PRELIMINARY ASSESSMENT
ARMY RESERVE CENTER
PEWAUKEE, WISCONSIN

REPORT DOCUMENT NO.
SFIM-AEC-IR-CR-93129

January 14, 1994

PREPARED FOR:
U.S. ARMY ENVIRONMENTAL CENTER
INSTALLATION RESTORATION DIVISION
BLDG. E4480
ABERDEEN PROVING GROUND, MARYLAND 21010

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The Army Reserve Center Pewaukee has been in operation since 1960. The facility is currently occupied by the 961st Engineering Battalion, a unit from the 86th Army ARCOM. Its mission is construction and approximately 145 people are assigned to the unit. Routine maintenance of vehicles associated with the construction is performed on-site. Major repairs, repainting of vehicles, and refueling and washing of vehicles are performed off-site. Records indicate that the potential sources of contamination include two heating oil USTs, which have subsequently been removed; one 400-gallon mobile storage tank and five 55-gallon drums containing waste oil, solvents, and water; and a paint storage room. Based on the information determined from the investigation it is concluded that there have been no releases to the groundwater, surface waters, soil or air from the site. Due to the low volume of wastes generated at the site and the control measures taken to prevent spills, potential contamination to groundwater, surface water, soil and air pathways from the site is low.
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LIST OF ABBREVIATIONS

ARCOM - Army Reserve Command
PA - Preliminary Assessment
RCRA - Resource and Conservation Recovery Act
USARC - United States Army Reserve Center
USARCP - United States Army Reserve Center Pewaukee
USTs - Underground Storage Tanks
1.0 INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and Section 120 Federal Facilities, a Preliminary Assessment (PA) was conducted at the U.S. Army Reserve Center located in Pewaukee, Wisconsin. The purpose of the PA was to investigate and review conditions at the site to assess the threat posed to human health and the environment and provide the information necessary to reevaluate the facility's status on the Federal Facility Docket. PEER Consultants, P.C. was retained to perform the PA under Purchase Order (P.O.) No. DACA31-93-P-1658. The scope of the work included review of existing environmental documentation, perform a visual site inspection, and gather demographic information from the relevant state, county and local government records to satisfy the requirements in the Guidance for Performing Preliminary Assessments Under CERCLA, EPA/540/G-01/013, September 1991.

2.0 SITE DESCRIPTION

2.1 SITE LOCATION

The U.S. Army Reserve Center Pewaukee (USARCP) is located at 619 West Wisconsin Avenue in the Village of Pewaukee, Waukesha County, Wisconsin. The USARCP is within a rural area of Waukesha County, approximately twenty miles west of Milwaukee (Figure 1). It is located in the Northwest (NW) ¼ of the Northeast (NE) ¼ of Section 8, Township 7 North, Range 19 East in Pewaukee Township, Waukesha County. The geographic coordinates for the site are 43° 05' 18.5" North latitude and 88° 16' 25.9" West longitude (Figure 2). A worksheet showing the calculations of the geographic coordinates is included in Appendix A.

The summer months, June, July, and August, in the Milwaukee area are generally mild and humid with normal temperatures ranging from a high of 78° F and a low of 59° F. The winter months, December, January, and February, are cold with normal temperatures ranging from a high of 29° F and a low of 15° F. The average total annual rainfall is approximately thirty-three (33) inches (Ref. 1).

2.2 SITE DESCRIPTION

The site is located on approximately 5 acres of federally owned land. The property is bounded by County Highway "KF" to the west, Wisconsin Avenue to the south, West Avenue to the east, and an open field to the north (Figure 3). The terrain is relatively flat, gently sloping downgradient to the southwest. Two buildings, which were constructed and occupied in 1960, are on the site. One is the 11,694 square foot (sf), one-story, brick, USARCP building and the other is a 2,251 sf, one-story, brick, vehicle maintenance shop. Approximately 100,000 sf of the property is paved for a driveway and parking. Approximately 84,000 sf of the property is landscaped.
Source: U.S.G.S. Hartland and Waukesha
15-Minute Quadrangles, 1959

Figure 2 - GEOGRAPHIC LOCATION:
USARC Pewaukee, Wisconsin

No Scale

PEWAUKEE PA REPORT
with grass, trees, bushes, and flowers. The remaining portions of the property consists of grassy areas which receive little or no maintenance. The property gently slopes downhill toward an open drainage ditch which runs along the west property line. Visual observations indicate no staining, discoloration, or damage to vegetation at the site, except in the area north of the fence. The vegetation in this area has been physically damaged because the area is used as a practice area for the earth moving equipment.

According to discussions with the Facilities Manager at the project site, the property is connected to the local municipal water and sewer systems, which are operated and maintained by the Village of Pewaukee Water Utilities, electrical power is obtained from Wisconsin Electric Company, and trash is collected by Foyer Trash Collectors (Ref 2).

3.0 SITE ACTIVITY, HISTORY, AND WASTE CHARACTERIZATION

The Environmental Manager at the 86th U.S Army Reserve Command (ARCOM) in Forest Park, Illinois, the Environmental Manager from the 86th U.S. ARCOM at Fort McCoy in Wisconsin, and the Facilities Manager for the USARCP were interviewed to determine site activities and history.

3.1 PAST ON-SITE ACTIVITIES AND HISTORY

A unit of the 84th Division occupied the Center during the period of 1982 until 1993. Its mission was primarily to provide space for armored vehicle training units and military engineering units. A mission statement from a February 22, 1989 Annual Utilization Survey (Ref. 3) states that the USARCP is to:

- be utilized as primary mobilization site for tenant units;
- provide headquarters area, office space, storage facilities to tenant units;
- provide classroom space and learning center to tenant units;
- provide dining kitchen facilities to tenant units;
- provide space, storage area, and maintenance facility to tenant units in support of their organizational vehicles, equipment, and other authorized items in the Modification Table of Organization and Equipment, Common Table of Allowances, and Table of Distribution and Allowances (MTOE/CTA/TDA); and
- provide an emergency shelter or other utilization as directed by higher headquarters.
There were approximately 200 people in this unit. Large equipment such as backhoes, scrapers, and dump trucks used by the Division were stored on-site. Touch-up painting and routine maintenance and repairs of vehicles were performed on-site. All major repairs, repainting of vehicles, and refueling and washing of vehicles were performed at the Area Maintenance Support Activity 49 (AMSA 49) located at 5110 W. Silver Spring Drive, Milwaukee, Wisconsin. This facility is located approximately 25 miles east of the subject site, on the north side of Milwaukee, Wisconsin. The waste oils, antifreeze, and solvents generated on-site by the touch-up painting and routine maintenance and repairs were collected in 55-gallon drums and hauled from the site by a private hauler (Ref. 2).

The USARCP was originally classified as a large quantity generator of hazardous wastes, as defined by the Resource and Conservation Recovery Act (RCRA), Subtitle C. Its EPA Identification Number (ID #) is W19210021953. In 1989, a request was made to change the hazardous waste generator status to "Very Small Quantity Generator". A "Very Small Quantity Generator" generates less than 100 kilograms or approximately 25 gallons of hazardous wastes in any one month period (Ref. 4). This change was granted by the Wisconsin Department of Natural Resources in January 1991. No annual reporting is required with this status. A copy of the notification granting the revision in hazardous waste generator status is in Appendix B.

According to a U.S. Army Toxic and Hazardous Materials Agency (USATHMA) Property report, dated March 1989, the facility had three potential sources of hazardous substances or waste sites. They were a 1,000-gallon, heating oil, underground storage tank (UST); a 6,000-gallon, heating-oil UST; and, a paint storage shed. The 1,000 gallon UST, which has subsequently been removed, was located near the northeast corner of the vehicle maintenance building. The 6,000-gallon UST, which has subsequently been removed, was located between the south wing and drill room of the USARCP building. The paint storage shed, which has subsequently been removed, was a small corrugated metal shed reportedly located near the northwest corner of the vehicle maintenance shop. In addition, waste oil and solvents were stored in a 55-gallon drum inside of the Vehicle Maintenance Shed. Figure 4 indicates the location of the past on-site waste locations: the USTs, paint storage shed, and drum storage area.

In 1986, the facility's heating system was converted from oil to natural gas (Ref. 2). A "Mail-Out Questionnaire Response Sheet", found in the files maintained by the facility, stated that the heating oil was removed from the USTs, except for a small amount to prevent the tanks from floating (Ref. 5). On October 28, 1991 the USTs were removed. An Underground Storage Tank Removal Documentation Report was prepared and submitted to the Wisconsin Department of Industry, Labor, and Human Relations. The report states that there was no evidence of contamination and that sample analysis results indicated that it was a clean closure site. A copy of the tank closure report is included in Appendix C. An interview with the a Village
Figure 4

USARC Pewaukee
Pewaukee, WI
Past On-Site Waste Locations

Legend:
- [ ] Property Line
- [ ] Pavement
- [ ] Drainage Ditch

- 55-gallon
  Waste Oil Drum
- 1,000 gallon
  Underground
  Storage Tank
  (Removed 10/28/91)
- 6,000-gallon
  Underground
  Storage Tank
  (Removed 10/28/91)

Point Storage Shed
of Pewaukee Fire Inspector confirmed the findings of the report (Ref. 6).

3.2 **PRESENT ON-SITE ACTIVITY**

On April 1, 1993, the 84th Division moved out of the facility. The facility is presently occupied by the 961st Engineering Battalion, a unit from the 86th Army ARCOM. The mission for this unit is construction. Approximately 145 people are assigned to this unit. Five full-time employees and two part-time employees are on site. The unit maintains readiness by performing non-profit construction projects in the community. It has constructed items such as a soccer field in the Village of Pewaukee and a playground for the public schools. As before, only routine maintenance and repairs of construction vehicles are performed on-site. Used oil and antifreeze are generated and collected at the site. Solvents are used for cleaning of parts and equipment. Approximately 40 to 50 gallons of non-RCRA used oil is generated per month. The used oil is collected in a 55-gallon drum satellite accumulation point inside the Vehicle Maintenance Shop. Once the drum is full, the oil is subsequently pumped into a 400-gallon mobile above ground storage tank. The used oil, as well as used antifreeze and spent solvents, are collected and tested by Safety Kleen.

There are presently four potential sources of hazardous substances on-site: the paint storage room, the 55-gallon drum storage area inside of the vehicle maintenance building, the 100-gallon mobile storage tank, and the four 55-gallon drum storage area. The paint storage shed is located in the northeast corner of the Vehicle Maintenance Shop. The room is constructed of masonry block to the roof and is accessed from outside of the building. There also are four 55-gallon drums and a 400-gallon mobile storage tank on site. Samples of the contents of the drums and tank have been collected and are currently being analyzed by Safety Kleen. Preliminary results indicate that the drums contain a mixture of oil, solvents, antifreeze, and water; and that the mobile storage tank contains used oil and water. A temporary sand bag dike has been constructed around the drums and mobile tank for spill control. Rain protection has also been provided for the drums. The location of the paint storage room, 55-gallon drums and 400-gallon mobile storage tank are indicated on Figure 5. The Environmental Manager stated that a request had been submitted to Fort McCoy to sample the materials in the 55-gallon drums and 400-gallon mobile storage tank in order to determine the contents and appropriately dispose of them (Ref. 2). Photographs of the site, the 400-gallon mobile storage tank, and the four 55-gallon drums are included in Appendix G. The location and direction of the photos are indicated on Figure 5.

