



REMEDIAL INVESTIGATION REPORT FORM

FOR

GTE NORTH, INC.

HALLOCK, MINNESOTA

AUGUST 1996

PROJECT NO. 96-6176

RECEIVED

AUG 30 1996

MPCA, HAZARDOUS
WASTE DIVISION

PREPARED BY

AIRES CONSULTING GROUP, INCORPORATED

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WASTE DIVISION

Remedial Investigation Report Form

Fact Sheet #3 24

April 1996

This form must be completed for all sites in which a remedial investigation (RI) is conducted--this includes either a *Limited Site Investigation (LSI)* or a *full RI*. Completing this form will provide the MPCA with the minimum amount of information necessary for a *full RI*. Additional information should be included if deemed important for making a site cleanup decision. If the consultant has concluded that a *Limited Site Investigation* is applicable to this site, Section 6 and Section 7 may be deleted from this report.

Refer to MPCA fact sheet #3.19 "Leaking Underground Storage Tank Investigation and Cleanup Policy" for guidance for the overall objectives of an RI and other MPCA fact sheets regarding investigations.

When a tank has been excavated, refer to fact sheets #3 6 "Excavation of Petroleum Contaminated Soil" and #3 7 "Excavation Report Worksheet for Petroleum Release Sites" for reporting requirements.

If free product is discovered the initial reporting should be done in accordance with fact sheet #3 3 "Free Product Evaluation and Recovery" and fact sheet #3 4 "Free Product Recovery Report Worksheet".

LeakNumber LEAK0000 8767 Date August 30, 1996

Responsible Party GIE North, Incorporated R P phone # (309) 663-3356

Facility Name. GIE North, Incorporated

Facility Address 150 South Second Street City Hallock

County Kittson Zip Code 56728

Location of site LAT 48°46'25" LONG 96°56'36" Circle one UTM/State

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Section 1: Emergency and High Priority Sites

- 1 Is an existing drinking water well impacted? YES NO
- 2 Are there existing vapor impacts? YES NO
- 3 Is there an existing surface water impact as indicated by 1) a product sheen on the surface water or 2) a product sheen or volatile organic compounds in the part per million range in ground water in a well located close to the surface water YES NO
- 4 Has the release occurred in the last 30 days? YES NO
- 5 Has free product been detected at the site? YES NO
- 6 Is sand or gravel aquifer impacted which is tapped by water wells within or potentially within 500 feet from the edge of the plume or does impacted soil overlie a karsted limestone or fractured bedrock? If yes, explain: YES NO

Due to restrictions on site posed by overhead lines and underground utilities, a subsurface investigation was not able to be conducted. It is not likely that impacted soil overlies a karsted limestone or fractured bedrock. Regional geology of Hallock indicates that the bedrock consists of dolomitic shale with upper beds of cherty dolostone which are not fractured. All residents within 500 feet of the site obtain their drinking water from municipal sources, and it is unlikely that the municipal water supply has been impacted. See Figures 2d and 2e, and Appendix G

If you answered YES to any of questions 1 through 6 above describe below the actions taken to date to reduce or eliminate the risk posed by the release

The leaking underground storage tank was removed September 14, 1995. Due to unfavorable conditions at the time of tank removal, overexcavation of the contaminated soils was not feasible. The proximity of the underground utilities to the tank as well as the location of the building immediately to the west rendered overexcavation impossible. See Figure 2. Contaminated soils were returned to the excavation. Plastic sheeting was used to separate the contaminated backfill from the native soil within the excavation as well as the clean fill used to bring the excavation to grade.

Section 2: Site and Release Information

2.1 Describe the land use and pertinent geographic features within 1000 feet of the site

The topography in the vicinity of Hallock is relatively flat. Land use within 1000 feet of the site is primarily commercial, but minor residential areas do exist. Two Rivers is approximately 1/2 mile northeast of the site. No surface waters or wetland areas exist within 1000 feet of the site. Eight (8) LUST sites are located within 1000 feet of the GTE facility in Hallock. Please refer to Appendix H

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Table 1.

