzene	2400	16	51
1,1,2,2-Tetrachloroethane	< 38	12	38
Tetrachloroethene	590	17	57
Toluene	5500	27	86
1,2,3-Trichlorobenzene	< 120	38	136
1,2,4-Trichlorobenzene	< 110	32	113
1,1,1-Trichloroethane	3800	25	78
1,1,2-Trichloroethane	< 21	7	21
Trichloroethene	8100	7	22
Trichlorofluoromethane	< 170	174	546
1,2,4-Trimethylbenzene	2900	22	71
1,3,5-Trimethylbenzene	910	22	71
Vinyl Chloride	< 67	21	67
m & p-Xylene	3000	35	112
o-Xylene	2300	12	41

Fluorobenzene Surrogate	159	% Rec.
1,4-Dichlorobutane Surrogate	87	% Rec.
Sample pH	NA	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature



U.S. Oil Co., Inc.

nalytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

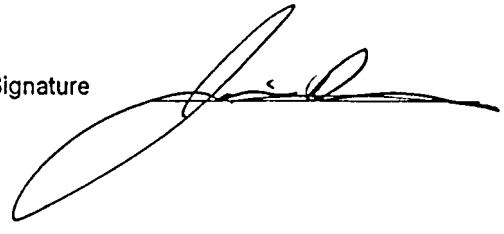
Project #: 3777.01 Report Date: 04-Sep-96
Sample ID: WCL Oil Lab Code: 5014265A

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	F	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	P	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	P	P	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	P	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	P	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-DCP, Tetrachloroethene	P	P	P	P	P	P	P
cis-1,2-DCE, 2,2-Dichloropropane	P	F	P	P	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	F	F	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	F	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	F	F	P	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	F	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	F	P	P	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	F	F	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory
425 S. Washington St. Combined Locks, WI 54113
Phone 414-735-0298

WI DNR Certified Lab #445027660

September 11, 1996

Dan Peplinski
RMT
150 N Patrick BLVD
Brookfield WI 53045

Dear Dan:

The purpose of this letter is to summarize U.S. Analytical's findings regarding the three different analysis' performed on sample ID: WCL Oil from the project # 3777.01. The lab first tried extracting the oil like a volatile soil sample using the same method that is used for GRO,PVOC, and VOC's. This procedure involves methanol addition, 2 minute shake, and 20 minute sonication. The next analysis used the same procedure but more aggressive, the samples were shook 3 times for 2 minutes followed by a 40 minute sonication. The third procedure is the recommended extraction procedure for oily wastes as written in SW-846 method 5030. This involves diluting the oil in Tetraethylene glycol dimethyl ether and placing an aliquot directly into the purge vessel. After reviewing the data generated from these three different extraction procedures the following conclusions were made. #1 The Tetraethylene glycol dimethyl ether dilution technique provided between 2-10 times greater recovery for the detected analytes than the normal methanol extraction procedure. #2 The aggressive methanol extraction procedure provided about 2 times greater recovery for the detected analytes than the normal methanol extraction procedure. #3 It does not appear that methanol extraction provides very reproducible results with this oil matrix or the detected analytes are not evenly dispersed within the sample or more likely a combination of both. Based on the above information it is our recommendation that the Tetraethylene glycol dimethyl ether dilution be performed on oil samples. Unfortunately it is very difficult to clean our analytical instruments after this procedure is used. If you have an further questions regarding this procedure please call.

Sincerely,

Michael J. Ricker

Mike Ricker
Asst Lab. Mgr.

CHAIN CUSTODY RECORD

Rev. Date: 11-03-94

U.S. Analytical Lab
1090 Kennedy Av.
Kimberly, WI 54136 *(414) 735-8295*

Chain # № 3796

Page 1 of 1

Lab I.D. # 5014265

Account No. : Quote No.:

Project #: 3777.01

Sampler: (signature) [signature]

Sample Integrity - To completed by receiving lab.
Method of Shipment : Courier Temp. of Temp. Blank. ___ °C On Ice: X
Sample Condition (good, cracked/broken bottle, improper seal):

Project (Name / Location): NAVISTAR / WAUKESHA, WI

Reports To: DAN PEPLINSKI Invoice To: ← SAME

Company RMT, INC. Company

Address 150 N. PATRICK BLVD Address

City State Zip BROOKFIELD WI 53045 City State Zip

Phone 414-879-1212 Phone

Sample Handling Request

X Rush Analysis Date Required 8/29

___ Normal Turn Around

Analysis Requested

Lab I.D.	Sample I.D.	Collection Date	Collection Time	No. of Containers Size and Type	Description Water	Description Soil	Description Other (specify)	Preservation	DRO (Mod/TPH)	GRO (Mod/TPH)	PVOC (EPA 8020)	BTEX (EPA 8020)	VOC (EPA 8021)	O&G (EPA 413.1)	PAH (EPA 8310)	Pb	Flash Point	Other Analysis	PID/ FID
5014265A	WCL 01C	8-23-96	9:45	3, 40mL, GLASS	GW			HCl					3						—

Department Use Only

Split Samples: Offered ? ____ Yes _____ No
Accepted? ____ Yes _____ No
Accepted By: _____

Comments/ Special Instructions

Need Results By 8/29 TMC D.P. CAZ 8/27.

Department Use Optional for Soil Samples

Disposition of unused portion of sample
Lab Should:
____ Dispose _____ Retain for ___ days
____ Return _____ Other

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
[signature]	10:45	8-23-96	George Huss	10:45	8-23-96
George Huss	3:55	8-23-96			

Received in Laboratory By: [signature] Date: 8/23/96 Time: 5:55

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Soil Adjacent To hydraulic Oil Line A.P.

Method 8021 Volatile Organic Compounds
(Methanol Preserved)

Dan Peplinski
R M T
150 N PATRICK BLVD
BROOKFIELD WI 53045

Report Date: 03-Sep-96
Analyzed By: K. Brahmsteadt

Project #: 3777.01
Project : Navistar
Sample ID: WCL Soil(4.8')
Lab Code: 5014295A
Sample Type: Soil
Sample Date: 23-Aug-96
Date Analyzed: 29-Aug-96

ANALYTE	RESULT	MDL UG/KG	PQL UG/KG	CONFIRMED METHOD
Benzene	< 25	10	33	
Bromobenzene	< 25	5	17	
Bromodichloromethane	< 25	2	7	
n-Butylbenzene	< 25	21	67	
sec-Butylbenzene	< 25	19	59	
tert-Butylbenzene	< 25	11	36	
Carbon Tetrachloride	< 25	5	16	
Chlorobenzene	< 25	7	23	
Chloroethane	< 25	17	53	
Chloroform	< 25	3	10	
Chloromethane	< 25	8	24	
2-Chlorotoluene	< 25	4	13	
4-Chlorotoluene	< 25	4	12	
1,2-Dibromo-3-Chloropropane	< 25	6	19	
Dibromochloromethane	< 25	5	15	
1,2-Dichlorobenzene	< 25	5	15	
1,3-Dichlorobenzene	< 25	4	11	
1,4-Dichlorobenzene	< 25	4	11	
Dichlorodifluoromethane	< 25	13	43	
1,1-Dichloroethane	< 25	3	10	
1,2-Dichloroethane	< 25	3	11	
1,1-Dichloroethene	< 25	5	15	
cis 1,2-Dichloroethene	< 25	21	69	
trans-1,2-Dichloroethene	< 25	8	24	
1,2-Dichloropropane	< 25	3	9	
1,3-DCP, Tetrachloroethene	< 25	9.3	28	

ANALYTE	RESULT	MDL UG/KG	PQL UG/KG	CONFIRMED METHOD
2,2-Dichloropropane	< 25	25	75	
Di-isopropyl Ether	< 25	6	18	
Ethylbenzene	< 25	9	28	
EDB (1,2-Dibromoethane)	< 25	8	24	
Hexachlorobutadiene	< 25	3	11	
Isopropylbenzene	< 25	7	23	
p-Isopropyltoluene	< 25	15	48	
Methylene Chloride	< 25	5	17	
MTBE	< 25	5	15	
Naphthalene	< 25	19	61	
n-Propylbenzene	< 25	19	60	
1,1,2,2-Tetrachloroethane	< 25	14	43	
Tetrachloroethene	< 25	20	65	
Toluene	< 25	14	46	
1,2,3-Trichlorobenzene	< 25	16	50	
1,2,4-Trichlorobenzene	< 25	11	35	
1,1,1-Trichloroethane	< 25	8	26	
1,1,2-Trichloroethane	< 25	8	24	
Trichloroethene	< 25	11	34	
Trichlorofluoromethane	< 25	22	71	
1,2,4-Trimethylbenzene	< 25	9	27	
1,3,5-Trimethylbenzene	< 25	6	19	
Vinyl Chloride	< 25	5	16	
m&p-Xylene	< 50	11	36	
o-Xylene	< 25	6	19	

Fluorobenzene Surrogate 108 % Rec.
1,4-Dichlorobutane Surrogate 105 % Rec.
Total % Solids 81.6

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

GC #8S

Authorized Signature

RECEIVED
RMT, INC.
SEP - 6 1996
PROJ. #

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

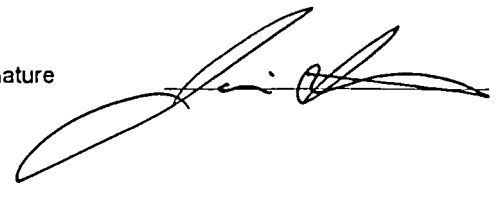
Project #: 3777.01 Report Date: 03-Sep-96
Sample ID: WCL Soil(4.8') Lab Code: 5014295A

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	P	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	F	P	P	F	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	P	P	P	P	P	P
cis 1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	F	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-DCP, Tetrachloroethene	P	P	P	P	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	P	P	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	P	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	P	P	P	P
Trichloroethene	P	F	P	P	P	P	P
Trichlorofluoromethane	P	P	P	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m&p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Soil Adjacent to hydraulic oil line D.P.

Method 8021 Volatile Organic Compounds
(Methanol Preserved)

Dan Peplinski
R M T
150 N PATRICK BLVD
BROOKFIELD WI 53045

Report Date: 03-Sep-96
Analyzed By: K. Brahmsteadt

Project #: 3777.01
Project : Navistar
Sample ID: WCL Soil(1.3')
Lab Code: 5014295B
Sample Type: Soil
Sample Date: 23-Aug-96
Date Analyzed: 29-Aug-96

ANALYTE	RESULT	MDL UG/KG	PQL UG/KG	CONFIRMED METHOD
Benzene	< 25	10	33	
Bromobenzene	< 25	5	17	
Bromodichloromethane	< 25	2	7	
n-Butylbenzene	< 25	21	67	
sec-Butylbenzene	< 25	19	59	
tert-Butylbenzene	< 25	11	36	
Carbon Tetrachloride	< 25	5	16	
Chlorobenzene	< 25	7	23	
Chloroethane	< 25	17	53	
Chloroform	< 25	3	10	
[illegible]loromethane	< 25	8	24	
[illegible]Chlorotoluene	< 25	4	13	
4-Chlorotoluene	< 25	4	12	
1,2-Dibromo-3-Chloropropane	< 25	6	19	
Dibromochloromethane	< 25	5	15	
1,2-Dichlorobenzene	< 25	5	15	
1,3-Dichlorobenzene	< 25	4	11	
1,4-Dichlorobenzene	< 25	4	11	
Dichlorodifluoromethane	< 25	13	43	
1,1-Dichloroethane	< 25	3	10	
1,2-Dichloroethane	< 25	3	11	
1,1-Dichloroethene	< 25	5	15	
cis 1,2-Dichloroethene	< 25	21	69	
trans-1,2-Dichloroethene	< 25	8	24	
1,2-Dichloropropane	< 25	3	9	
1,3-DCP, Tetrachloroethene	< 25	9.3	28	

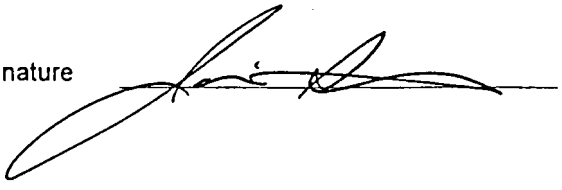
ANALYTE	RESULT	MDL UG/KG	PQL UG/KG	CONFIRMED METHOD
2,2-Dichloropropane	< 25	25	75	
Di-isopropyl Ether	< 25	6	18	
Ethylbenzene	< 25	9	28	
EDB (1,2-Dibromoethane)	< 25	8	24	
Hexachlorobutadiene	< 25	3	11	
Isopropylbenzene	< 25	7	23	
p-Isopropyltoluene	< 25	15	48	
Methylene Chloride	< 25	5	17	
MTBE	< 25	5	15	
Naphthalene	< 25	19	61	
n-Propylbenzene	< 25	19	60	
1,1,2,2-Tetrachloroethane	< 25	14	43	
Tetrachloroethene	< 25	20	65	
Toluene	< 25	14	46	
1,2,3-Trichlorobenzene	< 25	16	50	
1,2,4-Trichlorobenzene	< 25	11	35	
1,1,1-Trichloroethane	< 25	8	26	
1,1,2-Trichloroethane	< 25	8	24	
Trichloroethene	< 25	11	34	
Trichlorofluoromethane	< 25	22	71	
1,2,4-Trimethylbenzene	< 25	9	27	
1,3,5-Trimethylbenzene	< 25	6	19	
Vinyl Chloride	< 25	5	16	
m&p-Xylene	< 50	11	36	
o-Xylene	< 25	6	19	

Fluorobenzene Surrogate	107 % Rec.
1,4-Dichlorobutane Surrogate	104 % Rec.
Total % Solids	93.4

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

GC #8S

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

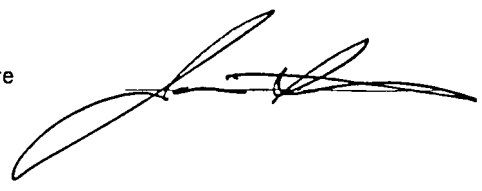
Project #: 3777.01 Report Date: 03-Sep-96
Sample ID: WCL Soil(1.3') Lab Code: 5014295B

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	P	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	F	P	P	F	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	P	P	P	P	P	P
cis 1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	F	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-DCP, Tetrachloroethene	P	P	P	P	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	P	P	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	P	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	P	P	P	P
Trichloroethene	P	F	P	P	P	P	P
Trichlorofluoromethane	P	P	P	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m&p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds
(Methanol Preserved)

Dan Peplinski
R M T
150 N PATRICK BLVD
BROOKFIELD WI 53045

Report Date: 03-Sep-96
Analyzed By: K. Brahmsteadt

Project #: 3777.01
Project : Navistar
Sample ID: Methanol Blk
Lab Code: 5014295C
Sample Type: Soil
Sample Date: 23-Aug-96
Date Analyzed: 29-Aug-96