3.3 **WASTE CHARACTERIZATION**

The on-site waste source types can be described as drums, tanks, and storage room. The drums consist of the one 55-gallon drum, which contains used oil, located in the Vehicle Maintenance Shop; and four 55-gallon drums, containing a combination of
oil, solvents, antifreeze and water. The tanks consist of one 400-gallon mobile storage tank, containing used oil and water; and two No. 2 heating oil USTs, one 1,000-gallon and one 6,000-gallon. The two USTs were removed in 1992. The paint storage room contains paints, varnish, and corrosion preventative. These materials are stored in gallon and quart size containers; the quantity varies.

4.0 GROUNDWATER PATHWAY

4.1 HYDROGEOLOGIC SETTING

Waukesha County is located in the Central Lowland physiographic province. This area can be characterized as glaciated till covering bedrock which gently slopes downgradient westward toward the Mississippi River. The site is not located in a karst terrain (Ref 7).

There are three principal sources of ground water in Waukesha County. They are, in order of depth below ground level, the sand-and-gravel aquifer in the glacial drift, the Niagara aquifer, and the sandstone aquifer (Ref. 8). The sandstone aquifer, which consists primarily of rocks in the Galena-Platteville formations, St. Peter Sandstone, the Trempealeau formation, the Franconia, Galesville, Eau Claire, and Mount Simon Sandstones, ranges from approximately 700 feet to 2,300 feet in thickness. This aquifer is continuous throughout the county. The Niagara aquifer includes Silurian dolomite overlying Maquoketa shale. This aquifer, which is only in the eastern two-thirds of the county, ranges from approximately 0 feet to 300 feet in thickness. Water from this aquifer is used extensively for domestic, commercial, and small municipal or subdivision water supplies. The sand-and-gravel aquifer consists of sand and gravel deposits in the glacial drift. These deposits are found throughout the county and range in thickness of approximately 0 feet to 200 feet. Water from this aquifer is used mostly for domestic water supplies. Well Constructors Reports for wells constructed near the project site indicate that the geology in the area generally consists of, in order of depth, topsoil and/or clay, gravel, and limestone and/or shale. The static water level ranged from five feet to 115 feet below ground level. It has been reported that the groundwater flow in the vicinity of the lake is toward the lake except at the spillway (Ref 9). Groundwater flow at the spillway is to the northeast. In the case of the project site, the groundwater flow would be to the south.

4.2 GROUNDWATER TARGETS

Groundwater targets are drinking water supply wells located within four miles of the project site. Water supply wells within a 4-mile radius of the project site are used for drinking water, irrigation, and livestock. The drinking water supply wells consist of municipal water supply wells and individual private wells. According to the well constructors reports and interviews with local municipal water supply facilities, well depths range from 22 feet to 2,200 feet, resulting in water being drawn from all three
TABLE 1
GROUNDWATER TARGET POPULATION WITHIN A 4-MILE RADIUS

<table>
<thead>
<tr>
<th>MUNICIPALITY</th>
<th>MUNICIPAL WATER SYSTEM (Blended Systems)</th>
<th>APPROXIMATE NUMBER OF INDIVIDUAL PRIVATE WELLS</th>
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</thead>
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<tr>
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<td>NO. OF WELLS</td>
<td>TARGET POPULATION</td>
</tr>
<tr>
<td>Town of Merton</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Village of Merton</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Town of Pewaukee</td>
<td>7</td>
<td>5,000</td>
</tr>
<tr>
<td>Village of Pewaukee</td>
<td>3</td>
<td>5,550</td>
</tr>
<tr>
<td>Village of Hartland</td>
<td>4</td>
<td>7,280</td>
</tr>
<tr>
<td>Village of Sussex</td>
<td>4</td>
<td>6,100</td>
</tr>
</tbody>
</table>

aquifers discussed in Section 4.1. Municipal water supplies with wells located in a 4-mile radius of the project site are operated by the Village of Pewaukee Water Utilities, the Town of Pewaukee Water Utility and Sanitary District, Village of Hartland Water Utilities, and the Village of Sussex Water and Sanitary District. These Utilities operate three to seven wells and each system is a blended system. None of these systems are in wellhead protection areas. The total population served by these utilities is approximately 23,930. There are also many private wells in a 4-mile radius of the project site. Based on population data, there are at least 13,300 people serviced with private wells. The groundwater target population for each municipality is presented in Table 1. Well Constructors Reports revealed at least thirty-nine wells located within ¼-mile of the subject site (Ref. 10). The distance to the nearest drinking water well is approximately 500 feet southwest of the site. There have been no reports of foul-tasting or foul-smelling water in any nearby drinking water wells (Ref. 11 and Ref. 12).

4.3 GROUNDWATER CONCLUSIONS

Based on the site conditions, the analytical results in the UST closure report (Appendix D), and interviews with local officials, it has been determined that there have been no suspected releases of hazardous substances to the groundwater pathways. Due to the low volume of wastes generated at the site and the control measures taken to prevent spills, potential groundwater contamination from the site is low.
5.0 SURFACE WATER PATHWAY

5.1 HYDROLOGIC SETTING

At the project site, surface water flows either across the surface or through a subsurface drainage system to a drainage ditch along the west property line. The drainage ditch flows south approximately 1,000 feet to Pewaukee Lake. According to the Waukesha County floodplain map, the site is not located in a flood plain (Ref. 13). Pewaukee Lake covers approximately 2,446 acres and is approximately 4.5 miles in length. The drainage ditch along the site enters the lake approximately 3,000 feet from the lake’s spillway. The lake discharges into the Pewaukee River which flows in a southeasterly direction approximately four miles to the Fox River. Figure 6 is a sketch of the surface water migration pathway.

5.2 SURFACE WATER TARGETS

There are no drinking water intakes located within fifteen miles downstream of the project site. Residents within fifteen miles downstream of the project site are served by either municipal water supply systems from deep water wells, or by individual private wells.

The Pewaukee Lake, Pewaukee River and the Fox River are used for recreational fishing. The typical species of fish found in Pewaukee Lake are bluegill, pumpkin seed, crappie, rock bass, bullhead, white bass, northern pike, and white sucker. One threatened species of fish, the pugnose shiner, has been found in the Pewaukee Lake according to the Wisconsin Natural Heritage Working List (Ref. 14). Another species of fish, which has been listed as a State Special Concern Fish, the lake chubsucker, occurs in the Pewaukee Lake.

In addition, historical records (generally 25 years or older) indicate that a threatened plant species had been known to occur in the area. It is not known whether or not this species of plant still exists. A copy of the letter from the Wisconsin Department of Natural Resources providing the endangered resources information is included in Appendix H.

There are numerous wetland sites located within fifteen downstream miles of the project site (Ref. 15). The nearest wetland site is approximately 4,000 feet downstream. It is approximately five (5) acres in size and is classified as palustrine wet soil with needle-leaved deciduous shrubs by the Wisconsin Department of Natural Resources, Bureau of Planning.

The distance to the nearest surface water is Pewaukee Lake, located approximately 1,000 feet south of the site. The nearest fishery is Pewaukee Lake.
There has been no indication or report of contaminants to the surface waters from the site. The drainage ditch located to the west side of the property shows no signs of damaged vegetation, discoloration, or oil sheens. There are no drinking water intakes located within fifteen downstream miles. There are three human food chain targets located within fifteen downstream miles of the site. Human food chain targets are any surface water body from which fish or other water animals are taken or could be taken for human consumption. They are the Pewaukee Lake, the Pewaukee River, and the Fox River. The flow in the Pewaukee River is not monitored.

5.3 SURFACE WATER CONCLUSIONS

Based on the site conditions and interviews with local officials it has been determined that there have been no suspected releases of hazardous substances to the surface water pathways. Due to the low volume of wastes generated at the site and the control measures taken to prevent spills, potential surface water contamination from the site is low.

6.0 SOIL EXPOSURE AND AIR PATHWAY

6.1 PHYSICAL CONDITIONS

Approximately 55 percent of the property is impermeable (covered by buildings or pavement). The site is normally occupied during the day by five full-time employees and two part-time employees. As many as 150 personnel can be on-site when all personnel are called to duty. The site is open to the public. Public functions, such as elections, have been held at the site and the site has been designated as a public shelter in case of an emergency. The Facility Manager stated that there have been no reports or complaints of odors from the site and that no releases of hazardous substances to the air have been directly observed.

6.2 SOIL AND AIR TARGETS

Six private homes are located within 200 feet of the site. It is estimated that a total of twenty people live in these homes. There are no schools within 200 feet of the site. The nearest school is located approximately 1,000 feet east of the site. There is a playground adjacent to the property, to the east. The total population located within a 4-mile radius of the site, based on census data provided by the County of Waukesha, is approximately 37,200. There are no terrestrial sensitive environments, areas which contain threatened or endangered species, or wetland sites located within 200 feet of the site. The nearest wetland site is approximately five (5) acres and is located approximately 4,000 feet downstream along the Pewaukee River. The nearest fishery is the Pewaukee Lake which contains one threatened species of fish and one State Special Concern fish. No threatened or endangered wildlife have been identified within 200 feet of the site.
6.3 **SOIL AND AIR CONCLUSIONS**

Based on the site conditions and interviews with local officials it has been concluded that there have been no suspected releases of hazardous substances to soil and air pathways. Due to the low volume of wastes generated at the site and the control measures taken to prevent spills, potential contamination to soil and air pathways from the site is low.

7.0 **OTHER ENVIRONMENTAL CONCERNS**

7.1 **RADON**

The Environmental Manager stated that testing for radon had been performed on site. The results indicated the levels to be below the EPA limits of 4.0 pCi/liter. (Ref. 2)

7.2 **ASBESTOS**

The Facilities Manager stated that limited asbestos sampling and analysis had been performed at the site. During the site inspection, suspect asbestos-containing materials were observed.

8.0 **SUMMARY AND CONCLUSIONS**

The Army Reserve Center Pewaukee has been in operation since 1960. Records indicate that the only potential sources of contamination include the two heating oil USTs, which have subsequently been removed, the 400-gallon mobile storage tank and the four 55-gallon drums of unknown contents, the paint storage room, and the waste oils and solvents generated from the routine maintenance activities. As stated in Section 3.1, the two USTs were removed in 1991. There was no evidence of leakage or contamination from the tanks when they were removed and they no longer pose any threat. The 400-gallon mobile storage tank and the four 55-gallon drums of unknown contents are stored in the parking lot. A sandbag dike has been constructed around the mobile storage tank and 55-gallon drums for spill control. Rain protection has been provided for the drums. The 400-gallon mobile storage tank and drums are scheduled for removal and disposal once their contents have been determined. There is no evidence of leakage or contamination from the 400-gallon mobile storage tank and 55-gallon drums. Based on the information determined from the investigation it is concluded that there have been no releases to the groundwater, surface waters, soil or air from the site. Due to the low volume of wastes generated at the site and the control measures taken to prevent spills, potential contamination to groundwater, surface water, soil and air pathways from the site is low.
REFERENCES


2. Mark Wisniewski, Facilities Manager; Colleen Reilly, Environmental Manager; Dave Jennings, Environmental Manager; Interview with John Tucker and Pamela Lemme of PEER Consultants, November 1, 1993. Re: Site history and activities (Interview Report #1).


5. "Mail Out Questionnaire - Response Sheet", completed by Laura A. Sodemann, the previous facility manager, as part of the Environmental Compliance Assessment System. It is an internal report prepared by the 416th Engineering Command.