Provide the following for all tanks that have been at the site

Tank #	UST or AST	Capacity	Contents	Age	Status*	Condition
1	UST	285 gallons	Diesel fuel	18 yrs	removed 9/14/95	Heavy pitting and corrosion on the north end of the tank bottom, especially around the weld seam

*Indicate: removed (date), abandoned in place (date), or currently used

Notes:

2.2 Describe the status of the other components of the tank system(s), (i.e , piping and dispensers) for those tanks listed above.

Some corrosion was noted in the piping, but it was otherwise in good condition The tank was used to store fuel for an emergency generator located at the site No dispenser was present in the UST system

2.3 Identify and describe the source or suspected source(s) of the release

The suspected source of the release was the weld seam of the tank

2.4 What was the volume of the release? (if known). unknown gallons

2.5 When did the release occur? (if known) unknown

Section 3: Excavated Soil Information

3.1 Was soil excavated for off-site treatment?

YES **(NO)**

If YES then complete the fact sheet #3.7 "Excavation Report Worksheet for Petroleum Release Sites" and include it as an appendix

Date excavated

Not Applicable

Volume removed

 cubic yards

3 2 Indicate soil treatment type

land treatment
 thermal treatment
 composting/biopiling
 other (_____)
 Name and location of treatment facility

Section 4: Extent and Magnitude of Soil Contamination

- 4 1 Were soil borings conducted in or immediately adjacent to all likely source areas (e.g , UST basins, AST areas, piping, dispensers, remote fill pipes, known spill areas)? YES NO
- 4 2 To adequately define the vertical extent of contamination soil borings should be completed at least five feet below the water table or ten feet below the deepest measurable (field screening and visual observation) contamination, whichever is deeper Were all soil borings completed to the required depth? YES NO
- 4 3 To adequately evaluate site stratigraphy at least one boring should be completed 20 feet below the water table, unless a confining layer is present Was this done? YES NO

If you answered *NO* to any of the three previous questions, explain why the borings were not conducted in the required locations or to the required depths (see fact sheet #3 19 "Soil and Ground Water Investigations Performed During Remedial Investigations" regarding exceptions and MPCA approval for depth of drilling)

Underground utilities and overhead lines eliminated the possibility of a subsurface investigation at the facility Access to the facility by any size drilling equipment was not feasible Please refer to Figure 2a and the photographs attached in Appendix H The MPCA was contacted upon discovery of these site conditions and an alternative approach to an investigation was suggested

4 4 Indicate the drilling method

hollow-stem auger
 sonic drilling
 push probes
 other (_____)
Note. contact MPCA staff hydro before use of flight augers)

Subsurface drilling activities were not able to be conducted at this facility

Table 2.

Complete the following table indicating jar headspace results (in ppm) for soil samples from soil borings.

ASTM soil classification	Depth (ft)	Soil Boring								
		1	2	3	4	5	6	7	8	9

Notes: (type of PID/FID)

A subsurface investigation was not able to be conducted at this site

Table 3.

Indicate the laboratory analytical results for soil samples in mg/kg.

Well/Boring, Depth(ft)	Date Analyzed	Benzene	Toluene	Ethylbenzene	Xylene	GRO	DRO

Notes (use less than symbols to show detection limits)

A subsurface investigation was not able to be conducted at this site

Table 4.

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in soil samples. Indicate contaminant and list in reported units mg/kg

Well/Boring, Depth (ft)	Date Analyzed						

Notes

Soil samples were not collected at the site

4.5 If any non-petroleum compounds were detected list them below and identify possible sources of these compounds

Not Applicable

4.6 Describe the vertical and horizontal extent and magnitude of soil contamination

Soil samples were not able to be collected for laboratory analysis at the time of the Site Investigation. The extent of soil contamination is unknown. Minor amounts of BTEX were detected in the north tank base sample as well as the center tank base sample collected at the time of tank removal. The south tank base sample did not indicate the presence BTEX compounds. The north and south tank base samples collected from native soil at the time of tank removal showed elevated levels of diesel range organics, but the center tank base sample detected no DRO. Regional soil conditions are not conducive to extensive migration of the contamination.