ANALYTE	RESULT	MDL UG/KG	PQL UG/KG	CONFIRMED METHOD
Benzene	< 25	10	33	
Bromobenzene	< 25	5	17	
Bromodichloromethane	< 25	2	7	
n-Butylbenzene	< 25	21	67	
sec-Butylbenzene	< 25	19	59	
tert-Butylbenzene	< 25	11	36	
Carbon Tetrachloride	< 25	5	16	
Chlorobenzene	< 25	7	23	
Chloroethane	< 25	17	53	
Chloroform	< 25	3	10	
[illegible]loromethane	< 25	8	24	
[illegible]hlorotoluene	< 25	4	13	
4-Chlorotoluene	< 25	4	12	
1,2-Dibromo-3-Chloropropane	< 25	6	19	
Dibromochloromethane	< 25	5	15	
1,2-Dichlorobenzene	< 25	5	15	
1,3-Dichlorobenzene	< 25	4	11	
1,4-Dichlorobenzene	< 25	4	11	
Dichlorodifluoromethane	< 25	13	43	
1,1-Dichloroethane	< 25	3	10	
1,2-Dichloroethane	< 25	3	11	
1,1-Dichloroethene	< 25	5	15	
cis 1,2-Dichloroethene	< 25	21	69	
trans-1,2-Dichloroethene	< 25	8	24	
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1,3-DCP, Tetrachloroethene	< 25	9.3	28	

ANALYTE	RESULT	MDL UG/KG	PQL UG/KG	CONFIRMED METHOD
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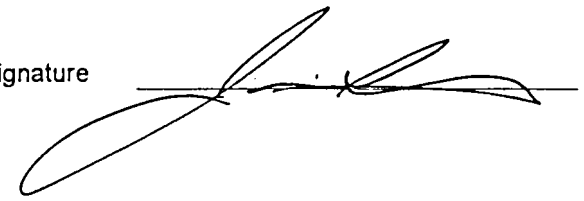
Hexachlorobutadiene	< 25	3	11	
Isopropylbenzene	< 25	7	23	
p-Isopropyltoluene	< 25	15	48	
Methylene Chloride	< 25	5	17	
MTBE	< 25	5	15	
Naphthalene	< 25	19	61	
n-Propylbenzene	< 25	19	60	
1,1,2,2-Tetrachloroethane	< 25	14	43	
Tetrachloroethene	< 25	20	65	
Toluene	< 25	14	46	
1,2,3-Trichlorobenzene	< 25	16	50	
1,2,4-Trichlorobenzene	< 25	11	35	
1,1,1-Trichloroethane	< 25	8	26	
1,1,2-Trichloroethane	< 25	8	24	
Trichloroethene	< 25	11	34	
Trichlorofluoromethane	< 25	22	71	
1,2,4-Trimethylbenzene	< 25	9	27	
1,3,5-Trimethylbenzene	< 25	6	19	
Vinyl Chloride	< 25	5	16	
m&p-Xylene	< 50	11	36	
o-Xylene	< 25	6	19	

Fluorobenzene Surrogate	108 % Rec.
1,4-Dichlorobutane Surrogate	101 % Rec.
Total % Solids	100

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

GC #8S

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

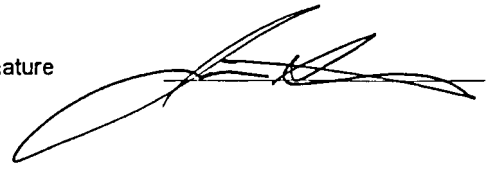
Project #: 3777.01 Report Date: 03-Sep-96
Sample ID: Methanol Blk Lab Code: 5014295C

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	P	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	F	P	P	F	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	P	P	P	P	P	P
cis 1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	F	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-DCP, Tetrachloroethene	P	P	P	P	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	P	P	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	P	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	P	P	P	P
Trichloroethene	P	F	P	P	P	P	P
Trichlorofluoromethane	P	P	P	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m&p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature



CHAIN CUSTODY RECORD

SAP

U.S. Analytical Lab
1090 Kennedy Av.
Kimberly, WI 54136 *(414) 735-8295*

Rev. Date: 11-03-94

Chain # № 3761

Page 1 of 1

Lab I.D. # 5014295

Account No. : Quote No.:

Project #: 3777.01

Sampler: (signature) Gregory J

Sample Integrity - To completed by receiving lab.
Method of Shipment : Courier Temp. of Temp. Blank. ___ °C On Ice: X
Sample Condition (good, cracked/broken bottle, improper seal):

Project (Name / Location): Navistar

Reports To: Dan Peplinski Invoice To: Same

Company RMT, Inc. Company

Address 150 N. Patrick Address

City State Zip Brookfield WI 53845 City State Zip

Phone 414-879-1212 Phone

Sample Handling Request

___ Rush Analysis Date Required ___

___ Normal Turn Around

Analysis Requested

Lab I.D.	Sample I.D.	Collection Date	Collection Time	No. of Containers Size and Type	Description Water	Description Soil	Description Other (specify)	Preservation	DRO (Mod/TPH)	GRO (Mod/TPH)	PVOC (EPA 8020)	BTEX (EPA 8020)	VOC (EPA 8021)	O&G (EPA 413.1)	PAH (EPA 8310)	Pb	Flash Point	Other Analysis	PID/FID
5014295A	WCL soil (4.8')	8/23	2:20	1-40 ml, 1-2oz		X		Methanol					X						<2
B	WCL soil (1.3')	"	2:30	"		X		"					X						<2
C	Methanol Blk	"	3:00	1-60 ml			QC	"					X						NA

Department Use Only

Split Samples: Offered ? ____ Yes ____ No

Accepted? ____ Yes ____ No

Accepted By: _____

Comments/ Special Instructions

Department Use Optional for Soil Samples

Disposition of unused portion of sample

Lab Should:

____ Dispose ____ Retain for ___ days

____ Return ____ Other

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Gregory J	8:00	8/27/96	Jerry Steinert	8:20	8/27/96
Jerry Steinert	11:10	8/27/96	Dan Thelen	11:10	8/27/96
Dan Thelen USAI	4:10	8/27/96			

Received in Laboratory By: [signature] Date: 8/27/96 Time: 4:10

RMT INC.
LABORATORIES
F-268 (R2/92)
(Use Black Ink Only)

Madison, WI 53717
744 Heartland Trail
Phone (608) 831-4444
FAX (608) 831-7530

Santa Monica, CA
Atlanta, GA
Baton Rouge, LA
Troy, MI

Ledge, MI
ille, TN

Greenville, SC
Schaumburg, IL

Dublin, OH
Waukesha, WI

CHAIN OF CUSTODY RECORD

№ 044472

Bottles Prepared by: Date/Time

Project No.: 3777.01
Client: Navistar

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

Analysis (~~Container Inventory~~): VOCs 8260 WI LUST; DRY WT; MATRIX

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

9497

RMT Lab NO.	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	VOCs 8260 WI LUST	DRY WT						MATRIX	Comments
001	3/29	9:20	GP-9 (4)	2	X	X						Soil	
002		10:05	GP-10 (3)	2	X	X							
003		10:45	GP-11 (4)	2	X	X							
004		10:55	Methanol Blk	1	X								
005		11:30	GP-12 (1)	2	X	X							
006		11:45	GP-12 (3)	2	X	X							
007		12:15	GP-13 (3)	2	X	X							
008		12:45	GP-14 (4)	2	X	X							
009		1:30	GP-15 (3)	2	X	X							

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
① Gregory [signature]	3/29/96 1257	② Shipper Name & #: Dunham Express	3/29/96 1257
③ Relinquished by (Sig.)	Date/Time	④ Received by (Sig.) Shipper Name & #	Date/Time
⑤ Relinquished by (Sig.): Dunham's	4/1/96 2pm	⑥ Received by (Sig.) Shipper Name & #: K. Sherfinski [signature]	4/1/96 2pm

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp: iced
Receipt pH: NA

Custody Seal Present/Absent (Absent circled) Seal Intact/Not Intact Seal #'s

Received on Saturday 3-30-96

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

Madison Office & Laboratory
802 Deming Way
Madison, WI 53717
608-827-5501 • Fax: 608-827-5503
1-888-5-ENCHEM

EN CHEM INC.

Corporate Office & Laboratory
1795 Industrial Drive
Green Bay, WI 54302
414-469-2436 • Fax: 414-469-8827
1-800-7-ENCHEM

PROJECT NAME: NAVISTAR
PROJECT NO: 03777.01
WORK ORDER NO: 9497

REPORT DATE:04/16/96

SAMPLE NO.	STATION ID	COLL. DATE	SAMPLE NO.	STATION ID	COLL. DATE
9497-001	GP-9 (4)	03/29/96			
9497-002	GP-10 (3)	03/29/96			
9497-003	GP-11 (4)	03/29/96			
9497-004	METHANOL BLK	03/29/96			
9497-005	GP-12 (1)	03/29/96			
9497-006	GP-12 (3)	03/29/96			
9497-007	GP-13 (3)	03/29/96			
9497-008	GP-14 (4)	03/29/96			
9497-009	GP-15 (3)	03/29/96			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by Laboratory management, as is verified by the following signature.

[redacted]roval Signature — Date 4/16/95

Lab Cert. #: WI DNR 113138520, MN DNR 055-999-107, SC DHEC 83001, TN DOH 02916

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-001
STATION ID: GP-9 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<100	100		ug/kg dry wt.
Chloromethane	<100	100		ug/kg dry wt.
Vinyl chloride	<100	100		ug/kg dry wt.
Chloroethane	<100	100		ug/kg dry wt.
Fluorotrichloromethane	<52	52		ug/kg dry wt.
1,1-Dichloroethene	<52	52		ug/kg dry wt.
Methylene chloride	<52	52		ug/kg dry wt.
trans-1,2-Dichloroethene	<52	52		ug/kg dry wt.
1,1-Dichloroethane	<52	52		ug/kg dry wt.
2,2-Dichloropropane	<52	52		ug/kg dry wt.
cis-1,2-Dichloroethene	<52	52		ug/kg dry wt.
Chloroform	<52	52		ug/kg dry wt.
1,1,1-Trichloroethane	<52	52		ug/kg dry wt.
Carbon tetrachloride	<52	52		ug/kg dry wt.
Methyl-tert-butyl-ether	<52	52		ug/kg dry wt.
Di-isopropyl ether	<52	52		ug/kg dry wt.
1,2-Dichloroethane	<52	52		ug/kg dry wt.
Benzene	<52	52		ug/kg dry wt.
Trichloroethene	53	52		ug/kg dry wt.
1,2-Dichloropropane	<52	52		ug/kg dry wt.
Bromodichloromethane	<52	52		ug/kg dry wt.
Toluene	<52	52		ug/kg dry wt.
1,1,2-Trichloroethane	<52	52		ug/kg dry wt.
Tetrachloroethene	<52	52		ug/kg dry wt.
1,3-Dichloropropane	<52	52		ug/kg dry wt.
Chlorodibromomethane	<52	52		ug/kg dry wt.
1,2-Dibromoethane	<52	52		ug/kg dry wt.
Chlorobenzene	<52	52		ug/kg dry wt.
Ethylbenzene	<52	52		ug/kg dry wt.
m,p-Xylenes	<52	52		ug/kg dry wt.
o-Xylene	<52	52		ug/kg dry wt.
Isopropylbenzene	<52	52		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<52	52		ug/kg dry wt.
n-Propylbenzene	<52	52		ug/kg dry wt.
Bromobenzene	<52	52		ug/kg dry wt.
1,3,5-Trimethylbenzene	<52	52		ug/kg dry wt.
2-Chlorotoluene	<52	52		ug/kg dry wt.
4-Chlorotoluene	<52	52		ug/kg dry wt.
tert-Butylbenzene	<52	52		ug/kg dry wt.
1,2,4-Trimethylbenzene	<52	52		ug/kg dry wt.
sec-Butylbenzene	<52	52		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-001
STATION ID: GP-9 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<52	52		ug/kg dry wt.
1,3-Dichlorobenzene	<52	52		ug/kg dry wt.
1,4-Dichlorobenzene	<52	52		ug/kg dry wt.
n-Butylbenzene	<52	52		ug/kg dry wt.
1,2-Dichlorobenzene	<52	52		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<100	100		ug/kg dry wt.
1,2,4-Trichlorobenzene	<52	52		ug/kg dry wt.
Hexachlorobutadiene	<52	52		ug/kg dry wt.
Naphthalene	<100	100		ug/kg dry wt.
1,2,3-Trichlorobenzene	<52	52		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-002
STATION ID: GP-10 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<130	130		ug/kg dry wt.
Chloromethane	<130	130		ug/kg dry wt.
Vinyl chloride	<130	130		ug/kg dry wt.
Chloroethane	<130	130		ug/kg dry wt.
Fluorotrichloromethane	<64	64		ug/kg dry wt.
1,1-Dichloroethene	<64	64		ug/kg dry wt.
Methylene chloride	<64	64		ug/kg dry wt.
trans-1,2-Dichloroethene	<64	64		ug/kg dry wt.
1,1-Dichloroethane	<64	64		ug/kg dry wt.
2,2-Dichloropropane	<64	64		ug/kg dry wt.
cis-1,2-Dichloroethene	<64	64		ug/kg dry wt.
Chloroform	<64	64		ug/kg dry wt.
1,1,1-Trichloroethane	<64	64		ug/kg dry wt.
Carbon tetrachloride	<64	64		ug/kg dry wt.
Methyl-tert-butyl-ether	<64	64		ug/kg dry wt.
Di-isopropyl ether	<64	64		ug/kg dry wt.
1,2-Dichloroethane	<64	64		ug/kg dry wt.
Benzene	<64	64		ug/kg dry wt.
Trichloroethene	<64	64		ug/kg dry wt.
1,2-Dichloropropane	<64	64		ug/kg dry wt.
Bromodichloromethane	<64	64		ug/kg dry wt.
Toluene	<64	64		ug/kg dry wt.
1,1,2-Trichloroethane	<64	64		ug/kg dry wt.
Tetrachloroethene	<64	64		ug/kg dry wt.
1,3-Dichloropropane	<64	64		ug/kg dry wt.
Chlorodibromomethane	<64	64		ug/kg dry wt.
1,2-Dibromoethane	<64	64		ug/kg dry wt.
Chlorobenzene	<64	64		ug/kg dry wt.
Ethylbenzene	<64	64		ug/kg dry wt.
m,p-Xylenes	<64	64		ug/kg dry wt.
o-Xylene	<64	64		ug/kg dry wt.
Isopropylbenzene	<64	64		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<64	64		ug/kg dry wt.
n-Propylbenzene	<64	64		ug/kg dry wt.
Bromobenzene	<64	64		ug/kg dry wt.
1,3,5-Trimethylbenzene	<64	64		ug/kg dry wt.
2-Chlorotoluene	<64	64		ug/kg dry wt.
4-Chlorotoluene	<64	64		ug/kg dry wt.
tert-Butylbenzene	<64	64		ug/kg dry wt.
1,2,4-Trimethylbenzene	<64	64		ug/kg dry wt.
sec-Butylbenzene	<64	64		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-002
STATION ID: GP-10 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<64	64		ug/kg dry wt.
1,3-Dichlorobenzene	<64	64		ug/kg dry wt.
1,4-Dichlorobenzene	<64	64		ug/kg dry wt.
n-Butylbenzene	<64	64		ug/kg dry wt.
1,2-Dichlorobenzene	<64	64		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<130	130		ug/kg dry wt.
1,2,4-Trichlorobenzene	<64	64		ug/kg dry wt.
Hexachlorobutadiene	<64	64		ug/kg dry wt.
Naphthalene	60	130	QB(20)	ug/kg dry wt.
1,2,3-Trichlorobenzene	<64	64		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-003
STATION ID: GP-11 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<54	54		ug/kg dry wt.
1,1-Dichloroethene	<54	54		ug/kg dry wt.
Methylene chloride	<54	54		ug/kg dry wt.
trans-1,2-Dichloroethene	<54	54		ug/kg dry wt.
1,1-Dichloroethane	<54	54		ug/kg dry wt.
2,2-Dichloropropane	<54	54		ug/kg dry wt.
cis-1,2-Dichloroethene	<54	54		ug/kg dry wt.
Chloroform	<54	54		ug/kg dry wt.
1,1,1-Trichloroethane	<54	54		ug/kg dry wt.
Carbon tetrachloride	<54	54		ug/kg dry wt.
Methyl-tert-butyl-ether	<54	54		ug/kg dry wt.
Di-isopropyl ether	<54	54		ug/kg dry wt.
1,2-Dichloroethane	<54	54		ug/kg dry wt.
Benzene	<54	54		ug/kg dry wt.
Trichloroethene	<54	54		ug/kg dry wt.
1,2-Dichloropropane	<54	54		ug/kg dry wt.
Bromodichloromethane	<54	54		ug/kg dry wt.
Toluene	<54	54		ug/kg dry wt.
1,1,2-Trichloroethane	<54	54		ug/kg dry wt.
Tetrachloroethene	<54	54		ug/kg dry wt.
1,3-Dichloropropane	<54	54		ug/kg dry wt.
Chlorodibromomethane	<54	54		ug/kg dry wt.
1,2-Dibromoethane	<54	54		ug/kg dry wt.
Chlorobenzene	<54	54		ug/kg dry wt.
Ethylbenzene	<54	54		ug/kg dry wt.
m,p-Xylenes	<54	54		ug/kg dry wt.
o-Xylene	<54	54		ug/kg dry wt.
Isopropylbenzene	<54	54		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<54	54		ug/kg dry wt.
n-Propylbenzene	<54	54		ug/kg dry wt.
Bromobenzene	<54	54		ug/kg dry wt.
1,3,5-Trimethylbenzene	<54	54		ug/kg dry wt.
2-Chlorotoluene	<54	54		ug/kg dry wt.
4-Chlorotoluene	<54	54		ug/kg dry wt.
tert-Butylbenzene	<54	54		ug/kg dry wt.
1,2,4-Trimethylbenzene	<54	54		ug/kg dry wt.
sec-Butylbenzene	<54	54		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-003
STATION ID: GP-11 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<54	54		ug/kg dry wt.
1,3-Dichlorobenzene	<54	54		ug/kg dry wt.
1,4-Dichlorobenzene	<54	54		ug/kg dry wt.
n-Butylbenzene	<54	54		ug/kg dry wt.
1,2-Dichlorobenzene	<54	54		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<54	54		ug/kg dry wt.
Hexachlorobutadiene	<54	54		ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<54	54		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-004
STATION ID: METHANOL BLK
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<100	100		ug/L
Chloromethane	<100	100		ug/L
Vinyl chloride	<100	100		ug/L
Chloroethane	<100	100		ug/L
Fluorotrichloromethane	<50	50		ug/L
1,1-Dichloroethene	<50	50		ug/L
Methylene chloride	<50	50		ug/L
trans-1,2-Dichloroethene	<50	50		ug/L
1,1-Dichloroethane	<50	50		ug/L
2,2-Dichloropropane	<50	50		ug/L
cis-1,2-Dichloroethene	<50	50		ug/L
Chloroform	<50	50		ug/L
1,1,1-Trichloroethane	<50	50		ug/L
Carbon tetrachloride	<50	50		ug/L
Methyl-tert-butyl-ether	<50	50		ug/L
Di-isopropyl ether	<50	50		ug/L
1,2-Dichloroethane	<50	50		ug/L
Benzene	<50	50		ug/L
Trichloroethene	<50	50		ug/L
1,2-Dichloropropane	<50	50		ug/L
Bromodichloromethane	<50	50		ug/L
Toluene	<50	50		ug/L
1,1,2-Trichloroethane	<50	50		ug/L
Tetrachloroethene	<50	50		ug/L
1,3-Dichloropropane	<50	50		ug/L
Chlorodibromomethane	<50	50		ug/L
1,2-Dibromoethane	<50	50		ug/L
Chlorobenzene	<50	50		ug/L
Ethylbenzene	<50	50		ug/L
m,p-Xylenes	<50	50		ug/L
o-Xylene	<50	50		ug/L
Isopropylbenzene	<50	50		ug/L
1,1,2,2-Tetrachloroethane	<50	50		ug/L
n-Propylbenzene	<50	50		ug/L
Bromobenzene	<50	50		ug/L
1,3,5-Trimethylbenzene	<50	50		ug/L
2-Chlorotoluene	<50	50		ug/L
4-Chlorotoluene	<50	50		ug/L
tert-Butylbenzene	<50	50		ug/L
1,2,4-Trimethylbenzene	<50	50		ug/L
sec-Butylbenzene	<50	50		ug/L