10. Well Constructors Reports, available for viewing at the Wisconsin Department of Natural Resources, dated 1936 to present (Document Review Report #2)

11. Ms. Carol Plant, Secretary of the District, Town of Pewaukee Water Utility and Sanitary District No. 3; telephone conversation with John Tucker of PEER Consultants, November 2, 1993 (Telecon Note #10).

12. Frank Edwinson, Public Health Sanitarian and George Morris, Manager, Waukesha
County Department of Environmental Resources; interview with John Tucker and Pamela Lemme of PEER Consultants, November 2, 1993. (Interview Reports #2 and #3)


15. Wisconsin Wetlands Inventory Map for Township 7 North, Range 19 East, Waukesha County, Wisconsin; revised 4/84.


APPENDIX A

GEOGRAPHIC COORDINATES WORKSHEET
**LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2**
LI USING ENGINEER'S SCALE (1/60)

<table>
<thead>
<tr>
<th>SITE NAME: U.S. Army Reserve Center Pewaukee</th>
<th>CIRCLE #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKA:</td>
<td></td>
</tr>
<tr>
<td>ADDRESS: 619 West Wisconsin Avenue</td>
<td></td>
</tr>
<tr>
<td>CITY: Pewaukee</td>
<td>STATE: Wisconsin</td>
</tr>
<tr>
<td>ZIP CODE: 53072-2447</td>
<td></td>
</tr>
<tr>
<td>SITE REFERENCE POINT: Center of site</td>
<td></td>
</tr>
<tr>
<td>USGS QUAD MAP NAME: Hartland, WI</td>
<td>TOWNSHIP: 7 N/S</td>
</tr>
<tr>
<td>SCALE: 1:24,000</td>
<td>MAP DATE: 1959</td>
</tr>
<tr>
<td>MAP DATUM: 1927 1983 (CIRCLE ONE)</td>
<td>MERIDIAN:</td>
</tr>
</tbody>
</table>

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy):

<table>
<thead>
<tr>
<th>LONGITUDE:</th>
<th>LATITUDE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>88° 15' 00&quot;</td>
<td>43° 00' 00&quot;</td>
</tr>
</tbody>
</table>

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

<table>
<thead>
<tr>
<th>LONGITUDE:</th>
<th>LATITUDE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>88° 15' 00&quot;</td>
<td>43° 00' 00&quot;</td>
</tr>
</tbody>
</table>

**CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)**

A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 56

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

\[ A \times 0.3304 = 18.5 \]

C) EXPRESS IN MINUTES AND SECONDS (1" = 60"):

\[ 0' 18.5" \]

D) ADD TO STARTING LATITUDE:

\[ 43° 00' 00" + 0' 18.5" = 43° 00' 18.5" \]

**SITE LATITUDE: 43° 00' 18.5"**

**CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)**

A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 260

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

\[ A \times 0.3304 = 85.9 \]

C) EXPRESS IN MINUTES AND SECONDS (1" = 60"):

\[ 1' 25.9" \]

D) ADD TO STARTING LONGITUDE:

\[ 88° 16' 00" + 1' 25.9" = 88° 17' 25.9" \]

**SITE LONGITUDE: 88° 17' 25.9"**

**INVESTIGATOR:** [Signature]  **DATE:** 1/7/94
APPENDIX B

HAZARDOUS WASTE GENERATOR STATUS
Dear Facility Owner/Operator or Hazardous Waste Generator:

When you submitted your 1989 Hazardous Waste Report you indicated on Form IC that a change in hazardous waste generator status was appropriate for your facility. At that time (Feb. 1990), our records showed your status WAS the following:

EPA ID#: WI9210021953 Location: 619 W WISCONSIN AVE LARGE QNTY GENERATOR
Location: PEWAUKEE, WI 53072

On your report you indicated that the generator category for your site SHOULD be:

VERY SMALL QUANTITY GENERATOR

An audit of your facility records has been completed which included a file check for pending violations, a manifest activity review for the last two years, and a review of annual hazardous waste activity reports that have been filed with the DNR. You may have been contacted during this review for additional information. As a result of this audit, we concluded that the appropriate hazardous waste generator status for your facility IS:

VERY SMALL QNTY GENERATOR with NO ANNUAL REPORTING REQUIRED

If our records show that no annual reporting is required for your facility, you will NOT be sent materials for 1990 reporting. However, should your hazardous waste activities change, you may be required to submit a report in the future. You are responsible for keeping track of your hazardous waste activities, determining if reporting is required, and requesting reporting materials from the DNR if you need to submit a report for your site.

I am enclosing an information sheet for your reference in hazardous waste matters. One side shows the generation and accumulation amounts for each of the generator categories. The other side lists the hazardous waste activities for which annual reporting is required. If you have questions about the audit decision for your site, the waste regulations, the requirements for reporting, or questions specific to the activities at your site, please contact:

Wyvetta Davis (414)263-8668 DNR Southeast District

If you have questions about the DNR procedures for hazardous waste status audits, please call me at (608)266-2414. Thanks.

Aggie Cook, Information Technician
Program Services Section
Bureau of Solid & Hazardous Waste Mgmt
Dear Notifier:

Enclosed you will find the U.S. Environmental Protection Agency (U.S. EPA) Identification (ID) number that has been assigned to your installation. This ID number must appear on all manifest forms when transporting hazardous waste. You will find your ID number on the second line of the copy of the enclosed notification form. This letter confirms that you have filed a Notification of Hazardous Waste Activity (Form 8700-12) to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). This letter and the enclosed copy of the notification form should be retained for future use.

If your facility is in the state of Michigan and you were previously issued and ID number with an MIG prefix, do not use the MIG number. This is a state number. Be sure to use the MID number only.

If you have any further questions regarding hazardous waste activity, please contact our Hotline at (312) 886-4001.

Sincerely yours,

Art Kawatachi, Chief
Information Section
RCRA Program Management Branch
APPENDIX C

UST CLOSURE REPORT
Mr. William Morrissey  
Safety and Buildings Division  
Department of Industry, Labor and Human Relations  
201 E. Washington Avenue  
Madison, Wisconsin 53707

Dear Mr. Morrissey:

Enclosed are Underground Petroleum Product Tank Inventory Forms and Underground Storage Tank Removal Documentation Reports for tank removals at Army Reserve Centers in Pewaukee and Kewaunee, Wisconsin (Enclosures 1 and 2).

One 1,000 gallon and a 6,000 gallon fuel oil tank were removed at Pewaukee. A 1,000 gallon fuel oil tank was removed at Kewaunee. All soil samples results were less than 10 parts per million total petroleum hydrocarbons, thus all three removals were clean closures.

Please contact Mr. Kurt Brownell, Environmental Management Division, Directorate of Engineering, at (608) 388-2160 if you have any questions.

Sincerely,

William S. Stanley  
Colonel, U.S. Army  
Commanding

Enclosures

Copies Furnished:

Mr. Terry Bauer, District 4, 2715 Post Road, Stevens Point, WI 54481  
Chief, Off-Post Facilities Division
## UNDERGROUND PETROLEUM PRODUCT TANK INVENTORY

**For Office Use Only:**

**Tank ID #**

This form is to be completed pursuant to Section 101.142, Wis. Stats., to register all underground tanks in Wisconsin that have currently store petroleum or regulated substances. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (including piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner.

### This Registration Applies to a Tank That Is (check one):

- [ ] In Use
- [ ] Abandoned - Tank Removed
- [ ] Abandoned With Product
- [ ] Abandoned - Filled With
- [ ] Abandoned No Product (empty) or Used Water
- [ ] Out of Service

### A. IDENTIFICATION: (Please Print)

<table>
<thead>
<tr>
<th>Installation Name</th>
<th>Mailing Name If Different Than #1</th>
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<tbody>
<tr>
<td>U.S. Army Reserve Center</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Installation Street Address</th>
<th>Mailing Address If Different Than #1</th>
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</thead>
<tbody>
<tr>
<td>619 West Wisconsin Ave.</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>City</th>
<th>Village</th>
<th>Town of:</th>
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<tbody>
<tr>
<td>Pewaukee</td>
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<td></td>
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<table>
<thead>
<tr>
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<th>Zip Code</th>
<th>County</th>
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<tbody>
<tr>
<td>WI</td>
<td>53072-2497</td>
<td>Waukesha</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Contact Person</th>
<th>Kurt Brownell</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Street Address</th>
<th>NO. Fort McCoy, ATTN: AFZR-DE-E</th>
</tr>
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<table>
<thead>
<tr>
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<th>Village of:</th>
<th>Town of</th>
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<tr>
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<td></td>
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<th>County</th>
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<table>
<thead>
<tr>
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<th>Phone No. (Include area code)</th>
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</thead>
<tbody>
<tr>
<td>Monroe</td>
<td>(608) 388-2160</td>
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<table>
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<th>Telephone No. (Include area code)</th>
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<th>Village of:</th>
<th>Town of</th>
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<table>
<thead>
<tr>
<th>State</th>
<th>Zip Code</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>WI</td>
<td>53072-2497</td>
<td>Waukesha</td>
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<tr>
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<tbody>
<tr>
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<td>(608) 388-2160</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Town</th>
<th>Telephone No. (Include area code)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tank Age (date installed, if known: or years old)</th>
<th>3.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Bank Capacity (gallons)</th>
<th>6,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tank Manufacturer's Name (if known)</td>
<td></td>
</tr>
</tbody>
</table>

### B. TYPE OF USER (check one):

- [ ] Gas Station
- [ ] Bulk Storage
- [ ] Industrial
- [ ] Government
- [ ] Agricultural
- [ ] Residential
- [ ] Other:

### C. TANK CONSTRUCTION:

1. [ ] Bare Steel
2. [ ] Cathodically Protected and Coated Steel (a. [ ] Sacrificial Anodes or b. [ ] Impressed Current)
3. [ ] Coated Steel
4. [ ] Fiberglass
5. [ ] Other (specify):
6. [ ] Reinforced
7. [ ] Steel - Fiberglass Reinforced Plastic Composite
8. [ ] Unknown

<table>
<thead>
<tr>
<th>Approval</th>
<th>is Tank Double Walled?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nat'l Std.</td>
<td>Yes No</td>
</tr>
<tr>
<td>2. UL</td>
<td>Yes No</td>
</tr>
<tr>
<td>3. Other</td>
<td>Yes No</td>
</tr>
</tbody>
</table>

### D. PIPING CONSTRUCTION:

1. [ ] Bare Steel
2. [ ] Cathodically Protected and Coated or Wrapped Steel (a. [ ] Sacrificial Anodes or b. [ ] Impressed Current)
3. [ ] Coated Steel
4. [ ] Fiberglass
5. [ ] Other (specify):
6. [ ] Reinforced
7. [ ] Unknown

<table>
<thead>
<tr>
<th>Piping System Type</th>
<th>Pressurized piping with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. [ ] Auto shut-off</td>
<td>b. [ ] Alarm</td>
</tr>
<tr>
<td>2. [ ] Suction piping with check valve at tank</td>
<td></td>
</tr>
<tr>
<td>3. [ ] Suction piping with check valve at pump</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Piping Leak Detection Method</th>
<th>1. [ ] Vapor monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. [ ] Interstitial monitoring</td>
<td></td>
</tr>
<tr>
<td>3. [ ] Not required at present</td>
<td></td>
</tr>
</tbody>
</table>

### E. TANK CONTENTS:

1. [ ] Diesel
2. [ ] Lead
3. [ ] Unleaded
4. [ ] Fuel Oil
5. [ ] Gasohol
6. [ ] Other
7. [ ] Empty
8. [ ] Sand/Gravel/Slurry
9. [ ] Unknown
10. [ ] Premix
11. [ ] Waste Oil
12. [ ] Propane
13. [ ] Kerosene
14. [ ] Aviation
15. [ ] Chemical