Section 5: Aquifer Characteristics/Ground Water Contamination Assessment

5.1 Indicate the hydraulic conductivity and the method used to determine it. Attach all supporting information for the determination in the Methodologies appendix

$1 \times 10^{-6} < X < 1 \times 10^{-3}$ cm/sec

x estimate from reference

 slug test

 permeability test

 Hazen approximation from grain-size distribution

estimate is based on an aquifer media of sandy silt, clayey sands, and silty sands, glacial outwash and alluvial deposits

5.2 Indicate the thickness of the aquifer. If the investigation does not provide enough information to determine the aquifer thickness, assume the aquifer is greater than 20 feet thick

 less than 10 feet

 between 10 and 20 feet

x 20 feet or greater

5.3 Describe in detail the geology underlying the site including confining layers, bedrock formations and the lateral extent of these formations

Native soil conditions noted at the time of tank removal consisted of brown silty clay. Quaternary geology in the area consists of alluvium, sand and gravel locally interbedded with silt, clay and organic material, deposited on floodplains of major streams. The bedrock consists of Cretaceous Aquifer deposits, fine- to coarse-graded sandstone and quartzose, generally at the base of a shale-siltstone sequence. The bedrock is regionally extensive, and the quaternary deposits are locally extensive.

The impacted aquifer or the aquifer that is likely to be impacted at the site is considered a resource aquifer if one of the following situations exist

- . The aquifer is a current water supply source
- . The water bearing unit has a hydraulic conductivity greater than 1×10^{-2} cm/sec and a minimum thickness of 10 feet.
- . The water bearing unit has a hydraulic conductivity between 1×10^{-4} cm/sec and 1×10^{-2} cm/sec and a minimum thickness of 20 feet
- . The water bearing unit has a hydraulic conductivity less than 1×10^{-4} cm/sec and no other viable source of water supply is available. (*Bedrock may be considered a resource aquifer if it is the only water supply available.*)

5.4 Based on the aquifer characteristics and water supply availability, is the aquifer at the site a resource aquifer? YES NO

5.5 If other water supplies are available, explain

Municipal water is available in Hallock. Municipal supply wells are not located within 1/2 mile of the site. All residents within 500 feet of the site obtain their drinking water from municipal sources. It is unlikely that the aquifer at the site is a supply aquifer, and it is unlikely that the municipal water supply of Hallock has been impacted by the release.

5.6 Are there any other reasons the impacted aquifer should not be considered a resource aquifer?

Table 5.

Indicate the water level measured in all of the soil borings

	Soil Boring									
	1	2	3	4	5	6	7	8	9	10
Water level depth, ft										

Notes:

Soil borings were not able to be advanced at the site

5.7 Is contaminated soil in contact with ground water? YES NO

If YES or if ground water contamination appears likely then complete tables 6 and 7 below

It is unknown whether contaminated soil is in contact with groundwater at the site

Table 6.

Indicate the laboratory analytical results for water samples collected from the borings, temporary wells or push probes

Well/Boring Number	Date Analyzed	Benzene	Toluene	Ethylbenzene	Xylene	GRO	DRO

Notes

Water samples were not able to be collected at the site for laboratory analysis

Table 7.

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in water samples collected from the borings, temporary wells or push probes. Indicate contaminant and report in units of ug/l (ppb)

Well/Boring Number	Date Analyzed						

Notes

Water samples were not collected at the site

5.8 If any non-petroleum compounds were detected list them below and indicate whether they exceed the HRLs. Also, identify possible sources of these compounds

Water samples were not able to be collected at the site

5.9 If contaminated soil is not in contact with ground water, what is the distance separating the deepest contamination from the surface of the water table? Was this distance measured during site activities, referenced from geologic information, or estimated based on professional opinion during a site visit?

20 feet

answer question 5.7
w/ unclear whether
GW is impacted.

This distance was referenced from geologic information gathered from various sources on the regional hydrogeology of the Hallock area.