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-004
STATION ID: METHANOL BLK
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<50	50		ug/L
1,3-Dichlorobenzene	<50	50		ug/L
1,4-Dichlorobenzene	<50	50		ug/L
n-Butylbenzene	<50	50		ug/L
1,2-Dichlorobenzene	<50	50		ug/L
1,2-Dibromo-3-chloropropane	<100	100		ug/L
1,2,4-Trichlorobenzene	<50	50		ug/L
Hexachlorobutadiene	<50	50		ug/L
Naphthalene	<100	100		ug/L
1,2,3-Trichlorobenzene	<50	50		ug/L

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-005
STATION ID: GP-12 (1)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<120	120		ug/kg dry wt.
Chloromethane	<120	120		ug/kg dry wt.
Vinyl chloride	<120	120		ug/kg dry wt.
Chloroethane	<120	120		ug/kg dry wt.
Fluorotrichloromethane	<58	58		ug/kg dry wt.
1,1-Dichloroethene	<58	58		ug/kg dry wt.
Methylene chloride	<58	58		ug/kg dry wt.
trans-1,2-Dichloroethene	<58	58		ug/kg dry wt.
1,1-Dichloroethane	<58	58		ug/kg dry wt.
2,2-Dichloropropane	<58	58		ug/kg dry wt.
cis-1,2-Dichloroethene	<58	58		ug/kg dry wt.
Chloroform	<58	58		ug/kg dry wt.
1,1,1-Trichloroethane	<58	58		ug/kg dry wt.
Carbon tetrachloride	<58	58		ug/kg dry wt.
Methyl-tert-butyl-ether	<58	58		ug/kg dry wt.
Di-isopropyl ether	<58	58		ug/kg dry wt.
1,2-Dichloroethane	<58	58		ug/kg dry wt.
Benzene	<58	58		ug/kg dry wt.
Trichloroethene	<58	58		ug/kg dry wt.
1,2-Dichloropropane	<58	58		ug/kg dry wt.
Bromodichloromethane	<58	58		ug/kg dry wt.
Toluene	20	58	Q	ug/kg dry wt.
1,1,2-Trichloroethane	<58	58		ug/kg dry wt.
Tetrachloroethene	<58	58		ug/kg dry wt.
1,3-Dichloropropane	<58	58		ug/kg dry wt.
Chlorodibromomethane	<58	58		ug/kg dry wt.
1,2-Dibromoethane	<58	58		ug/kg dry wt.
Chlorobenzene	<58	58		ug/kg dry wt.
Ethylbenzene	<58	58		ug/kg dry wt.
m,p-Xylenes	30	58	Q	ug/kg dry wt.
o-Xylene	20	58	Q	ug/kg dry wt.
Isopropylbenzene	<58	58		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<58	58		ug/kg dry wt.
n-Propylbenzene	<58	58		ug/kg dry wt.
Bromobenzene	<58	58		ug/kg dry wt.
1,3,5-Trimethylbenzene	<58	58		ug/kg dry wt.
2-Chlorotoluene	<58	58		ug/kg dry wt.
4-Chlorotoluene	<58	58		ug/kg dry wt.
tert-Butylbenzene	<58	58		ug/kg dry wt.
1,2,4-Trimethylbenzene	20	58	Q	ug/kg dry wt.
sec-Butylbenzene	<58	58		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-005
STATION ID: GP-12 (1)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<58	58		ug/kg dry wt.
1,3-Dichlorobenzene	<58	58		ug/kg dry wt.
1,4-Dichlorobenzene	<58	58		ug/kg dry wt.
n-Butylbenzene	<58	58		ug/kg dry wt.
1,2-Dichlorobenzene	<58	58		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<120	120		ug/kg dry wt.
1,2,4-Trichlorobenzene	<58	58		ug/kg dry wt.
Hexachlorobutadiene	<58	58		ug/kg dry wt.
Naphthalene	60	120	QB(20)	ug/kg dry wt.
1,2,3-Trichlorobenzene	<58	58		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-006
STATION ID: GP-12 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<120	120		ug/kg dry wt.
Chloromethane	<120	120		ug/kg dry wt.
Vinyl chloride	<120	120		ug/kg dry wt.
Chloroethane	<120	120		ug/kg dry wt.
Fluorotrichloromethane	<60	60		ug/kg dry wt.
1,1-Dichloroethene	<60	60		ug/kg dry wt.
Methylene chloride	<60	60		ug/kg dry wt.
trans-1,2-Dichloroethene	<60	60		ug/kg dry wt.
1,1-Dichloroethane	<60	60		ug/kg dry wt.
2,2-Dichloropropane	<60	60		ug/kg dry wt.
cis-1,2-Dichloroethene	<60	60		ug/kg dry wt.
Chloroform	<60	60		ug/kg dry wt.
1,1,1-Trichloroethane	<60	60		ug/kg dry wt.
Carbon tetrachloride	<60	60		ug/kg dry wt.
Methyl-tert-butyl-ether	<60	60		ug/kg dry wt.
Di-isopropyl ether	<60	60		ug/kg dry wt.
1,2-Dichloroethane	<60	60		ug/kg dry wt.
Benzene	<60	60		ug/kg dry wt.
Trichloroethene	<60	60		ug/kg dry wt.
1,2-Dichloropropane	<60	60		ug/kg dry wt.
Bromodichloromethane	<60	60		ug/kg dry wt.
Toluene	<60	60		ug/kg dry wt.
1,1,2-Trichloroethane	<60	60		ug/kg dry wt.
Tetrachloroethene	<60	60		ug/kg dry wt.
1,3-Dichloropropane	<60	60		ug/kg dry wt.
Chlorodibromomethane	<60	60		ug/kg dry wt.
1,2-Dibromoethane	<60	60		ug/kg dry wt.
Chlorobenzene	<60	60		ug/kg dry wt.
Ethylbenzene	<60	60		ug/kg dry wt.
m,p-Xylenes	<60	60		ug/kg dry wt.
o-Xylene	<60	60		ug/kg dry wt.
Isopropylbenzene	<60	60		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<60	60		ug/kg dry wt.
n-Propylbenzene	<60	60		ug/kg dry wt.
Bromobenzene	<60	60		ug/kg dry wt.
1,3,5-Trimethylbenzene	<60	60		ug/kg dry wt.
2-Chlorotoluene	<60	60		ug/kg dry wt.
4-Chlorotoluene	<60	60		ug/kg dry wt.
tert-Butylbenzene	<60	60		ug/kg dry wt.
1,2,4-Trimethylbenzene	<60	60		ug/kg dry wt.
sec-Butylbenzene	<60	60		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-006
STATION ID: GP-12 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<60	60		ug/kg dry wt.
1,3-Dichlorobenzene	<60	60		ug/kg dry wt.
1,4-Dichlorobenzene	<60	60		ug/kg dry wt.
n-Butylbenzene	<60	60		ug/kg dry wt.
1,2-Dichlorobenzene	<60	60		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<120	120		ug/kg dry wt.
1,2,4-Trichlorobenzene	<60	60		ug/kg dry wt.
Hexachlorobutadiene	<60	60		ug/kg dry wt.
Naphthalene	<120	120		ug/kg dry wt.
1,2,3-Trichlorobenzene	<60	60		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-007
STATION ID: GP-13 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<120	120		ug/kg dry wt.
Chloromethane	<120	120		ug/kg dry wt.
Vinyl chloride	<120	120		ug/kg dry wt.
Chloroethane	<120	120		ug/kg dry wt.
Fluorotrichloromethane	<61	61		ug/kg dry wt.
1,1-Dichloroethene	<61	61		ug/kg dry wt.
Methylene chloride	<61	61		ug/kg dry wt.
trans-1,2-Dichloroethene	<61	61		ug/kg dry wt.
1,1-Dichloroethane	<61	61		ug/kg dry wt.
2,2-Dichloropropane	<61	61		ug/kg dry wt.
cis-1,2-Dichloroethene	<61	61		ug/kg dry wt.
Chloroform	<61	61		ug/kg dry wt.
1,1,1-Trichloroethane	<61	61		ug/kg dry wt.
Carbon tetrachloride	<61	61		ug/kg dry wt.
Methyl-tert-butyl-ether	<61	61		ug/kg dry wt.
Di-isopropyl ether	<61	61		ug/kg dry wt.
1,2-Dichloroethane	<61	61		ug/kg dry wt.
Benzene	<61	61		ug/kg dry wt.
Trichloroethene	<61	61		ug/kg dry wt.
1,2-Dichloropropane	<61	61		ug/kg dry wt.
Bromodichloromethane	<61	61		ug/kg dry wt.
Toluene	<61	61		ug/kg dry wt.
1,1,2-Trichloroethane	<61	61		ug/kg dry wt.
Tetrachloroethene	<61	61		ug/kg dry wt.
1,3-Dichloropropane	<61	61		ug/kg dry wt.
Chlorodibromomethane	<61	61		ug/kg dry wt.
1,2-Dibromoethane	<61	61		ug/kg dry wt.
Chlorobenzene	<61	61		ug/kg dry wt.
Ethylbenzene	<61	61		ug/kg dry wt.
m,p-Xylenes	<61	61		ug/kg dry wt.
o-Xylene	<61	61		ug/kg dry wt.
Isopropylbenzene	<61	61		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<61	61		ug/kg dry wt.
n-Propylbenzene	<61	61		ug/kg dry wt.
Bromobenzene	<61	61		ug/kg dry wt.
1,3,5-Trimethylbenzene	<61	61		ug/kg dry wt.
2-Chlorotoluene	<61	61		ug/kg dry wt.
4-Chlorotoluene	<61	61		ug/kg dry wt.
tert-Butylbenzene	<61	61		ug/kg dry wt.
1,2,4-Trimethylbenzene	<61	61		ug/kg dry wt.
sec-Butylbenzene	<61	61		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-007
STATION ID: GP-13 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<61	61		ug/kg dry wt.
1,3-Dichlorobenzene	<61	61		ug/kg dry wt.
1,4-Dichlorobenzene	<61	61		ug/kg dry wt.
n-Butylbenzene	<61	61		ug/kg dry wt.
1,2-Dichlorobenzene	<61	61		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<120	120		ug/kg dry wt.
1,2,4-Trichlorobenzene	<61	61		ug/kg dry wt.
Hexachlorobutadiene	<61	61		ug/kg dry wt.
Naphthalene	20	120	QB(20)	ug/kg dry wt.
1,2,3-Trichlorobenzene	<61	61		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-008
STATION ID: GP-14 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<57	57		ug/kg dry wt.
1,1-Dichloroethene	<57	57		ug/kg dry wt.
Methylene chloride	<57	57		ug/kg dry wt.
trans-1,2-Dichloroethene	<57	57		ug/kg dry wt.
1,1-Dichloroethane	<57	57		ug/kg dry wt.
2,2-Dichloropropane	<57	57		ug/kg dry wt.
cis-1,2-Dichloroethene	<57	57		ug/kg dry wt.
Chloroform	<57	57		ug/kg dry wt.
1,1,1-Trichloroethane	<57	57		ug/kg dry wt.
Carbon tetrachloride	<57	57		ug/kg dry wt.
Methyl-tert-butyl-ether	<57	57		ug/kg dry wt.
Di-isopropyl ether	<57	57		ug/kg dry wt.
1,2-Dichloroethane	<57	57		ug/kg dry wt.
Benzene	<57	57		ug/kg dry wt.
Trichloroethene	<57	57		ug/kg dry wt.
1,2-Dichloropropane	<57	57		ug/kg dry wt.
Bromodichloromethane	<57	57		ug/kg dry wt.
Toluene	<57	57		ug/kg dry wt.
1,1,2-Trichloroethane	<57	57		ug/kg dry wt.
Tetrachloroethene	<57	57		ug/kg dry wt.
1,3-Dichloropropane	<57	57		ug/kg dry wt.
Chlorodibromomethane	<57	57		ug/kg dry wt.
1,2-Dibromoethane	<57	57		ug/kg dry wt.
Chlorobenzene	<57	57		ug/kg dry wt.
Ethylbenzene	<57	57		ug/kg dry wt.
m,p-Xylenes	<57	57		ug/kg dry wt.
o-Xylene	<57	57		ug/kg dry wt.
Isopropylbenzene	<57	57		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<57	57		ug/kg dry wt.
n-Propylbenzene	<57	57		ug/kg dry wt.
Bromobenzene	<57	57		ug/kg dry wt.
1,3,5-Trimethylbenzene	<57	57		ug/kg dry wt.
2-Chlorotoluene	<57	57		ug/kg dry wt.
4-Chlorotoluene	<57	57		ug/kg dry wt.
tert-Butylbenzene	<57	57		ug/kg dry wt.
1,2,4-Trimethylbenzene	<57	57		ug/kg dry wt.
sec-Butylbenzene	<57	57		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-008
STATION ID: GP-14 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<57	57		ug/kg dry wt.
1,3-Dichlorobenzene	<57	57		ug/kg dry wt.
1,4-Dichlorobenzene	<57	57		ug/kg dry wt.
n-Butylbenzene	<57	57		ug/kg dry wt.
1,2-Dichlorobenzene	<57	57		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<57	57		ug/kg dry wt.
Hexachlorobutadiene	<57	57		ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<57	57		ug/kg dry wt.