### If Tank Abandoned, Give Date (month/year):

- Removed 30 October 1991
- Has a site assessment been completed? (see reverse side for details)

### If installation of a new tank is being reported, indicate who performed the installation inspection:

1. [ ] Fire Department
2. [ ] OILHR
3. [ ] Other (specify):

<table>
<thead>
<tr>
<th>Signature of Person Completing Report:</th>
<th>Date Signed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt Brownell</td>
<td>20 Dec 1991</td>
</tr>
</tbody>
</table>

---

**SB0-7137 (R. 06-89)**
UNDERGROUND STORAGE TANK REMOVAL DOCUMENTATION REPORT

Site: US Army Reserve Center
619 West Wisconsin Ave
Pewaukee, Wisconsin 53072-2497
Waukesha County

Prepared For: US Dept of Army
Directorate of Contracting
Building 2103
Fort McCoy, Wisconsin 54656-5000

Mary E. Lydic
11-26-91
MC Cutchin Crane Service

Date
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction &amp; Background</td>
<td>1.</td>
</tr>
<tr>
<td>2. Tank Removal Activities</td>
<td>1.</td>
</tr>
<tr>
<td>4. Soil Sample Collection &amp; Results</td>
<td>2.</td>
</tr>
<tr>
<td>5. Closing Discussion</td>
<td>2.</td>
</tr>
</tbody>
</table>

Enclosures With Report:

- Site Location Map............................................. A.  
- Chain of Custody For Soil Samples......................... B.  
- Soil Analysis Results From Laboratory..................... C.  
- Site Worksheets.............................................. D1-D3  
- Checklist For Underground Tank Closure Form#SBD-8951  
- Underground Tank Inventory Form# SBD-7437 For Each Tank  
- Manifest For Disposal Of Tanks............................ E.  
1. INTRODUCTION & BACKGROUND

This report is for documentation of underground tank removals performed on 10-29-91 at the USARC, 619 West Wisconsin Ave, Pewaukee, Wisconsin, Waukesha County.

The owner of this site is the US Dept Of Army, Fort McCoy, Wisconsin. Directorate of Contracting who was responsible for overseeing this project is Bernie L Honish who may be reached by calling 608 388-2924, or by writing to the US Dept of Army, Directorate of Contracting, Bldg 2103, Room 2, Fort McCoy, Wisconsin 54656-5000.

The tanks which were removed were one 6,000 gallon heating fuel tank and one 1,000 gallon heating fuel tank.

The Dept of Army requested bid proposals on this work to be performed according to all State & Federal Regulations concerning removals & closures of underground tanks.

McCutchin Crane Service of Dodgeville was awarded the bid & authorized to perform the removals. McCutchin provided their own backhoe for the excavation.

The Dept of Army had a Contracting Officer Representative whose name was Officer Irv Capaul on site while all work was being performed.

2. TANK REMOVAL ACTIVITIES

McCutchin Crane Service, Officer Irv Capaul, and Inspector Charles Babe from the Pewaukee Fire Dept arrived on site to remove the tanks on Oct 28th, 1991. Diggers Hotline had been notified & requested to mark all lines, but because of inclimate weather had not done so yet as of Monday, Oct 28th. Diggers Hotline arrived on Tuesday Oct 29th.

Before work began all safety precautions were in place. Only air run equipment is used on tank removal jobs, and all work is performed in accordance with OSHA Safety Standards.

Before removal all product was drained from the piping into the tanks. The piping was then disconnected, from the tank, capped & removed, except for one pipe going into the furnace room from the 6,000 gallon tank, which we were unable to remove, was drained, and capped.

Once all product was drained into the tanks the liquid contents were pumped out (1,200 gallons of fuel oil from the 6,000 gal tank & 30 gal fuel oil from the 1,000 gal tank), & hauled away by McCutchin. The tank was then purged with liquid CO2, opened & cleaned. A total of 3 gallon of fuel oil sludge was cleaned from the tanks.

**USTUSARCPEW**

(1)
The tanks were removed from the hole, labeled, and loaded onto McCutchins trailer to be hauled away & disposed of.

Once the site assessment evaluation was complete & collection of soil samples were gathered the sites were filled in with clean native fill material and the site restored to grade.

3. VISUAL OBSERVATIONS

Before removal of the tanks began visual observations were made for evidence of the underground tanks having a system failure. We were looking for such things as dead vegetation, staining, saturated soils etc. There was no evidence of any dead vegetation, nor was any staining on the ground evident.

The tanks were located in two different areas so there were 2 excavation holes. The excavation at the 6,000 gallon tank measured 14' x 37' x 10' deep. The tank in this excavation measured 6' x 30'.

The excavation at the 1,000 gallon tank measured 8' x 10' x 8' deep. The tank in this excavation measured 5'4" x 6'.

The soil types encountered were of sand & clay mixture. There were no visual observations showing contamination, no staining of the soils, no free product in the excavation holes, no significant smell, etc.

The inspection of the tanks did not show any failure. There were no holes, cracks, or deep corrosion which could have caused leakage. All fittings & connections on the tank were secure.

4. SOIL SAMPLE COLLECTION AND RESULTS

Once the tank was out of the hole & the visual site evaluation complete soil samples were gathered under each end of the 6,000 gallon tank, under 2 areas of the piping run from that tank to where the piping entered the building, and one sample was taken under the center of the 1,000 gallon tank.

The samples were gathered with a clean hand trowel and placed into 4oz jars provided to us by our laboratory. These jars have ID information on them pertaining to the site and are kept with a chain of custody until delivery to the laboratory. The laboratory analyzed the samples for TPH, and all results returned at no action limits at under 10PPM.

5. CLOSING DISCUSSION

Based on all visual inspections of the tanks, excavation hole, and results of the soil analysis, it is our opinion that this should be a clean closure site.

**USTUSARCP**E**W** *(2)*
USARC, 619 W. Wisconsin Ave
Pewaukee, Wisconsin, Waukesha County

Piping Lines

Sample # 2
Sample # 3

6,000 Gallon Fuel Oil Tank
Tank Dimensions = 29' x 6'

Line Sample # 5 - Line Sample # 4

USARC Building - Offices & Assembly Hall, Building #1, Pewaukee, Wisconsin

Wisconsin Street
Excavation Hole Size = 8' x 10' x 8' Deep
Tank Size = 5'4" x 6' - 1,000 gallon Fuel Oil Tank
Tank was surrounded by asphalt, except for an opening enabling access to the tank.

Sail Sample Location For TPH Analysis

UCARC Pewaukee M V S Building #2
**CHAIN OF CUSTODY**

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Sampling Location</th>
<th>Date</th>
<th>Time</th>
<th>Component</th>
<th>Sample Type</th>
<th>No. of Container</th>
<th>Parameters</th>
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</thead>
<tbody>
<tr>
<td>USARC Pewaukee</td>
<td>Maps drawn</td>
<td>X</td>
<td></td>
<td>Grab</td>
<td>Soil</td>
<td>1</td>
<td>TP42</td>
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<tr>
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<td>X</td>
<td></td>
<td>Grab</td>
<td>Soil</td>
<td>1</td>
<td></td>
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<tr>
<td>USARC Pewaukee</td>
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<td>X</td>
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<td>Grab</td>
<td>Soil</td>
<td>1</td>
<td></td>
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<td>Grab</td>
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<td></td>
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<tr>
<td>USARC Pewaukee</td>
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<td>X</td>
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<td>Grab</td>
<td>Soil</td>
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<td></td>
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<tr>
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<td>X</td>
<td></td>
<td>Grab</td>
<td>Soil</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:**

Relinquished by: Date Time | Received by: Date Time
---|---
Jack Fonner | 11/1 8:00 | Mary Hughes | 11/4

Shipping Notes/Lab Comments: PM

Samples Field Filtered: Yes No N/A
Seals Intact Upon Receipt: Yes No N/A
ANALYTICAL REPORT

Clinton McCutchin  
McCUTCHIN CRANE SERVICE  
424 W. Washington Street  
Dodgeville, WI 53533

11/19/1991  
Job No: 91.3581  
Account No: 49210  
Purchase Order:  
Page 1

Job Description: USARC-Pewaukee

Date Taken: SEE BELOW  
Date Received: 11/04/1991

35611 USARC-Pewaukee #1-USARC Pewaukee

| Solids, Total | 77. | %
| TPH NONAQUEOUS |  |
| Gasoline | <5.0 | mg/kg
| Diesel Fuel | <5.0 | mg/kg

35612 USARC-Pewaukee #2-USARC Pewaukee

| Solids, Total | 83. | %
| TPH NONAQUEOUS |  |
| Gasoline | <5.0 | mg/kg
| Diesel Fuel | 6. | mg/kg

35613 USARC-Pewaukee #3-USARC Pewaukee

| Solids, Total | 88. | %
| TPH NONAQUEOUS |  |
| Gasoline | <5.0 | mg/kg
| Diesel Fuel | 7. | mg/kg

David W. Havick, Manager  
Watertown Division  
Certification No. 128053530
ANALYTICAL REPORT

Clinton McCutchen
McCUTCHIN CRANE SERVICE
424 W. Washington Street
Dodgeville, WI 53533

Job Description: USARC-Pewaukee

11/19/1991
Job No: 91.3581
Account No: 49210
Purchase Order:
Page 2

Date Taken: SEE BELOW

Date Received: 11/04/1991

<table>
<thead>
<tr>
<th>Job Description</th>
<th>Solids, Total</th>
<th>TPH NONAQUEOUS</th>
<th>Gasoline</th>
<th>Diesel Fuel</th>
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<tbody>
<tr>
<td>USARC-Pewaukee</td>
<td>90.</td>
<td>%</td>
<td>&lt;5.0</td>
<td>mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Job Description</th>
<th>Solids, Total</th>
<th>TPH NONAQUEOUS</th>
<th>Gasoline</th>
<th>Diesel Fuel</th>
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<tr>
<td>USARC-Pewaukee</td>
<td>90.</td>
<td>%</td>
<td>&lt;5.0</td>
<td>mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mg/kg</td>
<td></td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

David W. Havick, Manager
Watertown Division
Certification No. 128053530
**SITE ASSESSMENT INFORMATION**

**Site:** USARCC, Peoria  
**Date:** 0-29-91

**Site Owner:** USARCC  
**UST system owner/operator:** Same

**Description of past and present property use:** Same

**Legal Description of Site:**

**Has there been any previous reported or non-reported releases at this site, include any system leaks or repairs made:** No

**Results of previous Geotechnical Investigations:** No

**Have any tanks or underground systems been removed from this site previously to this job? If so, when & by whom:** No

**Tanks which are being removed at this time:** 100.4 +3000 gal. Fuel

**Are inventory records available:** No

**Has this system had tank tightness test performed & are those results available:** No

**Has any associated piping been left in the ground, if so, give reason why, and has the piping been drained & capped:** Yes, removed, not drained or capped.