5.10 Describe observations of any evidence of a fluctuating water table and a seasonal high water table (e.g., mottling). Also, from other sources of information describe the range of natural water table fluctuations in the area

No soil borings were advanced at the site, but no hydrogeologic information indicates the possibility of a seasonally high water table at the site

5.11 In your judgment, is there a sufficient distance separating the petroleum contaminated soil (or an impacted non-resource aquifer) from the underlying resource aquifer to prevent petroleum contamination of the resource aquifer? Please explain in detail. In your explanation consider the data and information of this section as well as the nature of the petroleum release (i.e., volume, when it occurred, petroleum product)

YES NO

The source of the release has been removed. Based on all referenced materials concerning the geologic and hydrogeologic characteristics of the Hallock area, it appears that sufficient distance separates the impacted soil from the underlying resource aquifer to prevent petroleum contamination of the resource aquifer. The immediate subsurface material consists of silty clay which would prevent vertical migration of the contaminants through the soil. Quaternary deposits in the area consist of poorly sorted outwash mixed with fines and organic matter which are not conducive to contaminant migration. The bedrock in the Hallock area consists of shale and quartzose. This would also tend to prevent vertical migration of the contamination through the bedrock. The bedrock does not appear to be fractured, and this would greatly reduce the ability of the contamination to migrate horizontally through the bedrock.

Additional Ground Water Investigation

Complete Section 6 and Section 7 only if 1) a resource aquifer has been impacted at or above Minnesota Department of Health Health Risk Limits (HRLs), 2) a resource aquifer has been impacted below the HRLs, but the levels are likely to reach the HRLs, or 3) there is an insufficient distance separating the petroleum contaminated soil (or an impacted non-resource aquifer) from the underlying resource aquifer. Regardless of whether you are submitting a Limited Site Investigation or a full RI, all sections following Section 7 must be completed

Section 6. Extent and Magnitude of Groundwater Contamination

Table 8

Monitoring well construction

Well Number	Unique Well Number	Date Installed	Relative Surface Elevation	Riser Height Above Grade	Bottom of Well (Elevation)	Screen Interval (Elev. - Elev.)

Notes (location and elevation of benchmark)

Table 9.

Water table summary

Well Number	Date	Depth of Water from Top of Casing	Product Thickness	Depth of Water Below Grade	Relative Groundwater Elevation
MW-1					
MW-2					
MW-3					
MW-4					

Notes (GW above/below screen, etc)

6.1 Were any deep monitoring wells completed at the site? YES NO

If YES, which are deep wells?

Before a deep well is installed contact the MPCA project hydrologist for guidance on its necessity and placement. A deep monitoring well may be necessary if 1) contamination exist more than 10 feet below the water table or 2) the impacted aquifer is a resource aquifer or is hydraulically connected to a resource aquifer presently utilized by a water supply well located within 500 feet of the site

Provide estimates of the following additional aquifer parameters

Horizontal Gradient (dh/dl) _____

Vertical Gradient (dv/dl). _____

Porosity _____

Flow direction _____

Hydraulic Conductivity (K) _____ m/s

Pore velocity: _____ meters/year

Table 10

All ground water monitoring data should be collected from a minimum of *two quarterly sampling events*.

Indicate the laboratory analytical results for water samples.

Well #	Date	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	GRO	DRO
MW-1								
MW-2								
MW-3								
MW-4								

Notes (e.g., free product, dry well, units etc.)

Table 11.

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in water samples

Well #	Date Analyzed						

Notes units

6 2 If any non-petroleum compounds were detected list them below and indicate whether they exceed the HRLs Also, identify possible sources of these compounds

6 3 Is there a clean or nearly clean (below HRLs) downgradient monitoring well *YES NO* located along the longitudinal axis of the contaminant plume? (approximately 20 degrees plus or minus the axis)

6 4 Is there a worst case well completed through the source area of the release? *YES NO*

If you have answered *NO* to any of the above three questions, please explain why a well was not completed in the required location

6 5 Provide an estimate of the longitudinal length of the dissolved _____ feet contaminant plume

6 6 Describe the extent and magnitude of the ground water contamination

Section 7: Evaluation of natural attenuation

Table 12

Complete the bioactivity data in the table below. Data should be from two quarterly rounds of sampling. Refer to the fact sheet #3 21 "Assessment of Natural Biodegradation at Petroleum Tank Release Sites" for acceptable methodologies and indicate the chosen method in the Methodologies appendix.