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Corporate Office & Laboratory
1795 Industrial Drive
Green Bay, WI 54302
414-469-2436 • Fax: 414-469-8827
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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-009
STATION ID: GP-15 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<150	150		ug/kg dry wt.
Chloromethane	<150	150		ug/kg dry wt.
Vinyl chloride	<150	150		ug/kg dry wt.
Chloroethane	<150	150		ug/kg dry wt.
Fluorotrichloromethane	<74	74		ug/kg dry wt.
1,1-Dichloroethene	<74	74		ug/kg dry wt.
Methylene chloride	<74	74		ug/kg dry wt.
trans-1,2-Dichloroethene	<74	74		ug/kg dry wt.
1,1-Dichloroethane	<74	74		ug/kg dry wt.
2,2-Dichloropropane	<74	74		ug/kg dry wt.
cis-1,2-Dichloroethene	<74	74		ug/kg dry wt.
Chloroform	<74	74		ug/kg dry wt.
1,1,1-Trichloroethane	<74	74		ug/kg dry wt.
Carbon tetrachloride	<74	74		ug/kg dry wt.
Methyl-tert-butyl-ether	<74	74		ug/kg dry wt.
Di-isopropyl ether	<74	74		ug/kg dry wt.
1,2-Dichloroethane	<74	74		ug/kg dry wt.
Benzene	<74	74		ug/kg dry wt.
Trichloroethene	50	74	Q	ug/kg dry wt.
1,2-Dichloropropane	<74	74		ug/kg dry wt.
Bromodichloromethane	<74	74		ug/kg dry wt.
Toluene	<74	74		ug/kg dry wt.
1,1,2-Trichloroethane	<74	74		ug/kg dry wt.
Tetrachloroethene	<74	74		ug/kg dry wt.
1,3-Dichloropropane	<74	74		ug/kg dry wt.
Chlorodibromomethane	<74	74		ug/kg dry wt.
1,2-Dibromoethane	<74	74		ug/kg dry wt.
Chlorobenzene	<74	74		ug/kg dry wt.
Ethylbenzene	<74	74		ug/kg dry wt.
m,p-Xylenes	<74	74		ug/kg dry wt.
o-Xylene	<74	74		ug/kg dry wt.
Isopropylbenzene	<74	74		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<74	74		ug/kg dry wt.
n-Propylbenzene	<74	74		ug/kg dry wt.
Bromobenzene	<74	74		ug/kg dry wt.
1,3,5-Trimethylbenzene	<74	74		ug/kg dry wt.
2-Chlorotoluene	<74	74		ug/kg dry wt.
4-Chlorotoluene	<74	74		ug/kg dry wt.
tert-Butylbenzene	<74	74		ug/kg dry wt.
1,2,4-Trimethylbenzene	<74	74		ug/kg dry wt.
sec-Butylbenzene	<74	74		ug/kg dry wt.

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PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9497-009
STATION ID: GP-15 (3)
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REPORT DATE: 04/16/96
COLLECTION DATE: 03/29/96
ANALYSIS DATE: 04/05/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<74	74		ug/kg dry wt.
1,3-Dichlorobenzene	<74	74		ug/kg dry wt.
1,4-Dichlorobenzene	<74	74		ug/kg dry wt.
n-Butylbenzene	<74	74		ug/kg dry wt.
1,2-Dichlorobenzene	<74	74		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<150	150		ug/kg dry wt.
1,2,4-Trichlorobenzene	<74	74		ug/kg dry wt.
Hexachlorobutadiene	<74	74		ug/kg dry wt.
Naphthalene	<150	150		ug/kg dry wt.
1,2,3-Trichlorobenzene	<74	74		ug/kg dry wt.

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LUST Data Qualifier Sheet

A	Sample odor present.
B(n)	Analyte is 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 Sample Narrative).
D	Analyte value from diluted analysis.
DP	Unidentified but detected peaks.
E	Analyte concentration exceeds calibration range (see Sample Narrative).
F	Repeated surrogate failure (see Sample Narrative).
G	Sample exhibits hydrocarbon pattern resembling gasoline.
H(n)	Analysis performed "n" days past holding time.
L	Detects in trip blank.
M	Methanol leakage.
P	Sample vial used for previous analysis.
R	Relative percent difference high (see Sample 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 02/06/95

CHAIN OF CUSTODY RECORD № 058328

RMT, INC. LABORATORIES

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.	Project/Client:
3777.01	Navistar

Project Manager/Contact Person: Don Paplinski

Lab No. 9464	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	Analyses Requested: VOCs 8260 WI LIST	Dry wt	DRO	Comments:
						Filtered (Yes/No)	N	N	N
						Preserved (Code)	F	A	F
001	3/25	9:15A	GP-1 (3)	2	Soil	X	x		
002		10:20A	GP-2 (3)						
003		11:10A	GP-3 (2)						
004		1200P	GP-4 (2)						
005		1:15P	GP-5 (1)						
006		1:25P	GP-5 (3)						
007		2:40P	GP-6 (2)						
008		2:55P	GP-6 (4)						
009	3/26	9:45A	GP-7 (6)	1		X			
010		10:30A	GP-8 (7)	3		X	X	X	
011			Methanol Blk	1	QC	X			*DRO sample preserved w/MeOH BW 3/27/96

PRESERVED CODES
A - NONE
B - HNO_3
C - H_2SO_4
D - NaOH
E - HCl
F - METHANOL
G - _____

SPECIAL INSTRUCTIONS: See scope for instructions KGH 3/28/96

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Gregory [illegible]	3/26/96 1311	Jerry Steinert	1:11 3-26-96
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Jerry Steinert	1:55 3-26-96	[illegible]518	1:57 3.26.96
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
		B. Wachal	3/27/96 11 30

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush

Report Due _____

(For Lab Use Only)

Receipt Temp: Temp Blank Y (N) no ice 3°c

Receipt pH (Wet/Metals) [illegible] N/A

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

F-268 (R6/95)

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

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PROJECT NAME: NAVISTAR
PROJECT NO: 03777.01
WORK ORDER NO: 9464

REPORT DATE:04/16/96

SAMPLE NO.	STATION ID	COLL. DATE	SAMPLE NO.	STATION ID	COLL. DATE
9464-001	GP-1 (3)	03/25/96			
9464-002	GP-2 (3)	03/25/96			
9464-003	GP-3 (2)	03/25/96			
9464-004	GP-4 (2)	03/25/96			
9464-005	GP-5 (1)	03/25/96			
9464-006	GP-5 (3)	03/25/96			
9464-007	GP-6 (2)	03/25/96			
9464-008	GP-6 (4)	03/25/96			
9464-009	GP-7 (6)	03/26/96			
9464-010	GP-8 (7)	03/26/96			
9464-011	METH BLANK	03/26/96			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by Laboratory management, as is verified by the following signature.

[redacted]roval Signature

4/16/96
Date

Lab Cert. #: WI DNR 113138520, MN DNR 055-999-107, SC DHEC 83001, TN DOH 02916

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-001
STATION ID: GP-1 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<55	55		ug/kg dry wt.
1,1-Dichloroethene	<55	55		ug/kg dry wt.
Methylene chloride	56	55		ug/kg dry wt.
trans-1,2-Dichloroethene	<55	55		ug/kg dry wt.
1,1-Dichloroethane	<55	55		ug/kg dry wt.
2,2-Dichloropropane	<55	55		ug/kg dry wt.
cis-1,2-Dichloroethene	<55	55		ug/kg dry wt.
Chloroform	<55	55		ug/kg dry wt.
1,1,1-Trichloroethane	<55	55		ug/kg dry wt.
Carbon tetrachloride	<55	55		ug/kg dry wt.
Methyl-tert-butyl-ether	<55	55		ug/kg dry wt.
Di-isopropyl ether	<55	55		ug/kg dry wt.
1,2-Dichloroethane	<55	55		ug/kg dry wt.
Benzene	<55	55		ug/kg dry wt.
Trichloroethene	<55	55		ug/kg dry wt.
1,2-Dichloropropane	<55	55		ug/kg dry wt.
Bromodichloromethane	<55	55		ug/kg dry wt.
Toluene	30	55	Q	ug/kg dry wt.
1,1,2-Trichloroethane	<55	55		ug/kg dry wt.
Tetrachloroethene	<55	55		ug/kg dry wt.
1,3-Dichloropropane	<55	55		ug/kg dry wt.
Chlorodibromomethane	<55	55		ug/kg dry wt.
1,2-Dibromoethane	<55	55		ug/kg dry wt.
Chlorobenzene	<55	55		ug/kg dry wt.
Ethylbenzene	<55	55		ug/kg dry wt.
m,p-Xylenes	<55	55		ug/kg dry wt.
o-Xylene	<55	55		ug/kg dry wt.
Isopropylbenzene	<55	55		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<55	55		ug/kg dry wt.
n-Propylbenzene	<55	55		ug/kg dry wt.
Bromobenzene	<55	55		ug/kg dry wt.
1,3,5-Trimethylbenzene	<55	55		ug/kg dry wt.
2-Chlorotoluene	<55	55		ug/kg dry wt.
4-Chlorotoluene	<55	55		ug/kg dry wt.
tert-Butylbenzene	<55	55		ug/kg dry wt.
1,2,4-Trimethylbenzene	<55	55		ug/kg dry wt.
sec-Butylbenzene	<55	55		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-001
STATION ID: GP-1 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<55	55		ug/kg dry wt.
1,3-Dichlorobenzene	<55	55		ug/kg dry wt.
1,4-Dichlorobenzene	<55	55		ug/kg dry wt.
n-Butylbenzene	<55	55		ug/kg dry wt.
1,2-Dichlorobenzene	<55	55		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<55	55		ug/kg dry wt.
Hexachlorobutadiene	<55	55		ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<55	55		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-002
STATION ID: GP-2 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<100	100		ug/kg dry wt.
Chloromethane	<100	100		ug/kg dry wt.
Vinyl chloride	<100	100		ug/kg dry wt.
Chloroethane	<100	100		ug/kg dry wt.
Fluorotrichloromethane	<51	51		ug/kg dry wt.
1,1-Dichloroethene	<51	51		ug/kg dry wt.
Methylene chloride	50	51	Q	ug/kg dry wt.
trans-1,2-Dichloroethene	<51	51		ug/kg dry wt.
1,1-Dichloroethane	<51	51		ug/kg dry wt.
2,2-Dichloropropane	<51	51		ug/kg dry wt.
cis-1,2-Dichloroethene	<51	51		ug/kg dry wt.
Chloroform	<51	51		ug/kg dry wt.
1,1,1-Trichloroethane	<51	51		ug/kg dry wt.
Carbon tetrachloride	<51	51		ug/kg dry wt.
Methyl-tert-butyl-ether	<51	51		ug/kg dry wt.
Di-isopropyl ether	<51	51		ug/kg dry wt.
1,2-Dichloroethane	<51	51		ug/kg dry wt.
Benzene	<51	51		ug/kg dry wt.
Trichloroethene	<51	51		ug/kg dry wt.
1,2-Dichloropropane	<51	51		ug/kg dry wt.
Bromodichloromethane	<51	51		ug/kg dry wt.
Toluene	<51	51		ug/kg dry wt.
1,1,2-Trichloroethane	<51	51		ug/kg dry wt.
Tetrachloroethene	<51	51		ug/kg dry wt.
1,3-Dichloropropane	<51	51		ug/kg dry wt.
Chlorodibromomethane	<51	51		ug/kg dry wt.
1,2-Dibromoethane	<51	51		ug/kg dry wt.
Chlorobenzene	<51	51		ug/kg dry wt.
Ethylbenzene	<51	51		ug/kg dry wt.
m,p-Xylenes	<51	51		ug/kg dry wt.
o-Xylene	<51	51		ug/kg dry wt.
Isopropylbenzene	<51	51		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<51	51		ug/kg dry wt.
n-Propylbenzene	<51	51		ug/kg dry wt.
Bromobenzene	<51	51		ug/kg dry wt.
1,3,5-Trimethylbenzene	<51	51		ug/kg dry wt.
2-Chlorotoluene	<51	51		ug/kg dry wt.
4-Chlorotoluene	<51	51		ug/kg dry wt.
tert-Butylbenzene	<51	51		ug/kg dry wt.
1,2,4-Trimethylbenzene	<51	51		ug/kg dry wt.
sec-Butylbenzene	<51	51		ug/kg dry wt.