**Will any underground tanks remain in place at this site & what is their status:** No

**OBSERVATIONS:**

**Size & Depth of excavation:** 28' x 2.5' x 10' x 8' x 10'  
**Depth to Bedrock:** 10'-11'-39'-10'-8'depth

**Soil Types encountered:** Clay

**Seasonal High Water table:** 14'  
**Mottling & colorations of soil? At what depths:**

**Was there presence of free standing water in the excavation:** No

**Depth to groundwater?** Unknown  
**Into which systems would drainage be likely to flow?** City sewer

**Were water samples taken:** No

**Was any of the following encountered: Free product, stained soils, odors, dead vegetation or other evidence of contamination:** No

**Tank & piping conditions:** Great

**Possible leak locations:** None

**If contamination was found who was notified & what procedures were taken:**
<table>
<thead>
<tr>
<th>ID</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Age</th>
<th>Manufacturer</th>
<th>Construction</th>
<th>Contents &amp; Quantity Pumped from Tanks</th>
<th>Status of Tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>6000</td>
<td>6'x30'</td>
<td></td>
<td></td>
<td>Lake Stil</td>
<td>200 gal. tank neat st.</td>
<td>Mig cut</td>
</tr>
<tr>
<td>#2</td>
<td>1000</td>
<td>54'x6'</td>
<td></td>
<td></td>
<td>Lake Stil</td>
<td>30 gal. tank neat st.</td>
<td>Mig cut</td>
</tr>
</tbody>
</table>

- Are tanks purged on site? **Yes** - Liquid C/F
- What method used to purged tanks? **Yes**
- All liquids pumped from tanks (quantity of each type): **1230 gal.**
- Are tanks cleaned on site? **Yes**
- Sludge (quantity of each type) cleaned from tanks: **3 gal.**

We will fill out: DISPOSITION OF WASTE PRODUCT, TANK SLUDGES, AND TANKS

Are there pumps on this site & how were they disposed of: **on site**

There was piping disposed of: **Mig Cut**

Her comments: "One thing looked very good was reusing all the tubes & other small fittings."
SOIL SAMPLE LOG

SITE NAME: USARC - Pewaukee
ADDRESS: 619 W Wisconsin Ave

City: Pewaukee
Township: 
County: Waukesha

DATE 10-29-1990 10-30 SAMPLES TAKEN BY Jack Gordon

<table>
<thead>
<tr>
<th>Tank Size</th>
<th>Tank ID#</th>
<th>Sample#</th>
<th>Time Taken</th>
<th>Depth</th>
<th>Approx soil temp</th>
<th>Rel Mois. Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1</td>
<td>1</td>
<td>11:30-12:30</td>
<td>7'</td>
<td>50'</td>
<td>Wet</td>
</tr>
<tr>
<td>5000</td>
<td>2</td>
<td>3</td>
<td>11:00-11:30</td>
<td>10'</td>
<td>50'</td>
<td>Wet</td>
</tr>
<tr>
<td>6000</td>
<td>2</td>
<td>4</td>
<td>11:00-11:30</td>
<td>10'</td>
<td>50'</td>
<td>Wet</td>
</tr>
</tbody>
</table>

Once samples were collected how were they stored? Ice chest

All sample locations are shown on site map identified by their ID#. Soil samples have been taken and handled in accordance with State of Wisconsin DILHR Closures, and soil sampling techniques as described in September 1990 requirements & checklist.

Signature of 3rd party witness to sample collection: D.H. Bole
CERTIFICATE OF REASSURANCE

McCutchin Crane Service on this day has disposed of according to regulations 2 underground storage tanks which were hauled away from USARC, 619 West Wisconsin Ave, Pewaukee, Wisconsin Waukesha County. These tanks have been opened, cleaned, and cut up to be sold as scrap iron. Any contents such as sludge which may have been cleaned from the tank is ultimately disposed of by Safety-Kleen Corp, who picks up from McCutchin on a quarterly basis. Safety-Kleen Corp then enters the product into a treatment process which is deemed suitable for the spent materials, which is in compliance with all applicable regulatory and permit requirements.

By acceptance of these tanks McCutchin Crane Service shall hold harmless USARC Pewaukee, US Dept. of Army, Fort McCoy Wisconsin, and any previous owners of the said tanks any type of liability claims arising from the storage, handling, cutting, and disposing of the tanks. The tanks which were hauled away & disposed of were a 6,000 gal. heating fuel & a 1,000 gal heating fuel. A total of 1,230 gallons of heating fuel was pumped from the tanks and 3 gallons of fuel oil sludge was cleaned from the tanks.

McCutchin Crane Service Generator Waste EPA ID# WID9885759
McCutchin Crane Service Generator Waste IL ID# 9550498134
McCutchin Crane Service Hazardous Waste Hauler License number for Wisconsin --------------------------# 12372

DATE 10/30/91

Mary Ellen Lytle
McCutchin Crane Service
## A. IDENTIFICATION:

1. Installation Name:  
   - **USAR**  
   - **272 W. Chapel Street**

2. Owner Name:  
   - **Wisconsin Department of Industry, Labor and Human Relations**

3. Closure Company Name:  
   - **MOUNT KAR CRANE SERVICE**

4. Name of Company performing the underground tank closure:  
   - **272 W. Chapel Street**

5. Company Telephone No. (include area code):  
   - **608-935-9411**

### Tank ID # | Closure | Temp. Closure | Closure In Place | Tank Capacity | Contents | Closure Assessment |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>6000</td>
<td>0</td>
<td>☑️ ☑️ ☑️</td>
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<tr>
<td>2.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>1900</td>
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<tr>
<td>3.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>4.</td>
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<td>0</td>
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<tr>
<td>5.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>0</td>
<td>0</td>
<td>☑️ ☑️ ☑️</td>
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<tr>
<td>6.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>0</td>
<td>0</td>
<td>☑️ ☑️ ☑️</td>
</tr>
</tbody>
</table>

* Indicate which product by numeric code: 01-Diesel; 02-Leaded; 03-Unleaded; 04-Fuel Oil; 05-Gasohol; 06-Other; 09-Unknown; 10-Premium; 11-Waste oil; 13-Chemical (indicate the chemical name(s) or number(s)); 14-Kerosene; 15-Aviation.

---

### B. TEMPORARILY OUT OF SERVICE

1. Product Removed
   - a. Product lines drained into tank (or other container) and resulting liquid removed, AND elec ☑️ ☑️ ☑️
   - b. All product removed to bottom of suction line, OR ☑️ ☑️ ☑️
   - c. All product removed to within 1" of bottom, OR ☑️ ☑️ ☑️
   - 2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped. ☑️ ☑️ ☑️
   - 3. All product lines at the islands or pumps located elsewhere are removed and capped, OR ☑️ ☑️ ☑️
   - 4. Dispensers/pumps left in place but locked and power disconnected. ☑️ ☑️ ☑️
   - 5. Vent lines left open. ☑️ ☑️ ☑️
   - 6. Written inspector approval of temporary closure obtained, which is effective until ☑️ ☑️ ☑️

### C. CLOSURE BY REMOVAL

1. Product from piping drained into tank (or other container). ☑️ ☑️ ☑️
2. Piping disconnected from tank and capped or removed. ☑️ ☑️ ☑️
3. All liquid and residue removed from tank using explosion proof pumps or hand pumps. ☑️ ☑️ ☑️
4. All pump motors and suction hoses bonded to tank or otherwise grounded. ☑️ ☑️ ☑️
5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed. ☑️ ☑️ ☑️

**NOTE:** DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCTOR.

7. Vent lines left connected until tanks purged. ☑️ ☑️ ☑️
8. Tank openings temporarily plugged so vapors exit through vent. ☑️ ☑️ ☑️
9. Tank atmospheres reduced to 10% of the lower flammable range (LEL) - see Section E. ☑️ ☑️ ☑️
10. Tank removed from excavation after PURGING/INERTING, placed on level ground and blocked to prevent movement. ☑️ ☑️ ☑️

RETURN CHECKLIST TO SAFETY & BUILDINGS DIVISION
Fire Prevention & Underground Storage Tank Section
P. O. Box 7969, Madison, WI 53707
C. CLOSURE BY REMOVAL (continued)

12. Tank labeled in 2" high letters after removal but before being moved from site. ................................................................. N

NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE; FORMER CONTENTS; VAPOR STATE; VAPOR FREEING TREATMENT; DATE.

13. Tank vent hole (1/8 th " in uppermost part of tank) installed prior to moving the tank from site. ................................................................. N

14. Inventory form filed by owner with Safety and Buildings Division indicating closure by removal. ................................................................. Y

15. Site security is provided while the excavation is open. ................................................................. N

D. CLOSURE IN PLACE

NOTE: CLOSURES IN PLACE ARE ONLY ALLOWED WITH THE PRIOR APPROVAL OF THE DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS.

1. Product from piping drained into tank (or other container). ................................................................. Y

2. Piping disconnected from tank and capped or removed. ................................................................. N

3. All liquid and residue removed from tank using explosion proof pumps or hand pumps. ................................................................. Y

4. All pump motors and suction hoses bonded to tank or otherwise grounded. ................................................................. N

5. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed. ................................................................. N

6. Vent lines left connected until tanks purged. ................................................................. Y

7. Tank openings temporarily plugged so vapors exit through vent. ................................................................. Y

8. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section F. ................................................................. Y

9. Openings cut in tank top if necessary to introduce inert material. ................................................................. Y

10. Solid inert material (sand, cyclone boiler slag, pea gravel recommended) introduced and tank filled. ................................................................. Y

11. Vent line disconnected or removed. ................................................................. N

12. Tank labeled in 2" high letters after removal ................................................................. Y

NOTE: DROP TUBE SHOULD NOT BE REMOVED IF THE TANK IS TO BE PURGED THROUGH THE USE OF AN EDUCATOR.

13. Tank atmosphere monitored for flammable or combustible vapor levels. ................................................................. N

14. Was the DNR notified of suspected or obvious contamination? ................................................................................. Y

15. Was a field screening instrument used to pre-screen soil sample locations? ................................................................................. N

16. Are there strong odors in the soils? ................................................................................. N

17. Product from piping evaporated before proceeding. ................................................................................. N

18. Dry ice introduced at 1.5 pounds per 100 gallons of tank capacity. Dry ice crushed and distributed over the greatest possible tank area. ................................................................................. Y

19. Inert Gas (CO2 or N2) NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. THE TANK MAY NOT BE ENTERED IN THIS STATE WITHOUT SPECIAL EQUIPMENT. Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank opposite the vent. Gas introduced under low pressure not to exceed 5 psig to reduce static electricity. Gas introducing device grounded. ................................................................................. Y

20. Tank atmosphere monitored for flammable or combustible vapor levels. Calibrate combustible gas indicator. Drop tube removed prior to checking atmosphere. Tank space monitored at bottom, middle and upper portion of tank. Readings of 10% or less of the lower flammable range (LEL) obtained before removing tank from ground. ................................................................................. Y

E. CLOSURE ASSESSMENTS

NOTE: DETERMINE IF A CLOSURE ASSESSMENT IS REQUIRED BY REFERRING TO ILHR 10.

1. Individual conducting the assessment has a closure assessment plan (written) which is used as the basis for their work on the site. ................................................................................. Y

2. Do points of obvious contamination exist? ................................................................................. Y

3. Were there strong odors in the soils? ................................................................................. N

4. Was a field screening instrument used to pre-screen soil sample locations? ................................................................................. N

5. Was a closure assessment omitted because of obvious contamination? ................................................................................. N

6. Was the DNA notified of suspected or obvious contamination? ................................................................................. N

7. Contamination suspected because of: Odor Soil Staining Free Product Sheen On Groundwater Field Instrument Test

F. METHOD OF ACHIEVING 10% LEVEL DESCRIPTION

Educator Or Diffused Air Blower

Educator driven by compressed air, bonded and drop tube left in place; vapors discharged minimum of 12 feet above ground.