Monitoring Well	Temp. °C	pH	Dissolved oxygen (mg/l)	Nitrate (mg/l)	(Fe II) (mg/l)	(H ₂ S, HS) (mg/l)
MW-1						
MW-2						
MW-3						
MW-4						

Notes:

7.1 Discuss the results of the bioactivity evaluation. Specifically, compare the concentrations of the inorganic parameters inside and outside the plume.

7.2 In your judgment, is natural biodegradation occurring at this site? Please *YES NO*
Explain

Section 8: Well Receptor Information/Assessment

Include in the appendices of this report 1) a list of addresses within 500 feet from the edge of the plume and confirmation of status of water supply from the city utility billing department, 2) well logs, and 3) map showing 1/2 mile radius, 500 foot radius, water supply wells, other potential petroleum sources, and addresses for properties within 500 feet

Table 13

Complete the following table for all water supply wells located within 500 feet of the edge of the plume and any municipal or industrial wells found within 1/2 mile

Unique Well #	Ground Elevation	Total Depth (ft)	Base of Casing (ft)	Static Elevation	Aquifer	Use	Owner	Distance & Direction from site
215966	815 ft ASL	529	504	102.05		observation	Federal Government	1800 ft SSW

Notes

No water supply or municipal wells exist within the specified radiu

8 1 Is municipal water available in the area? YES NO

8 2 Were all property owners within 500 feet of the nearest edge of the contaminant plume successfully contacted to determine if water wells are present? If No, please explain YES NO

All property owners are provided municipal water service See Appendix G

8 3 Discuss the results of the ground water receptor survey and any analytical results from sampling conducted at nearby water wells Comment on the risks to water supply wells identified within 500 feet from the edge of the plume as well as the risk posed by or to any municipal or industrial wells found within 1/2 mile Specifically indicate whether water supply wells identified utilize the impacted aquifer (Note an impacted aquifer separated from another aquifer by a clay lens is not considered a separate aquifer)

No water supply wells exist within a 500 foot radius of the site No municipal or industrial wells are located within 1/2 mile of the site No risk is imposed by the impacted soils to supply wells, municipal or industrial wells, or the surface water in the vicinity of Hallock

8.4 Are there any plans for groundwater development in the impacted aquifer within one half mile of the site, or one mile down gradient of the site if the aquifer is fractured? Please give the name, title and phone number of the person that was contacted for this information.

YES NO

Mr Hank Noel, City of Hallock

Phone 218-843-2737

Section 9: Surface Water Risk Assessment

9.1 Are there any surface waters or wetlands located within 1/4 mile of the site?

YES NO

If YES, indicate its name: _____

9.2 If surface water is present downgradient of the site, is there a clean down gradient soil boring or monitoring well located between the site and the surface water?

YES
NO
N/A

If NO, we assume that contamination discharges to surface water. Therefore, complete the following information.

Name of receiving water. _____

Plume width, (W) _____ feet

Plume thickness, (H) _____ feet

Hydraulic conductivity, (K) _____ gal/day/ft²

Horizontal gradient, (dh/dl) _____ (unitless)

Discharge, (Q) = $H \cdot W \cdot K \cdot (dh/dl) / 1440$ _____ gal/min

If YES, identify them and indicate the distance to these features and discuss the contamination risk potential.

Section 10: Vapor Risk Assessment/Survey

10.1 Is there a history of vapor impacts in the vicinity of the site?

YES NO

If YES, describe

YES NO

10 2 Is there any indication that free product or highly contaminated groundwater may be traveling offsite within the utility corridors? If YES, have they been investigated with borings or push probes?

Although several utility conduits are located at the facility, no free product exists at the site. It is not likely that highly contaminated groundwater exists at the site.

10 3 Discuss the potential for vapor migration/accumulation near the site. In your discussion consider soil types, product type, presence and distribution of free product or high concentrations of dissolved product. Also, compare the depth of contamination with the location of underground utility lines, location and depth of storm and sanitary sewers and location of nearby basements.

The potential for vapor migration/accumulation is insignificant. The source of the release has been removed. Utility corridors surround the tank location, but no storm or sanitary sewers are located near the former LUST. Free product does not exist at the site, and it is not likely that highly contaminated groundwater exists at the site. Subsurface soils consist of silty clay as well as poorly sorted outwash and alluvial deposits. The permeability of the soil appears to be extremely low.