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LAB SAMPLE NUMBER: 9464-002
STATION ID: GP-2 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<51	51		ug/kg dry wt.
1,3-Dichlorobenzene	<51	51		ug/kg dry wt.
1,4-Dichlorobenzene	<51	51		ug/kg dry wt.
n-Butylbenzene	<51	51		ug/kg dry wt.
1,2-Dichlorobenzene	<51	51		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<100	100		ug/kg dry wt.
1,2,4-Trichlorobenzene	<51	51		ug/kg dry wt.
Hexachlorobutadiene	<51	51		ug/kg dry wt.
Naphthalene	<100	100		ug/kg dry wt.
1,2,3-Trichlorobenzene	<51	51		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-003
STATION ID: GP-3 (2)
WI DNR LAB ID: 113138520

REPORT DATE: 04/15/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<120	120		ug/kg dry wt.
Chloromethane	<120	120		ug/kg dry wt.
Vinyl chloride	<120	120		ug/kg dry wt.
Chloroethane	<120	120		ug/kg dry wt.
Fluorotrichloromethane	<62	62		ug/kg dry wt.
1,1-Dichloroethene	<62	62		ug/kg dry wt.
Methylene chloride	64	62		ug/kg dry wt.
trans-1,2-Dichloroethene	<62	62		ug/kg dry wt.
1,1-Dichloroethane	<62	62		ug/kg dry wt.
2,2-Dichloropropane	<62	62		ug/kg dry wt.
cis-1,2-Dichloroethene	<62	62		ug/kg dry wt.
Chloroform	<62	62		ug/kg dry wt.
1,1,1-Trichloroethane	<62	62		ug/kg dry wt.
Carbon tetrachloride	<62	62		ug/kg dry wt.
Methyl-tert-butyl-ether	<62	62		ug/kg dry wt.
Di-isopropyl ether	<62	62		ug/kg dry wt.
1,2-Dichloroethane	<62	62		ug/kg dry wt.
Benzene	<62	62		ug/kg dry wt.
Trichloroethene	<62	62		ug/kg dry wt.
1,2-Dichloropropane	<62	62		ug/kg dry wt.
Bromodichloromethane	<62	62		ug/kg dry wt.
Toluene	<62	62		ug/kg dry wt.
1,1,2-Trichloroethane	<62	62		ug/kg dry wt.
Tetrachloroethene	<62	62		ug/kg dry wt.
1,3-Dichloropropane	<62	62		ug/kg dry wt.
Chlorodibromomethane	<62	62		ug/kg dry wt.
1,2-Dibromoethane	<62	62		ug/kg dry wt.
Chlorobenzene	<62	62		ug/kg dry wt.
Ethylbenzene	<62	62		ug/kg dry wt.
m,p-Xylenes	<62	62		ug/kg dry wt.
o-Xylene	<62	62		ug/kg dry wt.
Isopropylbenzene	<62	62		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<62	62		ug/kg dry wt.
n-Propylbenzene	<62	62		ug/kg dry wt.
Bromobenzene	<62	62		ug/kg dry wt.
1,3,5-Trimethylbenzene	<62	62		ug/kg dry wt.
2-Chlorotoluene	<62	62		ug/kg dry wt.
4-Chlorotoluene	<62	62		ug/kg dry wt.
tert-Butylbenzene	<62	62		ug/kg dry wt.
1,2,4-Trimethylbenzene	<62	62		ug/kg dry wt.
sec-Butylbenzene	<62	62		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-003
STATION ID: GP-3 (2)
WI DNR LAB ID: 113138520

REPORT DATE: 04/15/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<62	62		ug/kg dry wt.
1,3-Dichlorobenzene	<62	62		ug/kg dry wt.
1,4-Dichlorobenzene	<62	62		ug/kg dry wt.
n-Butylbenzene	<62	62		ug/kg dry wt.
1,2-Dichlorobenzene	<62	62		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<120	120		ug/kg dry wt.
1,2,4-Trichlorobenzene	50	62	Q	ug/kg dry wt.
Hexachlorobutadiene	<62	62		ug/kg dry wt.
Naphthalene	<120	120		ug/kg dry wt.
1,2,3-Trichlorobenzene	50	62	Q	ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-004
STATION ID: GP-4 (2)
WI DNR LAB ID: 113138520

REPORT DATE: 04/15/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<130	130		ug/kg dry wt.
Chloromethane	<130	130		ug/kg dry wt.
Vinyl chloride	<130	130		ug/kg dry wt.
Chloroethane	<130	130		ug/kg dry wt.
Fluorotrichloromethane	<66	66		ug/kg dry wt.
1,1-Dichloroethene	<66	66		ug/kg dry wt.
Methylene chloride	68	66		ug/kg dry wt.
trans-1,2-Dichloroethene	<66	66		ug/kg dry wt.
1,1-Dichloroethane	<66	66		ug/kg dry wt.
2,2-Dichloropropane	<66	66		ug/kg dry wt.
cis-1,2-Dichloroethene	<66	66		ug/kg dry wt.
Chloroform	<66	66		ug/kg dry wt.
1,1,1-Trichloroethane	<66	66		ug/kg dry wt.
Carbon tetrachloride	<66	66		ug/kg dry wt.
Methyl-tert-butyl-ether	<66	66		ug/kg dry wt.
Di-isopropyl ether	<66	66		ug/kg dry wt.
1,2-Dichloroethane	<66	66		ug/kg dry wt.
Benzene	<66	66		ug/kg dry wt.
Trichloroethene	<66	66		ug/kg dry wt.
1,2-Dichloropropane	<66	66		ug/kg dry wt.
Bromodichloromethane	<66	66		ug/kg dry wt.
Toluene	<66	66		ug/kg dry wt.
1,1,2-Trichloroethane	<66	66		ug/kg dry wt.
Tetrachloroethene	<66	66		ug/kg dry wt.
1,3-Dichloropropane	<66	66		ug/kg dry wt.
Chlorodibromomethane	<66	66		ug/kg dry wt.
1,2-Dibromoethane	<66	66		ug/kg dry wt.
Chlorobenzene	<66	66		ug/kg dry wt.
Ethylbenzene	<66	66		ug/kg dry wt.
m,p-Xylenes	<66	66		ug/kg dry wt.
o-Xylene	<66	66		ug/kg dry wt.
Isopropylbenzene	<66	66		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<66	66		ug/kg dry wt.
n-Propylbenzene	<66	66		ug/kg dry wt.
Bromobenzene	<66	66		ug/kg dry wt.
1,3,5-Trimethylbenzene	<66	66		ug/kg dry wt.
2-Chlorotoluene	<66	66		ug/kg dry wt.
4-Chlorotoluene	<66	66		ug/kg dry wt.
tert-Butylbenzene	<66	66		ug/kg dry wt.
1,2,4-Trimethylbenzene	<66	66		ug/kg dry wt.
sec-Butylbenzene	<66	66		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-004
STATION ID: GP-4 (2)
WI DNR LAB ID: 113138520

REPORT DATE: 04/15/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<66	66		ug/kg dry wt.
1,3-Dichlorobenzene	<66	66		ug/kg dry wt.
1,4-Dichlorobenzene	<66	66		ug/kg dry wt.
n-Butylbenzene	<66	66		ug/kg dry wt.
1,2-Dichlorobenzene	<66	66		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<130	130		ug/kg dry wt.
1,2,4-Trichlorobenzene	<66	66		ug/kg dry wt.
Hexachlorobutadiene	<66	66		ug/kg dry wt.
Naphthalene	<130	130		ug/kg dry wt.
1,2,3-Trichlorobenzene	<66	66		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-005
STATION ID: GP-5 (1)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<130	130		ug/kg dry wt.
Chloromethane	<130	130		ug/kg dry wt.
Vinyl chloride	<130	130		ug/kg dry wt.
Chloroethane	<130	130		ug/kg dry wt.
Fluorotrichloromethane	<64	64		ug/kg dry wt.
1,1-Dichloroethene	<64	64		ug/kg dry wt.
Methylene chloride	60	64	Q	ug/kg dry wt.
trans-1,2-Dichloroethene	<64	64		ug/kg dry wt.
1,1-Dichloroethane	65	64		ug/kg dry wt.
2,2-Dichloropropane	<64	64		ug/kg dry wt.
cis-1,2-Dichloroethene	<64	64		ug/kg dry wt.
Chloroform	<64	64		ug/kg dry wt.
1,1,1-Trichloroethane	<64	64		ug/kg dry wt.
Carbon tetrachloride	<64	64		ug/kg dry wt.
Methyl-tert-butyl-ether	<64	64		ug/kg dry wt.
Di-isopropyl ether	<64	64		ug/kg dry wt.
1,2-Dichloroethane	<64	64		ug/kg dry wt.
Benzene	<64	64		ug/kg dry wt.
Trichloroethene	69	64		ug/kg dry wt.
1,2-Dichloropropane	<64	64		ug/kg dry wt.
Bromodichloromethane	<64	64		ug/kg dry wt.
Toluene	<64	64		ug/kg dry wt.
1,1,2-Trichloroethane	<64	64		ug/kg dry wt.
Tetrachloroethene	<64	64		ug/kg dry wt.
1,3-Dichloropropane	<64	64		ug/kg dry wt.
Chlorodibromomethane	<64	64		ug/kg dry wt.
1,2-Dibromoethane	<64	64		ug/kg dry wt.
Chlorobenzene	<64	64		ug/kg dry wt.
Ethylbenzene	<64	64		ug/kg dry wt.
m,p-Xylenes	<64	64		ug/kg dry wt.
o-Xylene	<64	64		ug/kg dry wt.
Isopropylbenzene	<64	64		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<64	64		ug/kg dry wt.
n-Propylbenzene	<64	64		ug/kg dry wt.
Bromobenzene	<64	64		ug/kg dry wt.
1,3,5-Trimethylbenzene	<64	64		ug/kg dry wt.
2-Chlorotoluene	<64	64		ug/kg dry wt.
4-Chlorotoluene	<64	64		ug/kg dry wt.
tert-Butylbenzene	<64	64		ug/kg dry wt.
1,2,4-Trimethylbenzene	<64	64		ug/kg dry wt.
sec-Butylbenzene	<64	64		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-005
STATION ID: GP-5 (1)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<64	64		ug/kg dry wt.
1,3-Dichlorobenzene	<64	64		ug/kg dry wt.
1,4-Dichlorobenzene	<64	64		ug/kg dry wt.
n-Butylbenzene	<64	64		ug/kg dry wt.
1,2-Dichlorobenzene	<64	64		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<130	130		ug/kg dry wt.
1,2,4-Trichlorobenzene	<64	64		ug/kg dry wt.
Hexachlorobutadiene	<64	64		ug/kg dry wt.
Naphthalene	<130	130		ug/kg dry wt.
1,2,3-Trichlorobenzene	<64	64		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-006
STATION ID: GP-5 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<56	56		ug/kg dry wt.
1,1-Dichloroethene	<56	56		ug/kg dry wt.
Methylene chloride	59	56		ug/kg dry wt.
trans-1,2-Dichloroethene	<56	56		ug/kg dry wt.
1,1-Dichloroethane	<56	56		ug/kg dry wt.
2,2-Dichloropropane	<56	56		ug/kg dry wt.
cis-1,2-Dichloroethene	<56	56		ug/kg dry wt.
Chloroform	<56	56		ug/kg dry wt.
1,1,1-Trichloroethane	<56	56		ug/kg dry wt.
Carbon tetrachloride	<56	56		ug/kg dry wt.
Methyl-tert-butyl-ether	<56	56		ug/kg dry wt.
Di-isopropyl ether	<56	56		ug/kg dry wt.
1,2-Dichloroethane	<56	56		ug/kg dry wt.
Benzene	<56	56		ug/kg dry wt.
Trichloroethene	<56	56		ug/kg dry wt.
1,2-Dichloropropane	<56	56		ug/kg dry wt.
Bromodichloromethane	<56	56		ug/kg dry wt.
Toluene	40	56	Q	ug/kg dry wt.
1,1,2-Trichloroethane	<56	56		ug/kg dry wt.
Tetrachloroethene	<56	56		ug/kg dry wt.
1,3-Dichloropropane	<56	56		ug/kg dry wt.
Chlorodibromomethane	<56	56		ug/kg dry wt.
1,2-Dibromoethane	<56	56		ug/kg dry wt.
Chlorobenzene	<56	56		ug/kg dry wt.
Ethylbenzene	<56	56		ug/kg dry wt.
m,p-Xylenes	<56	56		ug/kg dry wt.
o-Xylene	<56	56		ug/kg dry wt.
Isopropylbenzene	<56	56		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<56	56		ug/kg dry wt.
n-Propylbenzene	<56	56		ug/kg dry wt.
Bromobenzene	<56	56		ug/kg dry wt.
1,3,5-Trimethylbenzene	<56	56		ug/kg dry wt.
2-Chlorotoluene	<56	56		ug/kg dry wt.
4-Chlorotoluene	<56	56		ug/kg dry wt.
tert-Butylbenzene	<56	56		ug/kg dry wt.
1,2,4-Trimethylbenzene	<56	56		ug/kg dry wt.
sec-Butylbenzene	<56	56		ug/kg dry wt.