Diffused air blower bonded and drop tube removed. Air pressure not exceeding 5 psig.

Dry Ice

Dry ice introduced at 1.5 pounds per 100 gallons of tank capacity. Dry ice crushed and distributed over the greatest possible tank area. Dry ice evaporated before proceeding.

Inert Gas (CO2 or N2) NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. THE TANK MAY NOT BE ENTERED IN THIS STATE WITHOUT SPECIAL EQUIPMENT.

Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank opposite the vent.

Tank atmosphere monitored for flammable or combustible vapor levels. Calibrate combustible gas indicator. Drop tube removed prior to checking atmosphere. Tank space monitored at bottom, middle and upper portion of tank. Readings of 10% or less of the lower flammable range (LEL) obtained before removing tank from ground.

G. NOTE SPECIFIC PROBLEMS OR NONCOMPLIANCE ISSUES BELOW

I. INSPECTOR INFORMATION

Inspector Name (print):

Signature: Inspector Certification No.

FDID: For Location Where Inspection Performed: Inspector Telephone Number: Date Signed:

OWNER
APPENDIX D

INTERVIEW AND TELECON NOTES
Office. Aerial photos can be obtained from Parks and Planning. Geological information can be obtained from the Southeastern Regional Planning Commission located in the Old Courthouse located on Main Street.

TELECON NOTE 4
Date: November 2, 1993
Interviewer: Pamela Lemme
Name: Eileen Campbell
Title: Assessor's Office Clerk
Affiliation: Town of Pewaukee Assessor
Phone No.: (414) 691-0820
Remarks: The project site is located in the Village of Pewaukee; therefore, you must contact the Village of Pewaukee to review tax assessor's information for this site.

TELECON NOTE 5
Date: November 2, 1993
Interviewer: John Tucker, Jr.
Name: Kathy Schulne
Title: Water Utilities Clerk
Affiliation: Village of Pewaukee Water Utilities
Phone No.: (414) 691-5660
Remarks: The Village of Pewaukee Water Utilities serves the Village of Pewaukee. The Village of Pewaukee has a population of approximately 5,550 people as of January 1993. There are four deep wells around the Village. She did not know the locations, depths or capacities of the wells. She stated that I should talk with Louis Thibault, who is on vacation this week, or Richard Leutsches. Mr. Leutsches is a supervisor and can be reached at (414) 691-5690. He works from 7:30 a.m. to 4:00 p.m. He takes lunch form 12:00 to 12:30.

There have been no reports of contamination. There were some high bacteria counts in October 1993. DNR required chlorination until the bacteria disappeared. Only complaint from customers was during chlorination. Phone calls complained about odor and the change in taste. The Village normally does not chlorinate.
She was not aware of any need for special sampling for hazardous waste concentrations. When asked if any wells had been shut down, she said they have but only for mechanical reasons.

TELECON NOTE 6

Date: November 2, 1993
Interviewer: Pamela Lemme
Name: Charles Babe
Title: Fire Inspector
Affiliation: Village of Pewaukee Fire Department
Phone No.: (414) 691-9223

Remarks: He was present when the two fuel oil tanks were removed from the project site. He said there was no evidence of contamination when the tanks were removed. He confirmed that the 1,000 gallon tank was located near the northeast corner of the maintenance building. The tanks had been tarred and were buried in sand. The company performing the work collected samples and took pictures.

As far as reports of any overflows, spills, or leaks, the Fire Department is not aware of any.

TELECON NOTE 7

Date: November 2, 1993
Interviewer: Pamela Lemme
Name: Sharon Schaver
Title: Wisconsin Department of Natural Resources - Groundwater Division
Phone No.: (414) 961-5435

Remarks: She recommended obtaining a copy of the Waukesha Geological Survey Report, Circular #29, dated 1975, to obtain information about the geology in Waukesha County. To obtain information about private wells, well constructors reports can be reviewed at 4041 Richard Street. Contact Victoria Anderson to schedule an appointment to review the reports. Victoria Anderson can also provide information concerning LUST reports. Her phone number is (414) 961-2738. Additional information concerning groundwater...
and private wells can be obtained from Irene Lipheld at the Wisconsin Department of Natural Resources in Madison, Wisconsin. Her number is (608) 262-7430. The phone number for the Wisconsin Geological Survey is (608) 262-1705.

TELECON NOTE 8

Date: November 2, 1993

Interviewer: Pamela Lemme

Name: Irene Lipheld
Title: Department of Natural Resources
Affiliation: Department of Natural Resources
Phone No.: (608) 262-7430

Remarks: Information pertaining to a specific site can be obtained from well constructors reports. Wisconsin does not have a database which includes information about groundwater contamination in wells. Copies of reports generated from this office can be obtained from maps sales located at 3817 Mineral Point Road, Madison, Wisconsin between the hours of 8:00 a.m. and 4:30 p.m.

TELECON NOTE 9

Date: November 2, 1993

Interviewer: John Tucker

Name: Patricia Williams
Title: Office Manager
Affiliation: Lake Pewaukee Sanitary District
Phone No.: (414) 691-4485

Remarks: Lake Pewaukee Sanitary District only collects wastewater. Wastewater is transferred to the Brookville Wastewater Treatment Plant, which is owned by the City of Brookville, for treatment.
TELECON NOTE 10

Date: November 2, 1993

Interviewer: John Tucker

Name: Ms. Carol Plant
Title: Secretary of the District
Affiliation: Town of Pewaukee Water Utility and Sanitary District #3
Phone No.: (414) 691-0804

Remarks: Service area is all of the Township of Pewaukee except residents immediately around Lake Pewaukee. Serves approximately 2,000 customers. Most people have private wells. Residents around the Lake are served by Lake Pewaukee Sanitary District for sewers only.

Source of water is from seven deep wells ranging in depth from 380 feet to 1,200 feet. The closest well to the Army Reserve Center is about 1¼ to 2 miles away at W-240, N-3065 Pewaukee Road (east of town near intersection of Line and "J" Road)

There has been no reports of groundwater contamination. They are under new guidelines by EPA for testing. At this time, they have not detected anything unusual.

No wells have been closed in the past. There have been no reports of foul smelling or foul tasting water from residents. There has been no analytical or circumstantial evidence that suggest any contamination.

There is no well field. Wells are scattered throughout the area.

The well closest to the Center has a capacity of 380 gpm.

Site is not in a well head protection area.

Village of Pewaukee serves the Army Reserve Center. Other in the area have individual private wells.

Have not heard any complaints from private well owners, but the Village probably would not receive the complaints. The County Health Department would receive the complaints.
TELECON NOTE 11

Date: November 3, 1993

Interviewer: Pamela Lemme

Name: Ron Pieing
Title: Wisconsin Bureau of Endangered Species - Fisheries Division
Phone No.: (414) 263-8614

Remarks: I informed him that I was trying to obtain information concerning endangered species in Waukesha County. He said that he could provide information pertaining to fisheries. Information about other animals or species would have to be obtained from Chuck Pils of the Wisconsin Bureau of Endangered Species in Madison, Wisconsin. I scheduled a visit for 1:00 p.m. at which time he provided me with information pertaining to endangered fish in the Pewaukee area.

TELECON NOTE 12

Date: November 3, 1993

Interviewer: Pamela Lemme

Name: Richard Leutsches
Title: Supervisor
Affiliation: Village of Pewaukee Water Utilities
Phone No.: (414) 691-5690

Remarks: He stated that the Village of Pewaukee obtains its water from four deep wells. The wells are located at Main Street by WCTC, 104 Hickory Street and near the intersection of Capital and High Streets. Samples from two of the wells revealed unsafe levels of chloroform. This has been corrected and there have been no problems since then. Additional information can be obtained from Louis Thibault.
TELECON NOTE 13

Date: November 3, 1993
Interviewer: Pamela Lemme
Name: Bob Davis
Title:  
Affiliation: Waukesha Water and Sanitary District
Phone No.: (414) 521-5272
Remarks: The source of water for the City of Waukesha is ground water. The City has ten deep wells and the water supply system is interconnected. There have been no reports of contamination in any of the wells. There were high levels of iron in Well #7; however, it has been cleaned and is reopened. None of the wells have been permanently closed. Some have been temporarily closed for rehabilitation.

TELECON NOTE 14

Date: November 4, 1993
Interviewer: Pamela Lemme
Name: Becky Isenring
Title:  
Affiliation: Bureau of Endangered Resources
Phone No.:  
Remarks: In order to obtain information concerning endangered species, a request must be submitted in writing. A legal description and a map showing the area should be submitted with the request. The process takes about two to three weeks once the request has been received by her office. If you come in to fill out an application we will try to process it as quickly as possible. It can not be processed while you wait, so leave an address so the information can be sent.
TELECON NOTE 15

Date: November 16, 1993

Interviewer: Rakesh Aurora

Name: Bob Davis
Title: 
Affiliation: Waukesha Water and Sanitary District - Water Utilities
Phone No.: (414) 521-5272

Remarks: The City of Waukesha maintains ten municipal water supply wells. Depths of the wells range from 1,800 feet to 2,200 feet. The wells are interconnected and serve approximately 56,000 to 57,000 people. The wells are located at:

1. East North Street
2. Baxter Street
3. Newhall Road
4. South Moreland Blvd.
5. East Avenue & Sunset Drive
6. Sunset Drive
7. Sunset Drive
8. Seylesville
9. Crestwood Drive
10. Wolf Road

TELECON NOTE 16

Date: November 16, 1993

Interviewer: Rakesh Aurora

Name: Jim Wilson
Title: Director of DPW
Affiliation: Village of Hartland - Department of Public Works
Phone No.: (414) 367-4880

Remarks: The Village of Hartland is supplied with municipal water from four wells approximately 150 feet deep. Approximately 7,000 people are served. The wells are interconnected. The wells are located at:

- the intersection of Lindenwood Drive and Manchester Court
- Progress Drive
- Sunny Slope Drive
- @ end of Penbrook Way
TELECON NOTE 17

Date: November 16, 1993
Interviewer: Rakesh Aurora
Name: Ms. Sue Fribeit
Title: Affiliation: Village of Sussex - Water Utility
Phone No.: (414) 246-5200
Remarks: The Village of Sussex has four deep water wells. They are interconnected. The locations and depths are as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Depth</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Street</td>
<td>1,292 feet</td>
<td>12 inches</td>
</tr>
<tr>
<td>Maple Ave. (South of Main Street)</td>
<td>1,230 feet</td>
<td>17.25 inches</td>
</tr>
<tr>
<td>Lilac Drive</td>
<td>1,288 feet</td>
<td>12 inches</td>
</tr>
<tr>
<td>Donna Street</td>
<td>1,296 feet</td>
<td>12 inches</td>
</tr>
</tbody>
</table>

They also have one 1-million gallon storage standpipe and one ¼-million gallon storage standpipe.

TELECON NOTE 18

Date: November 16, 1993
Interviewer: Rakesh Aurora
Name: Carol
Title: Town Clerk
Affiliation: Merton Town
Phone No.: (414) 966-2125
Remarks: There are private wells on each person’s property. The wells are not interconnected.
TELECON NOTE 19

Date: November 17, 1993
Interviewer: Rakesh Aurora
Name: Louis Thibault
Title: Superintendent
Affiliation: Village of Pewaukee Water and Sewer
Phone No.: (414) 691-5690
Remarks: The Village of Pewaukee maintains three municipal water supply wells. The average depth of the wells is approximately 1,300 feet. The wells serve approximately 5,200 people. The wells are located on Hickory Street, Capital Drive, and Main Street. The wells are interconnected.