If the vapor risk assessment indicated a risk of vapor impacts to buildings or utilities, complete the following table with vapor monitoring data collected. Location numbers should be mapped on an accompanying figure of the surveyed area.

Table 14

Location #	Date	PID reading (ppm)	Percent of the LEL

Notes

A Vapor Survey was not necessary at the site.

10 4 Describe and interpret the results of the vapor survey

A Vapor Survey was not performed at this site.

Section 11: Discussion

11.1 Discuss the risks associated with the remaining soil contamination?

The remaining soil contamination does not likely present any risk to the environment or to human health. No vapor impacts exist at the site, and no free product exists at the site. Highly contaminated groundwater is not likely to be present at the facility. The subsurface soils and bedrock in the Hallock area are not conducive to the vertical or horizontal migration of contamination.

11.2 Discuss the risks associated with the impacted ground water?

The groundwater is not likely to be impacted. Hallock residents obtain their drinking water from municipal sources, none of which exist within 1/2 mile of the site. Surface water shows no evidence of impacts. The subsurface soils would tend to prevent the vertical migration of the contamination to the groundwater.

11.3 Discuss other concerns not mentioned above

Site restrictions such as underground utilities and overhead lines made it impossible to advance soil borings at the site (see Figure 2). Minnesota Department of Health restrictions on boring and monitoring well locations rendered it impossible to drill within approximately 70 feet of the tank. Overexcavation of the contaminated soils would undermine the building immediately west of the former tank location, as well as jeopardize the integrity of the utility conduits running throughout the site.

Section 12: Conclusions and Recommendations

Recommendation for site.

- site closure
- additional vapor monitoring
- additional ground water monitoring
- active cleanup

The recommendation above should be based on fact sheet #3 1 "Leaking Underground Storage Tank Investigation and Cleanup Policy." Describe below how you applied the policy to support your recommendation.

The risks posed to surface waters and resource aquifers are low as well as is the risk of vapor impacts. Free product does not exist at the site and the source of the release has been removed. Additional investigation and/or monitoring is not a feasible option at the facility. Since risks to receptors are low, site closure is the most feasible corrective action plan.

If additional monitoring is recommended, indicate the proposed monitoring schedule and frequency

Additional monitoring is not recommended at this site

If active cleanup is proposed then MPCA staff will review this remedial investigation report at a higher than normal priority to determine if active cleanup is required. We will respond with either a request for proposal for additional monitoring or a corrective action design report. Please indicate below what cleanup technology you are considering at this time.

Site closure - no active cleanup recommended

Section 13: Required Figures

Indicate attached figures

- | | | |
|-----------|--------------------------------|--|
| <u>x</u> | <i>Figure 1, 1a:</i> | Site location map (<i>approximate scale is not acceptable</i>) and a large scale site map show all potential receptors within 300 feet of the site. The large scale site map should show those properties with basements and wells |
| <u>x</u> | <i>Figure 2, 2a, 2b, etc :</i> | One or more site map showing structures; all past and present petroleum storage tanks, piping, and dispensers, extent of soil excavation, boring and well locations (including any drinking water wells on site), horizontal extent of soil contamination, horizontal extent of ground water contamination; and location of end points for all geologic cross sections |
| <u>NA</u> | <i>Figure 3, 3a:</i> | Ground water gradient contour maps (for sites with monitoring wells) |
| <u>x</u> | <i>Figure 4</i> | Well receptor survey map showing 1/2 mile radius, 500 foot radius, water supply wells, other potential sources of contamination |
| <u>NA</u> | <i>Figure 5</i> | Vapor survey map showing utilities and buildings with basements and monitoring locations (if a survey was required) |
| <u>NA</u> | <i>Figure 6</i> | Geologic cross sections |

Section 14: Appendices

Indicate attached appendices.