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PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-006
STATION ID: GP-5 (3)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<56	56		ug/kg dry wt.
1,3-Dichlorobenzene	<56	56		ug/kg dry wt.
1,4-Dichlorobenzene	<56	56		ug/kg dry wt.
n-Butylbenzene	<56	56		ug/kg dry wt.
1,2-Dichlorobenzene	<56	56		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<56	56		ug/kg dry wt.
Hexachlorobutadiene	<56	56		ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<56	56		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-007
STATION ID: GP-6 (2)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<120	120		ug/kg dry wt.
Chloromethane	<120	120		ug/kg dry wt.
Vinyl chloride	<120	120		ug/kg dry wt.
Chloroethane	<120	120		ug/kg dry wt.
Fluorotrichloromethane	<60	60		ug/kg dry wt.
1,1-Dichloroethene	<60	60		ug/kg dry wt.
Methylene chloride	<60	60		ug/kg dry wt.
trans-1,2-Dichloroethene	<60	60		ug/kg dry wt.
1,1-Dichloroethane	<60	60		ug/kg dry wt.
2,2-Dichloropropane	<60	60		ug/kg dry wt.
cis-1,2-Dichloroethene	<60	60		ug/kg dry wt.
Chloroform	<60	60		ug/kg dry wt.
1,1,1-Trichloroethane	<60	60		ug/kg dry wt.
Carbon tetrachloride	<60	60		ug/kg dry wt.
Methyl-tert-butyl-ether	<60	60		ug/kg dry wt.
Di-isopropyl ether	<60	60		ug/kg dry wt.
1,2-Dichloroethane	<60	60		ug/kg dry wt.
Benzene	<60	60		ug/kg dry wt.
Trichloroethene	<60	60		ug/kg dry wt.
1,2-Dichloropropane	<60	60		ug/kg dry wt.
Bromodichloromethane	<60	60		ug/kg dry wt.
Toluene	<60	60		ug/kg dry wt.
1,1,2-Trichloroethane	<60	60		ug/kg dry wt.
Tetrachloroethene	<60	60		ug/kg dry wt.
1,3-Dichloropropane	<60	60		ug/kg dry wt.
Chlorodibromomethane	<60	60		ug/kg dry wt.
1,2-Dibromoethane	<60	60		ug/kg dry wt.
Chlorobenzene	<60	60		ug/kg dry wt.
Ethylbenzene	<60	60		ug/kg dry wt.
m,p-Xylenes	<60	60		ug/kg dry wt.
o-Xylene	<60	60		ug/kg dry wt.
Isopropylbenzene	<60	60		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<60	60		ug/kg dry wt.
n-Propylbenzene	<60	60		ug/kg dry wt.
Bromobenzene	<60	60		ug/kg dry wt.
1,3,5-Trimethylbenzene	<60	60		ug/kg dry wt.
2-Chlorotoluene	<60	60		ug/kg dry wt.
4-Chlorotoluene	<60	60		ug/kg dry wt.
tert-Butylbenzene	<60	60		ug/kg dry wt.
1,2,4-Trimethylbenzene	<60	60		ug/kg dry wt.
sec-Butylbenzene	<60	60		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-007
STATION ID: GP-6 (2)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<60	60		ug/kg dry wt.
1,3-Dichlorobenzene	<60	60		ug/kg dry wt.
1,4-Dichlorobenzene	<60	60		ug/kg dry wt.
n-Butylbenzene	<60	60		ug/kg dry wt.
1,2-Dichlorobenzene	<60	60		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<120	120		ug/kg dry wt.
1,2,4-Trichlorobenzene	<60	60		ug/kg dry wt.
Hexachlorobutadiene	<60	60		ug/kg dry wt.
Naphthalene	60	120	Q	ug/kg dry wt.
1,2,3-Trichlorobenzene	<60	60		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-008
STATION ID: GP-6 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<53	53		ug/kg dry wt.
1,1-Dichloroethene	<53	53		ug/kg dry wt.
Methylene chloride	68	53		ug/kg dry wt.
trans-1,2-Dichloroethene	<53	53		ug/kg dry wt.
1,1-Dichloroethane	<53	53		ug/kg dry wt.
2,2-Dichloropropane	<53	53		ug/kg dry wt.
cis-1,2-Dichloroethene	<53	53		ug/kg dry wt.
Chloroform	<53	53		ug/kg dry wt.
1,1,1-Trichloroethane	<53	53		ug/kg dry wt.
Carbon tetrachloride	<53	53		ug/kg dry wt.
Methyl-tert-butyl-ether	<53	53		ug/kg dry wt.
Di-isopropyl ether	<53	53		ug/kg dry wt.
1,2-Dichloroethane	<53	53		ug/kg dry wt.
Benzene	<53	53		ug/kg dry wt.
Trichloroethene	<53	53		ug/kg dry wt.
1,2-Dichloropropane	<53	53		ug/kg dry wt.
Bromodichloromethane	<53	53		ug/kg dry wt.
Toluene	<53	53		ug/kg dry wt.
1,1,2-Trichloroethane	<53	53		ug/kg dry wt.
Tetrachloroethene	<53	53		ug/kg dry wt.
1,3-Dichloropropane	<53	53		ug/kg dry wt.
Chlorodibromomethane	<53	53		ug/kg dry wt.
1,2-Dibromoethane	<53	53		ug/kg dry wt.
Chlorobenzene	<53	53		ug/kg dry wt.
Ethylbenzene	<53	53		ug/kg dry wt.
m,p-Xylenes	30	53	Q	ug/kg dry wt.
o-Xylene	<53	53		ug/kg dry wt.
Isopropylbenzene	<53	53		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<53	53		ug/kg dry wt.
n-Propylbenzene	<53	53		ug/kg dry wt.
Bromobenzene	<53	53		ug/kg dry wt.
1,3,5-Trimethylbenzene	<53	53		ug/kg dry wt.
2-Chlorotoluene	<53	53		ug/kg dry wt.
4-Chlorotoluene	<53	53		ug/kg dry wt.
tert-Butylbenzene	<53	53		ug/kg dry wt.
1,2,4-Trimethylbenzene	<53	53		ug/kg dry wt.
sec-Butylbenzene	<53	53		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-008
STATION ID: GP-6 (4)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/25/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<53	53		ug/kg dry wt.
1,3-Dichlorobenzene	<53	53		ug/kg dry wt.
1,4-Dichlorobenzene	<53	53		ug/kg dry wt.
n-Butylbenzene	<53	53		ug/kg dry wt.
1,2-Dichlorobenzene	<53	53		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<53	53		ug/kg dry wt.
Hexachlorobutadiene	<53	53		ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<53	53		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-009
STATION ID: GP-7 (6)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/26/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<55	55		ug/kg dry wt.
1,1-Dichloroethene	<55	55		ug/kg dry wt.
Methylene chloride	<55	55		ug/kg dry wt.
trans-1,2-Dichloroethene	<55	55		ug/kg dry wt.
1,1-Dichloroethane	<55	55		ug/kg dry wt.
2,2-Dichloropropane	<55	55		ug/kg dry wt.
cis-1,2-Dichloroethene	<55	55		ug/kg dry wt.
Chloroform	<55	55		ug/kg dry wt.
1,1,1-Trichloroethane	<55	55		ug/kg dry wt.
Carbon tetrachloride	<55	55		ug/kg dry wt.
Methyl-tert-butyl-ether	<55	55		ug/kg dry wt.
Di-isopropyl ether	<55	55		ug/kg dry wt.
1,2-Dichloroethane	<55	55		ug/kg dry wt.
Benzene	<55	55		ug/kg dry wt.
Trichloroethene	<55	55		ug/kg dry wt.
1,2-Dichloropropane	<55	55		ug/kg dry wt.
Bromodichloromethane	<55	55		ug/kg dry wt.
Toluene	<55	55		ug/kg dry wt.
1,1,2-Trichloroethane	<55	55		ug/kg dry wt.
Tetrachloroethene	<55	55		ug/kg dry wt.
1,3-Dichloropropane	<55	55		ug/kg dry wt.
Chlorodibromomethane	<55	55		ug/kg dry wt.
1,2-Dibromoethane	<55	55		ug/kg dry wt.
Chlorobenzene	<55	55		ug/kg dry wt.
Ethylbenzene	<55	55		ug/kg dry wt.
m,p-Xylenes	<55	55		ug/kg dry wt.
o-Xylene	<55	55		ug/kg dry wt.
Isopropylbenzene	<55	55		ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<55	55		ug/kg dry wt.
n-Propylbenzene	<55	55		ug/kg dry wt.
Bromobenzene	<55	55		ug/kg dry wt.
1,3,5-Trimethylbenzene	<55	55		ug/kg dry wt.
2-Chlorotoluene	<55	55		ug/kg dry wt.
4-Chlorotoluene	<55	55		ug/kg dry wt.
tert-Butylbenzene	<55	55		ug/kg dry wt.
1,2,4-Trimethylbenzene	<55	55		ug/kg dry wt.
sec-Butylbenzene	<55	55		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-009
STATION ID: GP-7 (6)
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/26/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<55	55		ug/kg dry wt.
1,3-Dichlorobenzene	<55	55		ug/kg dry wt.
1,4-Dichlorobenzene	<55	55		ug/kg dry wt.
n-Butylbenzene	<55	55		ug/kg dry wt.
1,2-Dichlorobenzene	<55	55		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<55	55		ug/kg dry wt.
Hexachlorobutadiene	<55	55		ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<55	55		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-010
STATION ID: GP-8 (7)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/26/96
ANALYSIS DATE: 04/12/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<57	57		ug/kg dry wt.
1,1-Dichloroethene	<57	57		ug/kg dry wt.
Methylene chloride	<57	57		ug/kg dry wt.
trans-1,2-Dichloroethene	<57	57		ug/kg dry wt.
1,1-Dichloroethane	<57	57		ug/kg dry wt.
2,2-Dichloropropane	<57	57		ug/kg dry wt.
cis-1,2-Dichloroethene	30	57	Q	ug/kg dry wt.
Chloroform	<57	57		ug/kg dry wt.
1,1,1-Trichloroethane	<57	57		ug/kg dry wt.
Carbon tetrachloride	<57	57		ug/kg dry wt.
Methyl-tert-butyl-ether	<57	57		ug/kg dry wt.
Di-isopropyl ether	<57	57		ug/kg dry wt.
1,2-Dichloroethane	<57	57		ug/kg dry wt.
Benzene	<57	57		ug/kg dry wt.
Trichloroethene	20	57	Q	ug/kg dry wt.
1,2-Dichloropropane	<57	57		ug/kg dry wt.
Bromodichloromethane	<57	57		ug/kg dry wt.
Toluene	<57	57		ug/kg dry wt.
1,1,2-Trichloroethane	<57	57		ug/kg dry wt.
Tetrachloroethene	40	57	Q	ug/kg dry wt.
1,3-Dichloropropane	<57	57		ug/kg dry wt.
Chlorodibromomethane	<57	57		ug/kg dry wt.
1,2-Dibromoethane	<57	57		ug/kg dry wt.
Chlorobenzene	<57	57		ug/kg dry wt.
Ethylbenzene	20	57	Q	ug/kg dry wt.
m,p-Xylenes	40	57	Q	ug/kg dry wt.
o-Xylene	10	57	Q	ug/kg dry wt.
Isopropylbenzene	40	57	Q	ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<57	57		ug/kg dry wt.
n-Propylbenzene	60	57		ug/kg dry wt.
Bromobenzene	<57	57		ug/kg dry wt.
1,3,5-Trimethylbenzene	30	57	Q	ug/kg dry wt.
2-Chlorotoluene	20	57	Q	ug/kg dry wt.
4-Chlorotoluene	<57	57		ug/kg dry wt.
tert-Butylbenzene	30	57	Q	ug/kg dry wt.
1,2,4-Trimethylbenzene	30	57	Q	ug/kg dry wt.
sec-Butylbenzene	91	57		ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-010
STATION ID: GP-8 (7)
WI DNR LAB ID: 113138520

REPORT DATE: 04/16/96
COLLECTION DATE: 03/26/96
ANALYSIS DATE: 04/12/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<57	57		ug/kg dry wt.
1,3-Dichlorobenzene	<57	57		ug/kg dry wt.
1,4-Dichlorobenzene	<57	57		ug/kg dry wt.
n-Butylbenzene	120	57		ug/kg dry wt.
1,2-Dichlorobenzene	<57	57		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	70	57	B(110)	ug/kg dry wt.
Hexachlorobutadiene	110	57	B(110)	ug/kg dry wt.
Naphthalene	<110	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	83	57	B(110)	ug/kg dry wt.

Analysis performed three days past holding time.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-011
STATION ID: METH BLANK
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/26/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<100	100		ug/L
Chloromethane	<100	100		ug/L
Vinyl chloride	<100	100		ug/L
Chloroethane	<100	100		ug/L
Fluorotrichloromethane	<50	50		ug/L
1,1-Dichloroethene	<50	50		ug/L
Methylene chloride	40	50	Q	ug/L
trans-1,2-Dichloroethene	<50	50		ug/L
1,1-Dichloroethane	<50	50		ug/L
2,2-Dichloropropane	<50	50		ug/L
cis-1,2-Dichloroethene	<50	50		ug/L
Chloroform	<50	50		ug/L
1,1,1-Trichloroethane	<50	50		ug/L
Carbon tetrachloride	<50	50		ug/L
Methyl-tert-butyl-ether	<50	50		ug/L
Di-isopropyl ether	<50	50		ug/L
1,2-Dichloroethane	<50	50		ug/L
Benzene	<50	50		ug/L
Trichloroethene	<50	50		ug/L
1,2-Dichloropropane	<50	50		ug/L
Bromodichloromethane	<50	50		ug/L
Toluene	<50	50		ug/L
1,1,2-Trichloroethane	<50	50		ug/L
Tetrachloroethene	<50	50		ug/L
1,3-Dichloropropane	<50	50		ug/L
Chlorodibromomethane	<50	50		ug/L
1,2-Dibromoethane	<50	50		ug/L
Chlorobenzene	<50	50		ug/L
Ethylbenzene	<50	50		ug/L
m,p-Xylenes	<50	50		ug/L
o-Xylene	<50	50		ug/L
Isopropylbenzene	<50	50		ug/L
1,1,2,2-Tetrachloroethane	<50	50		ug/L
n-Propylbenzene	<50	50		ug/L
Bromobenzene	<50	50		ug/L
1,3,5-Trimethylbenzene	<50	50		ug/L
2-Chlorotoluene	<50	50		ug/L
4-Chlorotoluene	<50	50		ug/L
tert-Butylbenzene	<50	50		ug/L
1,2,4-Trimethylbenzene	<50	50		ug/L
sec-Butylbenzene	<50	50		ug/L

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-011
STATION ID: METH BLANK
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/26/96
ANALYSIS DATE: 04/03/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	<50	50		ug/L
1,3-Dichlorobenzene	<50	50		ug/L
1,4-Dichlorobenzene	<50	50		ug/L
n-Butylbenzene	<50	50		ug/L
1,2-Dichlorobenzene	<50	50		ug/L
1,2-Dibromo-3-chloropropane	<100	100		ug/L
1,2,4-Trichlorobenzene	<50	50		ug/L
Hexachlorobutadiene	<50	50		ug/L
Naphthalene	20	100	Q	ug/L
1,2,3-Trichlorobenzene	<50	50		ug/L

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LUST Data Qualifier Sheet

A	Sample odor present.
B(n)	Analyte is 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 Sample Narrative).
D	Analyte value from diluted analysis.
DP	Unidentified but detected peaks.
E	Analyte concentration exceeds calibration range (see Sample Narrative).
F	Repeated surrogate failure (see Sample Narrative).
G	Sample exhibits hydrocarbon pattern resembling gasoline.
H(n)	Analysis performed "n" days past holding time.
L	Detects in trip blank.
M	Methanol leakage.
P	Sample vial used for previous analysis.
R	Relative percent difference high (see Sample 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 02/06/95

CHAIN OF CUSTODY RECORD № 058320

RMT, INC. LABORATORIES

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.	Project/Client:
3227.01	Navistar

Project Manager/Contact Person: Dan Peplinski

Lab No.	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	Analyses Requested: DRY WT	VOCs 8260 WI LIST							Comments:
Filtered (Yes/No)						N	N							
Preserved (Code)						A	F							
9476 001	3/27	10:15	Used Sand Area	3	Soil	X	X							

PRESERVED CODES
A - NONE
B - HNO_3
C - H_2SO_4
D - NaOH
E - HCl
F - METHANOL
G - _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Gregory J. Pl	3/28/96 1220		
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
		HA Shefunski	3/28/96 12:30p

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush
Report Due _____

(For Lab Use Only)
Receipt Temp: iCed
Temp Blank Y N
Receipt pH (Wet/Metals): NA

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

F-268 (R6/95)

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

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PROJECT NAME: NAVISTAR
PROJECT NO: 03777.01
WORK ORDER NO: 9476

REPORT DATE:04/12/96

SAMPLE NO.	STATION ID	COLL. DATE	SAMPLE NO.	STATION ID	COLL. DATE
9476-001	USED SAND AREA	03/27/96			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by Laboratory management, as is verified by the following signature.