TELECON NOTE 20

Date: November 18, 1993
Interviewer: Rakesh Aurora
Name: Michele Nelson
Title: Deputy Village Clerk
Affiliation: Merton Village
Phone No.: (414) 538-0820
Remarks: There are private wells for each home. There are approximately 600 homes in the Village. The total population for the Village is approximately 1,333. The average depth of the wells is 150 feet. The range of depths is 22 feet to 200 feet.

TELECON NOTE 21

Date: November 19, 1993
Interviewer: Pamela Lemme
Name: Chris
Title: 
Affiliation: National Weather Bureau, Milwaukee
Phone No.: (414) 744-8000
Remarks: Average annual rainfall and rainfall equivalent in Milwaukee is 32.93 inches. (The rainfall equivalent is the amount of snow converted to rainfall inches.) The normal summer temperatures are: high - 78° F, low - 59° F. The normal winter temperatures are: high - 29° F, low - 15° F.

Summer includes the months of June, July, and August. The winter months include December, January, and February. The rainfall equivalent is the amount of snowfall calculated to an equivalent amount of rainfall.

TELECON NOTE 22

Date: November 23, 1993

Interviewer: Pamela Lemme

Name: Mr. Pat Brody
Title: Hazardous Waste Specialist
Affiliation: Wisconsin Department of Natural Resources, Bureau of Solid and Hazardous Waste Management
Phone No.: (414) 961-2717

Remarks: Wisconsin's hazardous waste generator classifications are similar to the federal classifications. A "Very Small Quantity Generator" is a facility that generates less than 100 kg, 220 lbs., or 25 gallons of hazardous wastes in any one month period. A "Small Quantity Generator" is a facility that generates less than 1,000 kg, 2,200 lbs. or 300 gallons of hazardous wastes in any one month.
APPENDIX E

DOCUMENT REVIEW REPORTS
DOCUMENT REVIEW REPORT #1

Document Reviewed by: Pamela Lemme
Date Reviewed: November 4, 1993

Remarks: The state leaking underground storage tank (LUST) list, the LUST Case Tracking System List, was reviewed on November 4, 1993. The list is prepared by the Wisconsin Department of Natural Resources and was dated 10/26/93. No reports of spills or LUSTs were found on the list for the subject site.

DOCUMENT REVIEW REPORT #2

Document Reviewed by: Pamela Lemme
Date Reviewed: November 4, 1993

Remarks: Well Constructors Reports, located at the Wisconsin Department of Natural Resources, 4041 Richard Street, Milwaukee, Wisconsin, were reviewed on November 4, 1993. The well constructors reports provided information pertaining to water supply wells developed throughout the state. The information included, but is not limited to, location of the well, depth of well, depth to water table, contractor performing the drilling, and the owner of the well. Reports dated as far back as 1936 were reviewed. There were no reports of wells within a 4-mile radius of the site closing due to contamination.
APPENDIX F

INTERVIEW REPORTS
INTERVIEW REPORT #1

Date:    November 1, 1993

Interviewer:  John Tucker and Pamela Lemme, PEER Consultants

Name:    Mark Wisniewski, Colleen Reilly, Dave Jennings
Title:    Facilities Manager, Environmental Manager, Environmental Manager, respectively.
Affiliation:  86th ARCOM

Remarks:    The reserve center has been occupied since 1961. Mark Wisniewski has been employed at the facility since 1979, and has been the facility manager since April, 1993. Mr. John Jekel was the facility manager since the Reserve Center's inception until 1981. The 84th Division and the 961st Engineering Battalion, a unit of the 86th ARCOM, have both occupied the facility until April 1, 1993, when the 84th Division moved out. It is currently occupied only by the 961st Engineering Battalion.

The 961st Engineering Battalion's mission is construction. The unit has performed non-profit community work, such as construction of a soccer field and a playground for the public schools. There are approximately 145 personnel in the unit. There are five full-time employees and two part-time employees. There are no refueling operations on site. Vehicles are not washed at the site. The vehicles are taken to the facility in Milwaukee. Only touch-up painting, minor repairs, and routine maintenance are performed on site. Painting of the building is performed by private contractors. The facility uses municipal water and sewer systems. Electrical power is from Wisconsin Electric. The nearest school is approximately 1½ blocks east of the site at St. Mary's Church. The nearest day care center is approximately 1½ miles east at the Waukesha County Technical College. The facility manager has not observed any evidence of contaminated soils or damaged vegetation. The facilities heating was changed from oil to natural gas in 1986. The USTs which stored the heating oil were removed in October 1991. Trash is collected every Monday by Foyer Trash Collection. Used oil, antifreeze, and solvents are tested, collected, and recycled or disposed of by Safety Kleen. All other hazardous wastes or unknown materials are handled by DRMO.
INTERVIEW REPORT #2

Date: November 2, 1993

Interviewer: John Tucker and Pamela Lemme, PEER Consultants

Name: Mr. Frank Edwinson
Title: Public Health Sanitarian
Affiliation: Waukesha County Department of Environmental Resources

Remarks: The County Department of Environmental Resources samples local wells, at the request of the owner, for bacteria, chlorine, fluoride, iron, hardness, chloride, and nitrates. There have been no reports of contamination in groundwater wells in the vicinity of the project site. Reports or complaints about oil or other contaminants would be referred directly to the Wisconsin Department of Natural Resources.

INTERVIEW REPORT #3

Date: November 2, 1993

Interviewer: John Tucker and Pamela Lemme, PEER Consultants

Name: Mr. George Morris
Title: Manager
Affiliation: Waukesha County Department of Environmental Resources

Remarks: Waukesha County has begun to perform environmental assessments for County facilities. To date, there have been no reports of groundwater contamination in the area.
INTERVIEW REPORT #4

Date: November 1, 1993

Interviewer: John Tucker and Pamela Lemme, PEER Consultants

Name: Sergeant Thomas Charlier
Title: Motor Sergeant
Affiliation: 86th ARCOM

Remarks: Laura Sodemann was the former facility manager. He did not have a current Standard Operating Procedures for hazardous waste management. A copy of the SOP for the 84th Division was available. It is dated February 27, 1990 and states that hazardous wastes will be handled by the 84th Division Headquarters located in Milwaukee. Approximately 40-50 gallons of waste oil is generated per month. Only routine maintenance is performed on site. Some solvents are on site for cleaning of wheel bearings, etc. The vehicle maintenance building had a grease pit; however, in 1979 it was cleaned and filled in with concrete.
APPENDIX G

PHOTOGRAPHS
PHOTO 1 - LOOKING NORTHWEST AT THE SOUTHEAST CORNER OF THE MAIN BUILDING

PHOTO 2 - LOOKING NORTHWEST AT THE SOUTH SIDE OF THE MAIN BUILDING
PHOTO 3 - LOOKING WEST AT THE EAST SIDE OF THE MAIN BUILDING

PHOTO 4 - LOOKING SOUTH AT THE NORTH SIDE OF CLASSROOM WING OF THE MAIN BUILDING
PHOTO 5 - LOOKING SOUTHWEST AT THE NORTH SIDE OF THE DRILL ROOM OF THE MAIN BUILDING

PHOTO 6 - LOOKING WEST AT THE PARKING LOT BEHIND THE MAIN BUILDING
PHOTO 7 - LOOKING NORTHWEST AT THE MAINTENANCE FACILITY

PHOTO 8 - LOOKING SOUTHWEST AT THE 400-GALLON MOBILE STORAGE TANK AND THE FOUR 55-GALLON STORAGE DRUMS
PHOTO 9 - LOOKING SOUTHEAST AT THE 400-GALLON MOBILE STORAGE TANK AND THE FOUR 55-GALLON STORAGE DRUMS

PHOTO 10 - LOOKING NORTH AT THE 400-GALLON MOBILE STORAGE TANK
APPENDIX H

ENDANGERED RESOURCES INFORMATION
November 24, 1993

Ms. Pamala Lemme
PEER Consultants P. C.
12300 Twinbrook Pkwy
Rockville, MD 20852

SUBJECT: Endangered Resources Information Review (Log Number 93-434)

Dear Ms. Lemme:

The Bureau of Endangered Resources has reviewed the project area described in your request for information of 4 November 1993 for the environmental assessment for army reserve center near Pewaukee Lake.

Our Natural Heritage Inventory (NHI) data files contain the following rare species information for the project site located in Sections 5-9 in T7N R19E, Waukesha County. In addition to the actual project site, I am providing endangered resource information for an area within one mile of the project’s location (within five miles for aquatic species.) I provide this information both so impacts to nearby endangered resources can be assessed and to assist in determining which rare species may occur in the project’s impact area if appropriate habitat exists. If the described habitat types occur in the project’s impact area, then species that occur nearby may be present there. The species information provided includes the location, date of the most recent observation, and other information useful in planning protection measures. Rare species occurring within or near the project site include:

*Erimyzon suavis* (lake chubsucker), a State Special Concern fish, occurs in Pewaukee Lake

The observation date for this occurrence record is 1977. This species prefers lakes, oxbow lakes, sloughs of large rivers and quiet streams with dense vegetation over bottoms of sand, gravel, or rubble. Spawning occurs from late March through early July.

Special Concern (Watch) species are species about which some problem of abundance or distribution is suspected but not yet proved. The main purpose of this category is to focus attention on certain species before they become endangered or threatened.

In addition to the above information, our data files also contain historical records (generally, records that are 25 years old or older) of rare species known to occur within the vicinity of the project site. Unfortunately, the Bureau does not have more current survey information documenting the continued existence of this species in this area. I am including this older record as an indication of which species may still occur in the project area if appropriate habitat exists:

*Gentiana alba* (yellowish gentian), a plant listed as Threatened in Wisconsin, has been known to occur in

In Wisconsin this species has been observed in wet, sandy railroad prairies; thin soil on open and wooded ridges and bluff-top; wooded ravine in clay soils and damp roadsides on edge of woods. Blooming occurs from mid-August through early October.
Comprehensive endangered resource surveys have not been completed for the project area. As a result, our data files may be incomplete. The lack of additional known occurrences does not preclude the possibility that other endangered resources may be present.

The specific location of endangered resources is sensitive information that has been provided to you for the analysis and review of this project. Exact locations should not be released or reproduced in any publicly disseminated documents.

This letter is for informational purposes and only addresses endangered resource issues. This letter does not constitute Department of Natural Resources authorization of the proposed project and does not exempt the project from securing necessary permits and approvals from the Department.

Please contact Becky Isenring at (608) 264-8968 if you have any questions about this information.

Sincerely,

Charles M. Pilz
Director, Bureau of Endangered Resources

cc: Bruce Braun - EA/6
Jim Morrissey - SED
Frank Trcka - SED
Betty Les - ER/4
Army Reserve Center, Pewaukee Wisconsin (ARCP)

11/01/93

Met with Mark Wisniewski (Facility Manager),
Colleen Reilly (Environmental Manager) and
Dave Jennings (Environmental Manager) to
discuss past and present activities on site.
PEER personnel present - Pamela Lemme and
John Tucker.