- | | | |
|-----------|--------------------------|--|
| <u>NA</u> | <i>Appendix A</i> | Excavation Report Worksheet for Petroleum Release Sites |
| <u>NA</u> | <i>Appendix B</i> | Laboratory analytical reports for soil and ground water. |
| <u>x</u> | <i>Appendix C</i> | Methodologies and procedures, including field screening of soil, other field analyses, soil boring, soil sampling, well installation, and water sampling |
| <u>NA</u> | <i>Appendix D</i> | Geologic logs for each well or boring using attached template |
| <u>NA</u> | <i>Appendix E</i> | Well construction diagrams and copies of the Minnesota Department of Health Well Record using attached template. |
| <u>x</u> | <i>Appendix F</i> | Copies of water supply well logs with legible unique numbers. |
| <u>x</u> | <i>Appendix G</i> | A list of addresses within 500 feet from the edge of the plume and confirmation of status of water supply from the city utility billing department. |
| <u>x</u> | <u><i>Appendix H</i></u> | <u>A list of LUST sites located in the city of Hallock</u> |
| <u>x</u> | <u><i>Appendix I</i></u> | <u>Photographs taken during the Limited Site Investigation</u> |

Section 15: Consultant (or other) information

By signing this document, I/we acknowledge that we are submitting this document on behalf of and as agents of the responsible person or volunteer for this leaksite. I/we acknowledge that if information in this document is inaccurate or incomplete, it will delay the completion of remediation and may harm the environment and may result in reduction of reimbursement awards. In addition, I/we acknowledge on behalf of the responsible person or volunteer for this leaksite that if this document is determined to contain a false material statement, representation, or certification, or if it omits material information, the responsible person or volunteer may be found to be in violation of Minn. Stat f115 075 (1994) or Minn Rules 7000 0300 (Duty of Candor), and that the responsible person or volunteer may be liable for civil penalties

Name and Title:	Signature:	Date signed:
<u>ELIZABETH RACHMAN HYDROGEOLOGIST</u>	<u><i>Elizabeth Rachman</i></u>	<u>8/23/96</u>
<u>GLEN D. LEE SUPERVISOR-TECHNICAL SERVICES</u>	<u><i>G D Lee</i></u>	<u>8/26/96</u>
_____	_____	<u> / / </u>
_____	_____	<u> / / </u>