Approval Signature

4/12/96
Date

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9476-001
STATION ID: USED SAND AREA
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/27/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
Dichlorodifluoromethane	<110	110		ug/kg dry wt.
Chloromethane	<110	110		ug/kg dry wt.
Vinyl chloride	<110	110		ug/kg dry wt.
Chloroethane	<110	110		ug/kg dry wt.
Fluorotrichloromethane	<56	56		ug/kg dry wt.
1,1-Dichloroethene	<56	56		ug/kg dry wt.
Methylene chloride	<56	56		ug/kg dry wt.
trans-1,2-Dichloroethene	<56	56		ug/kg dry wt.
1,1-Dichloroethane	<56	56		ug/kg dry wt.
2,2-Dichloropropane	<56	56		ug/kg dry wt.
cis-1,2-Dichloroethene	<56	56		ug/kg dry wt.
Chloroform	<56	56		ug/kg dry wt.
1,1,1-Trichloroethane	<56	56		ug/kg dry wt.
Carbon tetrachloride	<56	56		ug/kg dry wt.
Methyl-tert-butyl-ether	<56	56		ug/kg dry wt.
Di-isopropyl ether	<56	56		ug/kg dry wt.
1,2-Dichloroethane	<56	56		ug/kg dry wt.
Benzene	180	56		ug/kg dry wt.
Trichloroethene	<56	56		ug/kg dry wt.
1,2-Dichloropropane	<56	56		ug/kg dry wt.
Bromodichloromethane	<56	56		ug/kg dry wt.
Toluene	310	56	B(20)	ug/kg dry wt.
1,1,2-Trichloroethane	<56	56		ug/kg dry wt.
Tetrachloroethene	<56	56		ug/kg dry wt.
1,3-Dichloropropane	<56	56		ug/kg dry wt.
Chlorodibromomethane	<56	56		ug/kg dry wt.
1,2-Dibromoethane	<56	56		ug/kg dry wt.
Chlorobenzene	<56	56		ug/kg dry wt.
Ethylbenzene	130	56		ug/kg dry wt.
m,p-Xylenes	310	56		ug/kg dry wt.
o-Xylene	170	56		ug/kg dry wt.
Isopropylbenzene	30	56	Q	ug/kg dry wt.
1,1,2,2-Tetrachloroethane	<56	56		ug/kg dry wt.
n-Propylbenzene	59	56		ug/kg dry wt.
Bromobenzene	<56	56		ug/kg dry wt.
1,3,5-Trimethylbenzene	100	56		ug/kg dry wt.
2-Chlorotoluene	<56	56		ug/kg dry wt.
4-Chlorotoluene	<56	56		ug/kg dry wt.
tert-Butylbenzene	<56	56		ug/kg dry wt.
1,2,4-Trimethylbenzene	260	56		ug/kg dry wt.
sec-Butylbenzene	20	56	Q	ug/kg dry wt.

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PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9476-001
STATION ID: USED SAND AREA
WI DNR LAB ID: 113138520

REPORT DATE: 04/12/96
COLLECTION DATE: 03/27/96
ANALYSIS DATE: 04/04/96
METHOD: 8260

VOLATILE ORGANICS ANALYSIS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
p-Isopropyltoluene	40	56	Q	ug/kg dry wt.
1,3-Dichlorobenzene	<56	56		ug/kg dry wt.
1,4-Dichlorobenzene	<56	56		ug/kg dry wt.
n-Butylbenzene	62	56		ug/kg dry wt.
1,2-Dichlorobenzene	<56	56		ug/kg dry wt.
1,2-Dibromo-3-chloropropane	<110	110		ug/kg dry wt.
1,2,4-Trichlorobenzene	<56	56		ug/kg dry wt.
Hexachlorobutadiene	<56	56		ug/kg dry wt.
Naphthalene	410	110		ug/kg dry wt.
1,2,3-Trichlorobenzene	<56	56		ug/kg dry wt.

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Organic GC/MS Data Qualifier Sheet

B(n)	Analyte is 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 diluted analysis.
E	Analyte concentration exceeds calibration range (see Sample Narrative).
H(n)	Analysis performed "n" days past holding time.
J	Estimated concentration to tentatively identified compounds (TICs).
K	Concentration may be elevated due to the presence of an unrequested analyte (see Sample Narrative).
N	Presumptive evidence of a compound based on mass spectral library search.
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 08/28/95

CHAIN OF CUSTODY RECORD № 058328

RMT INC. LABORATORIES

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.: 3777.01
Project/Client: Navistar
Project Manager/Contact Person: Don Poplinski

Filtered (Yes/No): N / N / N
Preserved (Code): F / A / F
Analyses Requested: VOCs 8260 WI LUST / Dry wt / DRO

Lab No. 9464	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	VOCs 8260 WI LUST	Dry wt	DRO					Comments
001	3/25	9:15A	GP-1(3)	2	Soil	X	x						
002		10:20A	GP-2(3)										
003		11:10A	GP-3(2)										
004		1200P	GP-4(2) *										
005		1:15P	GP-5(1)										
006		1:25P	GP-5(3)										
007		2:40P	GP-6(2)										
008		2:55P	GP-6(4) *										
009	3/26	9:45A	GP-7(6)										
010		10:30A	GP-8(7)	3				X					

SPECIAL INSTRUCTIONS
011 Methanol Blk | 1 | QC | X

*DRO sample preserved w/MeOH BW 7/22/96

See scope for instructions KGH 3/28/96

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Gregory J. [signature]	3/26/96 1311	Terry Steinert	1:11 3-26-96
Relinquished by (Sig.): Terry Steinert	1:55 3-26-96	Received by (Sig.): [signature] 578	1:55 3-26-96
Relinquished by (Sig.)	Date/Time	Received by (Sig.): B. Wochel	3/27/96 11 30

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list)

Turn Around (circle one) Normal Rush
Report Due ________

(For Lab Use Only)
Receipt Temp:
Temp Blank Y (N)
no ice 3°C

Receipt pH (Wet/Metals)
[signature] NA

Custody Seal: Present/Absent (circled Absent) Intact/Not Intact Seal #'s

PRESERVED CODES
A - NONE
B - HNO_3
C - H_2SO_4
D - NaOH
E - HCl
F - METHANOL
G - ________

F-268 (R6/95)

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

Madison Office & Laboratory
802 Deming Way
Madison, WI 53717
608-827-5501 • Fax: 608-827-5503
1-888-5-ENCHEM

EN CHEM INC.

Corporate Office & Laboratory
1795 Industrial Drive
Green Bay, WI 54302
414-469-2436 • Fax: 414-469-8827
1-800-7-ENCHEM

PROJECT NAME: NAVISTAR
PROJECT NO: 03777.01
WORK ORDER NO: 9464

REPORT DATE:04/11/96

SAMPLE NO.	STATION ID	COLL. DATE	SAMPLE NO.	STATION ID	COLL. DATE
9464-010	GP-8 (7)	03/26/96			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this Final Report is authorized by Laboratory management, as is verified by the following signature.

Kevin P. Mee
roval Signature

4/11/96
Date

Lab Cert. #: WI DNR 113138520, MN DNR 055-999-107, SC DHEC 83001, TN DOH 02916

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802 Deming Way
Madison, WI 53717
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1795 Industrial Drive
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1-800-7-ENCHEM

PROJECT NAME: NAVISTAR
PROJECT NUMBER: 03777.01
LAB SAMPLE NUMBER: 9464-010
STATION ID: GP-8 (7)
WI DNR LAB ID: 113138520

REPORT DATE: 04/11/96
COLLECTION DATE: 03/26/96
EXTRACTION DATE: 04/04/96
ANALYSIS DATE: 04/10/96
METHOD: LUFT

TOTAL PETROLEUM HYDROCARBONS REPORT

COMPOUND	RESULT	EQL	CODE	UNITS
TPH - Diesel	40	7.6		mg/kg dry wt.

Hydrocarbon heavier than diesel present.

VOLATILE ORGANIC MATRIX SPIKE RESULTS

PROJECT NUMBER : G1145.46
SAMPLE NUMBER : 9555-004
ANALYST : DRF
ANALYSIS DATE : 4/12/96
INSTRUMENT : ms71
METHOD : 8260
MATRIX : WATER

ANALYTE	SAMPLE CONC.	MS CONC.	% RECOVERY	MSD CONC.	% RECOVERY	RPD
DICHLORODIFLUOROMETHA	0.00	52.61	105%	48.47	97%	8%
CHLOROMETHANE	0.00	55.42	111%	50.29	101%	10%
VINYL CHLORIDE	0.00	59.03	118%	56.45	113%	4%
BROMOMETHANE	0.00	54.60	109%	52.69	105%	4%
CHLOROETHANE	0.00	58.69	117%	54.90	110%	7%
TRICHLOROFLUOROMETHA	0.00	65.32	131%	61.10	122%	7%
1 1-DICHLOROETHENE	0.00	52.70	105%	54.09	108%	3%
METHYLENE CHLORIDE	0.00	51.88	104%	51.04	102%	2%
trans-1 2-DICHLOROETHENE	0.00	57.58	115%	57.96	116%	1%
1 1-DICHLOROETHANE	0.00	56.83	114%	56.04	112%	1%
2 2-DICHLOROPROPANE	0.00	57.25	115%	57.23	114%	0%
cis-1 2-DICHLOROETHENE	0.00	56.23	112%	56.37	113%	0%
CHLOROFORM	0.00	55.87	112%	54.96	110%	2%
BROMOCHLOROMETHANE	0.00	54.32	109%	54.94	110%	1%
1 1 1-TRICHLOROETHANE	0.00	57.52	115%	56.03	112%	3%
CARBON TETRACHLORIDE	0.00	57.70	115%	57.19	114%	1%
1 1-DICHLOROPROPENE	0.00	54.56	109%	56.58	113%	4%
BENZENE	0.00	53.12	106%	52.70	105%	1%
1 2-DICHLOROETHANE	0.00	56.97	114%	55.18	110%	3%
TRICHLOROETHENE	0.00	54.00	108%	54.74	109%	1%
1 2-DICHLOROPROPANE	0.00	53.51	107%	52.91	106%	1%
BROMODICHLOROMETHANE	0.00	53.37	107%	51.73	103%	3%
DIBROMOMETHANE	0.00	52.69	105%	52.71	105%	0%
TOLUENE	1.42	51.29	100%	52.22	102%	2%
1 1 2-TRICHLOROETHANE	0.00	50.17	100%	50.67	101%	1%
TETRACHLOROETHENE	0.00	50.46	101%	52.17	104%	3%
1 3-DICHLOROPROPANE	0.00	50.17	100%	50.93	102%	2%
DIBROMOCHLOROMETHANE	0.00	50.14	100%	49.81	100%	1%
1 2-DIBROMOETHANE	0.00	50.05	100%	50.78	102%	1%
CHLOROBENZENE	0.00	49.76	100%	50.74	101%	2%
1 1 1 2-TETRACHLOROETHA	0.00	51.89	104%	52.76	106%	2%
ETHYL BENZENE	0.00	49.67	99%	50.27	101%	1%
m-,p-XYLENE	0.00	99.75	100%	100.56	101%	1%
o-XYLENE	0.00	50.17	100%	50.50	101%	1%
STYRENE	0.00	51.44	103%	51.18	102%	1%
BROMOFORM	0.00	48.46	97%	47.99	96%	1%
ISOPROPYLBENZENE	0.00	51.64	103%	52.77	106%	2%
1 1 2 2-TETRACHLOROETHA	0.00	46.63	93%	48.65	97%	4%
BROMOBENZENE	0.00	50.72	101%	52.31	105%	3%
1 2 3-TRICHLOROPROPANE	0.00	48.02	96%	50.05	100%	4%
n-PROPYLBENZENE	0.00	53.37	107%	54.07	108%	1%
2-CHLOROTOLUENE	0.00	51.50	103%	54.48	109%	6%
1 3 5-TRIMETHYLBENZENE	0.00	51.08	102%	52.71	105%	3%
4-CHLOROTOLUENE	0.00	50.31	101%	51.47	103%	2%
tert-BUTYLBENZENE	0.00	52.17	104%	54.52	109%	4%
1 2 4-TRIMETHYLBENZENE	0.00	50.66	101%	52.65	105%	4%
sec-BUTYLBENZENE	0.00	52.82	106%	55.23	110%	4%
p-ISOPROPYLTOLUENE (Cym	0.00	51.74	103%	54.18	108%	5%
1 3-DICHLOROBENZENE	0.00	49.73	99%	51.30	103%	3%
1 4-DICHLOROBENZENE	0.00	46.96	94%	51.40	103%	9%
n-BUTYLBENZENE	0.00	52.81	106%	54.58	109%	3%
1 2-DICHLOROBENZENE	0.00	48.70	97%	50.20	100%	3%
1 2-DIBROMO-3-CHLOROPRO	0.00	45.15	90%	48.80	98%	8%
1 2 4-TRICHLOROBENZENE	0.00	47.65	95%	48.51	97%	2%
HEXACHLOROBUTADIENE	0.00	49.85	100%	52.39	105%	5%
NAPHTHALENE	0.00	45.62	91%	47.03	94%	3%
1 2 3-TRICHLOROBENZENE	0.00	46.13	92%	47.72	95%	3%
cis-1,3-DICHLOROPROPENE	0.00	54.29	109%	54.47	109%	0%
trans-1,3-Dichlorpropene	0.00	53.13	106%	52.86	106%	1%

VOLATILE ORGANIC MATRIX SPIKE RESULTS

PROJECT NUMBER : G1145.46
SAMPLE NUMBER : 9555-015
ANALYST : DRF
ANALYSIS DATE : 4/12/96
INSTRUMENT : ms71
METHOD : 8260
MATRIX : WATER