1. Reserve Center has been in operation since 1961
under the command of Ft. McCoy.
2. The mission has been construction
3. The unit is currently constructing a building in
Pewaukee. The unit performs non-profit work.
4. There are approx. 145 people in the unit
5. There are 5 full time employees
6. No refueling operations on site
7. Trucks are taken to the maintenance facility on Silver Spring Dr. in Milwaukee for
washing down, major repairs etc.
8. Paint is stored in the paint storage room
for touching up paint on vehicles and the
building. Major painting of vehicles is performed
at the maintenance facility. Major painting
of the building is performed by contract
painters.
10. Power is obtained from Wisconsin Electric.
11. Construction of the building was during 1957 and 1961. The building was dedicated 1961.
12. The facility is in Waukesha County.
13. The closest school is about ½ a block east of the site - St. Mary’s.
14. Heat in the building was converted to gas prior to Dec. 88.
15. USTs were removed in Oct. 91.
16. The site has had no visits from regulatory agencies.
17. Sgt. Charlier is the Meter Sergeant for the facility. He is active duty.
18. Some asbestos sampling has been performed. No comprehensive survey.
19. The two buildings total approx. 14,216 sft. The site is 9.9 acres.
20. An internal report was prepared by the 416th Engineering Command for the Environmental Compliance Assessment System. This report was available for review but can not be included in the report.
21. The fenced in area is ≈ 5 acres.
ARCP PA
11/01/93

Site observations:

1. Surface water flow across the site is to the west.
2. Small oil stains on the floor from pumps and other equipment.
3. There is a water buffalo (400-gallon mobile storage tank) and 4 - 55-gallon drums just inside the gate at the fenced area.
4. The storage room contains paint and other solvents. A list or inventory of the materials is maintained on site. MSDS are available for most products.
5. The dry storage shed contains tents and other similar equipment.
6. The paint storage room is about 6' x 6', has block walls and a concrete floor.
7. An old grease pit was filled in 1979. It was located in the Maintenance Shop.
8. Trash is collected by Foyer on Mondays.
10. Antifreeze and solvents collected and tested by Safety Kleen.
11. Other HW and unknowns are collected and tested by DRM0.
12. Approx. 40-50 qts of waste oil is generated per month with routine maintenance of vehicles.

13. Oil in vehicles are not changed on any schedule. Samples of the oil are sent to the lab to determine if it needs to be changed.

14. The maintenance shop has gas heat. The old oil unit is still in place.

15. Water from the parking lot drains into a drainage ditch along the west side of the property.

16. There is a storm drain in front of the drill room near where the 6,000 gallon UST used to be.

17. There are 3 pole-mounted transformers on-site. They are owned by the Power Co.
ARCP DA
11/3/93

Summary of findings in the ECAS Report

1. Need to prepare emissions inventory list & CFC list.
2. Should prepare a SPCP and investigate water-pollution complaints.
3. No findings assoc. w/ Safe Drinking Water Act.
4. RCRA Subtitle B: HWM Plan had not been done, no inventory of haz. wastes.
5. RCRA Subtitle D: needed verification of disposal facility and licensure of waste haulers.
6. RCRA Subtitle II: No plan for managing liquid waste petroleum products.
8. TSCA (PCB): No findings.
<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village of Pewaukee</td>
<td>691-5686, 691-5660</td>
</tr>
<tr>
<td>Pewaukee Town</td>
<td></td>
</tr>
<tr>
<td>Waukesha County</td>
<td></td>
</tr>
<tr>
<td>Wisconsin State Gov't</td>
<td></td>
</tr>
</tbody>
</table>

**Pewaukee Phone No.**

- Village of Pewaukee
  - Fire Dept. Non-emergency 691-5686
  - Village Hall 691-5660

**Pewaukee Town**

- Waukesha County
  - Environmental Resource Dept.
  - 678 E Broadway
  - 500 Riverview Ave.

**Wisconsin State Gov't**

- Demographic Services (Madison) (608) 266-1927
- Natural Resources Dept. 263-5500
11/2/93 ~ 8:40 A.M.

Charles Bebe Pewaukee 691-9223
Fire Inspector

Was present at time of tank pull
Some contractor who did all for Army
Both tanks removed
No contamination

1,000 gal tank on NE corner
Completed in sand and terra

Company performing
Tanks pulled

 Took pictures - Removed Site Assessors
No overspill's that Mr. Fire Dept is aware of
Ms Williams Village Clerk 691-5640
5.550 received less a mortgage from State
automobile & voter registration
691-2100 School District Business Office
Think it was farmland prior

Cathy Business Office 691-2100
School age population K-12 in Pewaukee
1,653 students
1 elementary school
1 middle school
1 high school

Craig Kautt District Supervisor 5-7-77
Send air from LED Cessna
Aerial Park Planning
SE. Rug Planning Commission located Old Gusher
Main Street

Eileen Campbell 691-0820
Assessor’s Office Clerk would need to call Village of
Pewaukee for info on site.
A copy of Waukeshaw geological

Circular #29, 1975

Well constructors report Richard Street

Historical review LDP program

T. Leibler 961-5738 Victoria Anderer

602-262-7430  Trace Uphold

608-257-1765 Wisconsin Geological Survey

404/ Richard Street Capital Dr. Madison

Vee Antle 961-2738 out place

Uphold

App. of Hydrogeology, Wisconsin

...and other counties in Wisconsin

/ Trace Uphold

Looking for site-specific information go to
well construction reports

I would not get copies of gas contamination

do not have a database

in Madison 387 Minerals 4t. Vol. 8 4:30

Water supply paper 1809 - T

Index
11/3/93
9:15am Ron Blessing

Pewaukee Lake
Outlet of Pewaukee Lake to Fox River
Can come down to look at information
8614 dial
1:00 to review file draft info.

9:35 Richard Leutsehs

Ground water deep wells
Main street by WCTC
1604 Hickory St
Capitol & High Street

Did have two unsafe samples chloroform
Have not had any problems since
ltd call lunch time
4/15/99
3:00 p.m. Bob Davis
Source is deep wells 10 interconnected
One with Iron #7 was cleaned up
#7 closed temp.
Same dam for rehabilitation

11/4 7:30
Becky Isenring Bureau of Endangered Resources
Legal description
Requests are usually in writing process takes about
2-3 weeks
101 S. Webster JEFFBldg.
on 4th floor look for Bureau of Endangered Resources
Contact Elizabeth or Becky
Can fill out an application and will try to
process it as quickly as they can

4041 N. Richard St on Capitol I Richard St
94 C to 43N
exit east on Capitol Dr dial 727

State LUST list was reviewed
Not on the list 10/24/93
LUST Case Tracking System DN2
DIRE
ARCP - Pewaukee

1/6 Mike Hahn - Southeastern Wisconsin Regional Planning Commission, provided documents for review.

Water Quality Plan for Pewaukee Lake. March 1984
Comm. Ass't. Planning Report No. 58

No. 14 Floodland Management Plan for Village of Pewaukee. 2/78

Community Assistance Planning Report No. 9 (2nd Edition)
Floodland Information Report for the Pewaukee River Village of Pewaukee, Waukesha Co., Wis
Prepared by SWRPC, March 85

- Pewaukee River originates in Section 21, T8N, R19E
  Flows south-southeast to Village of Pewaukee
  then SE to Fox River
  - Fox River watershed - 142 square miles
  - Pewaukee River subwatershed - 38.65 square miles
- Average annual total precipitation in subwatershed
  based on the City of Waukesha data is 32.02 inches
  Average annual snowfall is 42 inches
  1" of snow = 1 inch of water
- Measured streamflow data was not available
- Hydrologic soil group for site B
  Moderate amounts of runoff because of
  moderate infiltration capacity, moderate
  permeability and good drainage
USARC - Pewaukee

11/3/93

(Mike Stahn, contd.)

Site located in subbasin 10. Subbasin area and total area tributary to subbasin discharge point in square miles (2.83 - 8.33) Land segment type number for existing land use conditions and land segment type number for 2000 planned land use conditions (I - I)

I - Rural-agriculture and open space

Length of Pewaukee River - 10.6 miles

Pewaukee Lake Outlet - 0.1 mile

According to Supp. Floodplain Zoning Map of the Village of Pewaukee dated 2/84 site is not located in the a flood plain (100 yr.)

CAPR No 58

A water Quality Money Pit for Pewaukee site 3/84

Lake is drained by the Pewaukee River which flows 4.4 miles to Lake Pewaukee.

Area of Lake - 2,444 acres

Area of Direct Drainage - 14,817 acres

Velocity - 34.552 sec/hr

Residence Time - 1.7 yrs.

Length - 4.5 miles

Width - 1.4 miles

Length of Shoreline - 12.8 miles

Depth < 5 ft. - 15%

5-20 ft. - 4.5%

Max. Depth 45'

Mean Depth 15'
USARC Pewaukee

11/3/93

(Mike Hahn, cont'd)

Map 3 shows storm sewer discharge points SE:SW of site. GW flow in this area is to the South.

GW flow at inlet is away from Lake ONE.

Map 4 shows moderate infiltration rate for site.

Table 4 pg 17

Civil Division Area within Direct Drainage Area

0.93 sq. miles

Maps 13 - 14 show site is downsloping from wildlife hab. Nat. areas, wetlands, woodlands in the drainage area.

Pewaukee lake fishing is supported by DNR stocking programs.

A public beach 0.5 mile long is located in the Village of Pewaukee.

Map 18 site is outside of shortland - floodplain zoning districts.
USARC - Parmer

Well Constructors Reports - Reviewed at the Wisconsin DNR on Nov. 4, 1993

Geology:
- Clay
- Gravel
- Limestone
- Shale

Report: DV 036  8/6/92  T7N, R17E, Sec 8
N 37 W 26 870  Karpiner Dr.
- Shelly Clay - 25 ft
- Gavel - 25 - 30 ft private well
- Limestone - 30 - 35 ft
- Static Water Level: 12 ft below surface

Report: EQ 346  11/25/91
- 6 in. water screen - 16 ft
- Shelly Clay - 7 ft private well
- Rock surface - 61 ft
- Limestone - 101 - 102 ft
- Grade - 162 - 229 ft
- S.W.L. - 110 ft below surface
Report date 8/2/90

N38 W26883 Glacier
T7N R19E Sec 8

Topsoil 0-2
Clay 2-18 SWL 25'
Stoney clay 18-40 private well
Hardpan 40-51
Limestone 51-163

Report date 3/24/87 T7N R19E Sec 8

N38 W26883 Kipner Dr.
SWL 22' private well

Report date 10/10/85

N37 W26883 Kipner Dr.
SWL 25' private well

Report date 10/7/84

N37 W26883 Kipner Dr.
SWL 27' private well

Report date 11/20/84

524 Spring St.
SWL 40' private well

Report date 3/19/84

N37 W26883 Kipner Dr.
SWL 40' private well
Date: 1/4/82
N37 W26805 Kaperier Dr. SWL 27'

3/4/75 N35 W26870 Glocir Ed. SWL 36
2/5/34 Park #2 Ducks 3 Lois Ave SWL 40

6/29/34 located in NE corner N/C North SWL 10'

10/21/70 N35 W26775 Glocir Dr SWL 35'

12/24/59 Hay J (13 W. Wisconsin Ave) SWL 25'

12/8/44 N37 W26911 Kaperier Dr SWL 16'

1/28/63 N35 Hahn 2
2/2/55 Hay J
2/18/54 W35 S2664 Forrest Ct
8/22/62 115 W. Wisconsin Ave
10/5/63 N39 W26660
3/20/64 N38 W26541 Kaperier Dr
4/19/41 N30 W26733 Hay J
4/21/64 N37 W26549 Kaperier Dr
7/20/50 NW 1/4 sec 8 Hay J
6/20/47 45 3 Prospect Ave
7/17/63 N4 1/4 NW 2 SWL 8
3/5/62 NW 5 1/4 (e dept) SWL 5