ANALYTE	SAMPLE CONC.	MS CONC.	% RECOVERY	MSD CONC.	% RECOVERY	RPD
DICHLORODIFLUOROMETHA	0.00	49.53	99%	52.32	105%	5%
CHLOROMETHANE	0.00	51.43	103%	53.42	107%	4%
VINYL CHLORIDE	0.00	55.60	111%	57.00	114%	2%
BROMOMETHANE	0.00	52.01	104%	52.82	106%	2%
CHLOROETHANE	0.00	53.68	107%	52.80	106%	2%
TRICHLOROFLUOROMETHA	0.00	60.26	121%	61.36	123%	2%
1 1-DICHLOROETHENE	11.24	63.84	105%	63.82	105%	0%
METHYLENE CHLORIDE	0.00	50.99	102%	49.20	98%	4%
trans-1 2-DICHLOROETHENE	0.00	56.54	113%	55.54	111%	2%
1 1-DICHLOROETHANE	3.78	58.82	110%	57.30	107%	3%
2 2-DICHLOROPROPANE	0.00	56.52	113%	52.38	105%	8%
cis-1 2-DICHLOROETHENE	0.00	56.87	114%	54.98	110%	3%
CHLOROFORM	0.00	56.13	112%	54.10	108%	4%
BROMOCHLOROMETHANE	0.00	55.97	112%	54.09	108%	3%
1 1 1-TRICHLOROETHANE	0.00	56.01	112%	53.73	107%	4%
CARBON TETRACHLORIDE	0.00	57.33	115%	54.87	110%	4%
1 1-DICHLOROPROPENE	0.00	55.96	112%	54.37	109%	3%
BENZENE	0.00	52.58	105%	50.81	102%	3%
1 2-DICHLOROETHANE	0.00	55.52	111%	53.59	107%	4%
TRICHLOROETHENE	0.00	55.17	110%	53.85	108%	2%
1 2-DICHLOROPROPANE	0.00	53.64	107%	52.21	104%	3%
BROMODICHLOROMETHANE	0.00	54.17	108%	50.43	101%	7%
DIBROMOMETHANE	0.00	54.30	109%	53.48	107%	2%
TOLUENE	0.00	51.78	104%	49.68	99%	4%
1 1 2-TRICHLOROETHANE	0.00	52.18	104%	51.72	103%	1%
TETRACHLOROETHENE	0.00	52.20	104%	50.15	100%	4%
1 3-DICHLOROPROPANE	0.00	52.12	104%	51.24	102%	2%
DIBROMOCHLOROMETHANE	0.00	52.05	104%	49.55	99%	5%
1 2-DIBROMOETHANE	0.00	52.58	105%	51.88	104%	1%
CHLOROBENZENE	0.00	51.41	103%	49.47	99%	4%
1 1 1 2-TETRACHLOROETHA	0.00	53.26	107%	51.26	103%	4%
ETHYL BENZENE	0.00	51.30	103%	49.51	99%	4%
m-,p-XYLENE	0.00	103.75	104%	98.86	99%	5%
o-XYLENE	0.00	51.38	103%	50.14	100%	2%
STYRENE	0.00	52.86	106%	51.57	103%	2%
BROMOFORM	0.00	51.94	104%	49.78	100%	4%
ISOPROPYLBENZENE	0.00	53.86	108%	51.59	103%	4%
1 1 2 2-TETRACHLOROETHA	0.00	50.58	101%	50.69	101%	0%
BROMOBENZENE	0.00	53.02	106%	51.00	102%	4%
1 2 3-TRICHLOROPROPANE	0.00	51.56	103%	51.92	104%	1%
n-PROPYLBENZENE	0.00	53.67	107%	51.10	102%	5%
2-CHLOROTOLUENE	0.00	54.38	109%	52.26	105%	4%
1 3 5-TRIMETHYLBENZENE	0.00	53.25	107%	50.62	101%	5%
4-CHLOROTOLUENE	0.00	53.58	107%	51.09	102%	5%
tert-BUTYLBENZENE	0.00	54.34	109%	51.65	103%	5%
1 2 4-TRIMETHYLBENZENE	0.00	52.86	106%	50.14	100%	5%
sec-BUTYLBENZENE	0.00	54.54	109%	51.57	103%	6%
p-ISOPROPYLTOLUENE (Cym	0.00	53.76	108%	50.31	101%	7%
1 3-DICHLOROBENZENE	0.00	52.00	104%	49.85	100%	4%
1 4-DICHLOROBENZENE	0.00	51.15	102%	49.34	99%	4%
n-BUTYLBENZENE	0.00	54.36	109%	49.59	99%	9%
1 2-DICHLOROBENZENE	0.00	50.80	102%	49.96	100%	2%
1 2-DIBROMO-3-CHLOROPRO	0.00	51.10	102%	50.84	102%	1%
1 2 4-TRICHLOROBENZENE	0.00	50.79	102%	48.76	98%	4%
HEXACHLOROBUTADIENE	0.00	54.05	108%	48.72	97%	10%
NAPHTHALENE	0.45	53.00	105%	51.13	101%	4%
1 2 3-TRICHLOROBENZENE	0.00	53.65	107%	49.04	98%	9%
cis-1,3-DICHLOROPROPENE	0.00	54.32	109%	52.20	104%	4%
trans-1,3-Dichlorpropene	0.00	53.60	107%	52.12	104%	3%

CHAIN OF CUSTODY RECORD № 058328

RMT INC. LABORATORIES

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No.: 3777.01

Project/Client: Navistar

Project Manager/Contact Person: Don Poplinski

Filtered (Yes/No): N / N / N

Preserved (Code): F / A / F

Analyses Requested: VOCs 8260 W/ LUST; Dry wt; DRO

Lab No. 9464	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	VOCs 8260 W/ LUST	Dry wt	DRO						Comments
001	3/25	9:15A	GP-1 (3)	2	Soil	X	X							
002		10:20A	GP-2 (3)											
003		11:10A	GP-3 (2)											
004		1200P	GP-4 (2) +											
005		1:15P	GP-5 (1)											
006		1:25P	GP-5 (3)											
007		2:40P	GP-6 (2)											
008		2:55P	GP-6 (4) +											
009	3/26	9:45A	GP-7 (6)											
010		10:30A	GP-8 (7)	3				X						
011			Methanol Blk	1	QC	X								*DRO sample preserved w/ MeOH BW 3/27/96

SPECIAL INSTRUCTIONS: See scope for instructions KGH 3/28/96

PRESERVED CODES
- A - NONE
- B - HNO_3
- C - H_2SO_4
- D - NaOH
- E - HCl
- F - METHANOL
- G - ____

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
Gregory J [signature]	3/26/96 1311	Terry Steinert	1:11 3-26-96
Relinquished by (Sig.) Terry Steinert	1:55 3-26-96	Received by (Sig.) [signature] 518	1:55 3-26-96
Relinquished by (Sig.)		Received by (Sig.) B. Wiechel	3/27/96 11 30

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list)

Turn Around (circle one) Normal Rush

Report Due ____

(For Lab Use Only)

Receipt Temp: Temp Blank Y (N) no ice 3°C

Receipt pH (Wet/Metals) [signature] NA

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

F-268 (R6/95)

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

VOLATILE ORGANIC MATRIX SPIKE RESULTS

PROJECT NUMBER : G1145.46
SAMPLE NUMBER : 9555-015
ANALYST : DRF
ANALYSIS DATE : 4/12/96
INSTRUMENT : ms71
METHOD : 8260
MATRIX : WATER

ANALYTE	SAMPLE CONC.	MS CONC.	% RECOVERY	MSD CONC.	% RECOVERY	RPD
DICHLORODIFLUOROMETHA	0.00	49.53	99%	52.32	105%	5%
CHLOROMETHANE	0.00	51.43	103%	53.42	107%	4%
VINYL CHLORIDE	0.00	55.60	111%	57.00	114%	2%
BROMOMETHANE	0.00	52.01	104%	52.82	106%	2%
CHLOROETHANE	0.00	53.68	107%	52.80	106%	2%
TRICHLOROFLUOROMETHA	0.00	60.26	121%	61.36	123%	2%
1 1-DICHLOROETHENE	11.24	63.84	105%	63.82	105%	0%
METHYLENE CHLORIDE	0.00	50.99	102%	49.20	98%	4%
trans-1 2-DICHLOROETHENE	0.00	56.54	113%	55.54	111%	2%
1 1-DICHLOROETHANE	3.78	58.82	110%	57.30	107%	3%
2 2-DICHLOROPROPANE	0.00	56.52	113%	52.38	105%	8%
cis-1 2-DICHLOROETHENE	0.00	56.87	114%	54.98	110%	3%
CHLOROFORM	0.00	56.13	112%	54.10	108%	4%
BROMOCHLOROMETHANE	0.00	55.97	112%	54.09	108%	3%
1 1 1-TRICHLOROETHANE	0.00	56.01	112%	53.73	107%	4%
CARBON TETRACHLORIDE	0.00	57.33	115%	54.87	110%	4%
1 1-DICHLOROPROPENE	0.00	55.96	112%	54.37	109%	3%
BENZENE	0.00	52.58	105%	50.81	102%	3%
1 2-DICHLOROETHANE	0.00	55.52	111%	53.59	107%	4%
TRICHLOROETHENE	0.00	55.17	110%	53.85	108%	2%
1 2-DICHLOROPROPANE	0.00	53.64	107%	52.21	104%	3%
BROMODICHLOROMETHANE	0.00	54.17	108%	50.43	101%	7%
DIBROMOMETHANE	0.00	54.30	109%	53.48	107%	2%
TOLUENE	0.00	51.78	104%	49.68	99%	4%
1 1 2-TRICHLOROETHANE	0.00	52.18	104%	51.72	103%	1%
TETRACHLOROETHENE	0.00	52.20	104%	50.15	100%	4%
1 3-DICHLOROPROPANE	0.00	52.12	104%	51.24	102%	2%
DIBROMOCHLOROMETHANE	0.00	52.05	104%	49.55	99%	5%
1 2-DIBROMOETHANE	0.00	52.58	105%	51.88	104%	1%
CHLOROBENZENE	0.00	51.41	103%	49.47	99%	4%
1 1 1 2-TETRACHLOROETHA	0.00	53.26	107%	51.26	103%	4%
ETHYL BENZENE	0.00	51.30	103%	49.51	99%	4%
m-,p-XYLENE	0.00	103.75	104%	98.86	99%	5%
o-XYLENE	0.00	51.38	103%	50.14	100%	2%
STYRENE	0.00	52.86	106%	51.57	103%	2%
BROMOFORM	0.00	51.94	104%	49.78	100%	4%
ISOPROPYLBENZENE	0.00	53.86	108%	51.59	103%	4%
1 1 2 2-TETRACHLOROETHA	0.00	50.58	101%	50.69	101%	0%
BROMOBENZENE	0.00	53.02	106%	51.00	102%	4%
1 2 3-TRICHLOROPROPANE	0.00	51.56	103%	51.92	104%	1%
n-PROPYLBENZENE	0.00	53.67	107%	51.10	102%	5%
2-CHLOROTOLUENE	0.00	54.38	109%	52.26	105%	4%
1 3 5-TRIMETHYLBENZENE	0.00	53.25	107%	50.62	101%	5%
4-CHLOROTOLUENE	0.00	53.58	107%	51.09	102%	5%
tert-BUTYLBENZENE	0.00	54.34	109%	51.65	103%	5%
1 2 4-TRIMETHYLBENZENE	0.00	52.86	106%	50.14	100%	5%
sec-BUTYLBENZENE	0.00	54.54	109%	51.57	103%	6%
p-ISOPROPYLTOLUENE (Cym	0.00	53.76	108%	50.31	101%	7%
1 3-DICHLOROBENZENE	0.00	52.00	104%	49.85	100%	4%
1 4-DICHLOROBENZENE	0.00	51.15	102%	49.34	99%	4%
n-BUTYLBENZENE	0.00	54.36	109%	49.59	99%	9%
1 2-DICHLOROBENZENE	0.00	50.80	102%	49.96	100%	2%
1 2-DIBROMO-3-CHLOROPRO	0.00	51.10	102%	50.84	102%	1%
1 2 4-TRICHLOROBENZENE	0.00	50.79	102%	48.76	98%	4%
HEXACHLOROBUTADIENE	0.00	54.05	108%	48.72	97%	10%
NAPHTHALENE	0.45	53.00	105%	51.13	101%	4%
1 2 3-TRICHLOROBENZENE	0.00	53.65	107%	49.04	98%	9%
cis-1,3-DICHLOROPROPENE	0.00	54.32	109%	52.20	104%	4%
trans-1,3-Dichlorpropene	0.00	53.60	107%	52.12	104%	3%

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

Grand Ledge, MI
[redacted]ille, TN

Greenville, SC
Schaumburg, IL

Dublin, OH
Waukesha, WI

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

CHAIN OF CUSTODY RECORD

№ 044472

Bottles Prepared by:	Date/Time

Project No.	Client:
3777.01	Navistar

RMT Lab NO.	Yr. 96 Date	Time	Sample Station ID	Total Number Of Containers	Analysis's Container/Preservative: VOCs 8260 WI List	DRY WT						MATRIX	Comments:
					N F	N A							
9497 001	3/29	9:20	GP-9 (4)	2	X	X						Soil	
002		10:05	GP-10 (3)	2	X	X							
003		10:45	GP-11 (4)	2	X	X							
004		10:55	Methanol Blk	1	X								
005		11:30	GP-12 (1)	2	X	X							
006		11:45	GP-12 (3)	2	X	X							
007		12:15	GP-13 (3)	2	X	X							
008		12:45	GP-14 (4)	2	X	X							
009		1:30	GP-15 (3)	2	X	X							

Filtered (Yes/No)
Preserved (Code) 1

Code: A - None
B - HNO_3
C - H_2SO_4
D - NaOH
E - HCl
F - Meth

SAMPLER Relinquished by (Sig.) ①	Date/Time	Received by (Sig.) ② Shipper Name & #	Date/Time
Gregory [illegible]	3/29/96 1257	Dunham Express	3/29/96 1257
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
Dunhams	4/1/96 2pm	K. Sherfenski	4/1/96 2pm

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp: iced
Receipt pH: NA

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

[illegible] 3-30-96

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

Madison Office & Laboratory
802 Deming Way
Madison, WI 53717
608-827-5501 • Fax: 608-827-5503
1-888-5-ENCHEM

Corporate Office & Laboratory
1795 Industrial Drive
Green Bay, WI 54302
414-469-2436 • Fax: 414-469-8827
1-800-7-ENCHEM

SAMPLE NARRATIVE
VOLATILE GC/MS ORGANIC ANALYSIS

PROJECT NAME:	NAVISTAR
PROJECT NUMBER:	3777.01
WORKORDER NUMBER:	9497, 9464, 9476
DATE:	05/01/96

The Wisconsin DNR proposed detection limit of 25 ug/kg for methanol preserved soils was met for all of the volatile organic analytes reported for this work order. The reports issued have raised EQLs which are based a 1:50 dilution which is necessary when analyzing methanol preserved soils. If an analyte was present at a value less the EQL it is on the report qualified with a Q value.

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Organic GC/MS Data Qualifier Sheet

B(n)	Analyte is 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 diluted analysis.
E	Analyte concentration exceeds calibration range (see Sample Narrative).
H(n)	Analysis performed "n" days past holding time.
J	Estimated concentration to tentatively identified compounds (TICs).
K	Concentration may be elevated due to the presence of an unrequested analyte (see Sample Narrative).
N	Presumptive evidence of a compound based on mass spectral library search.
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 08/28/95

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