Company and mailing address

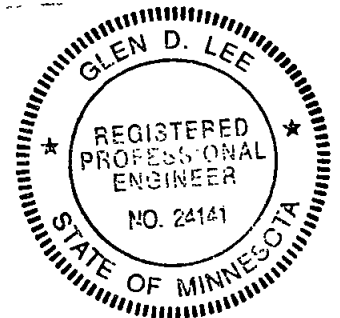
Aires Consulting Group, Inc

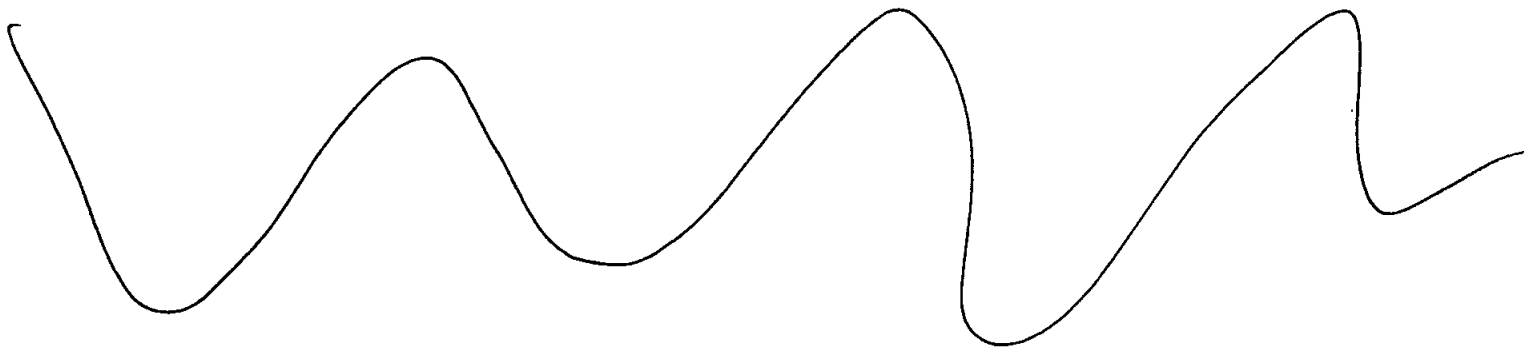
1550 Hubbard Street

Batavia, IL 60510

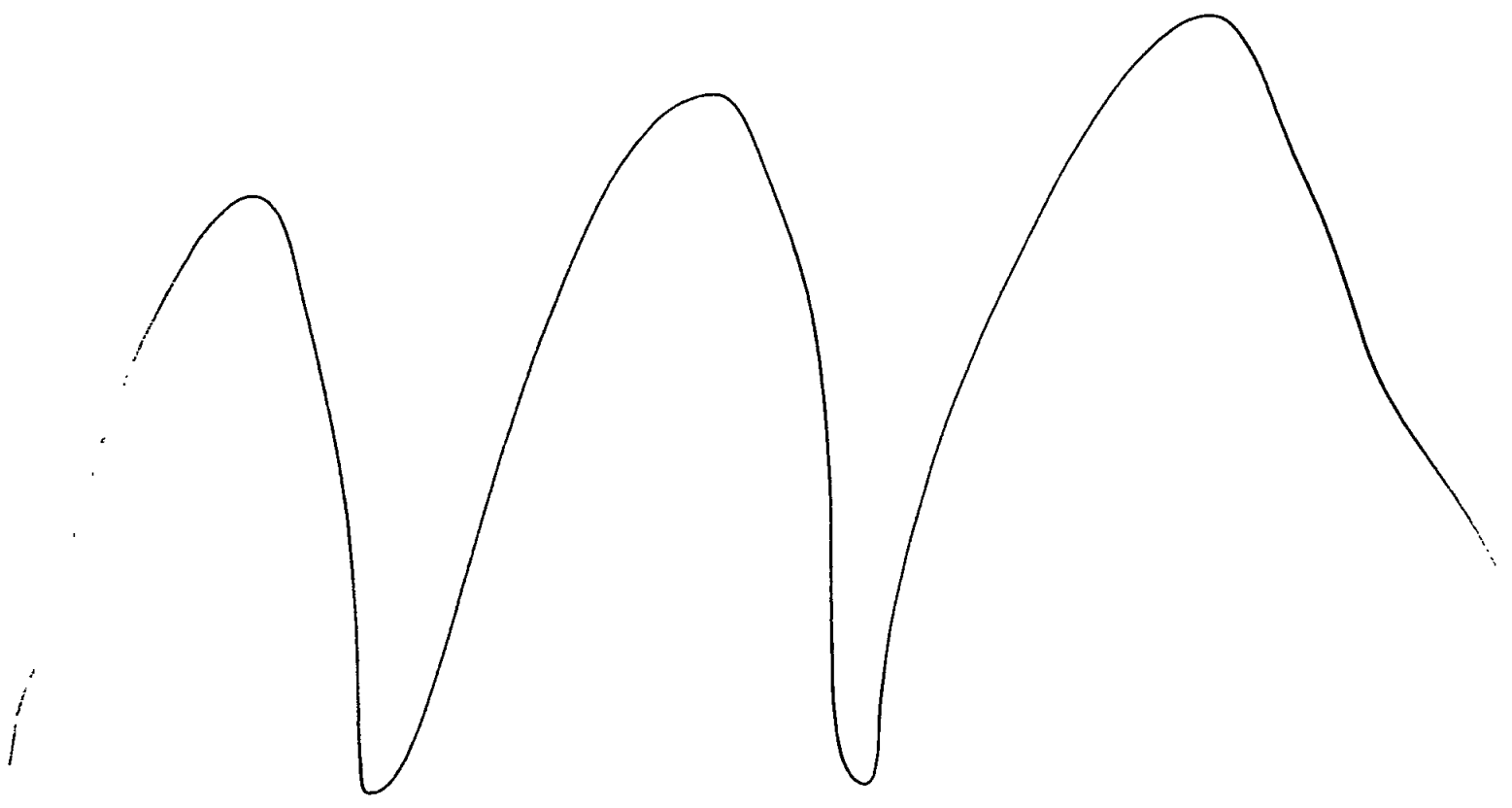
Phone (630) 879-3006

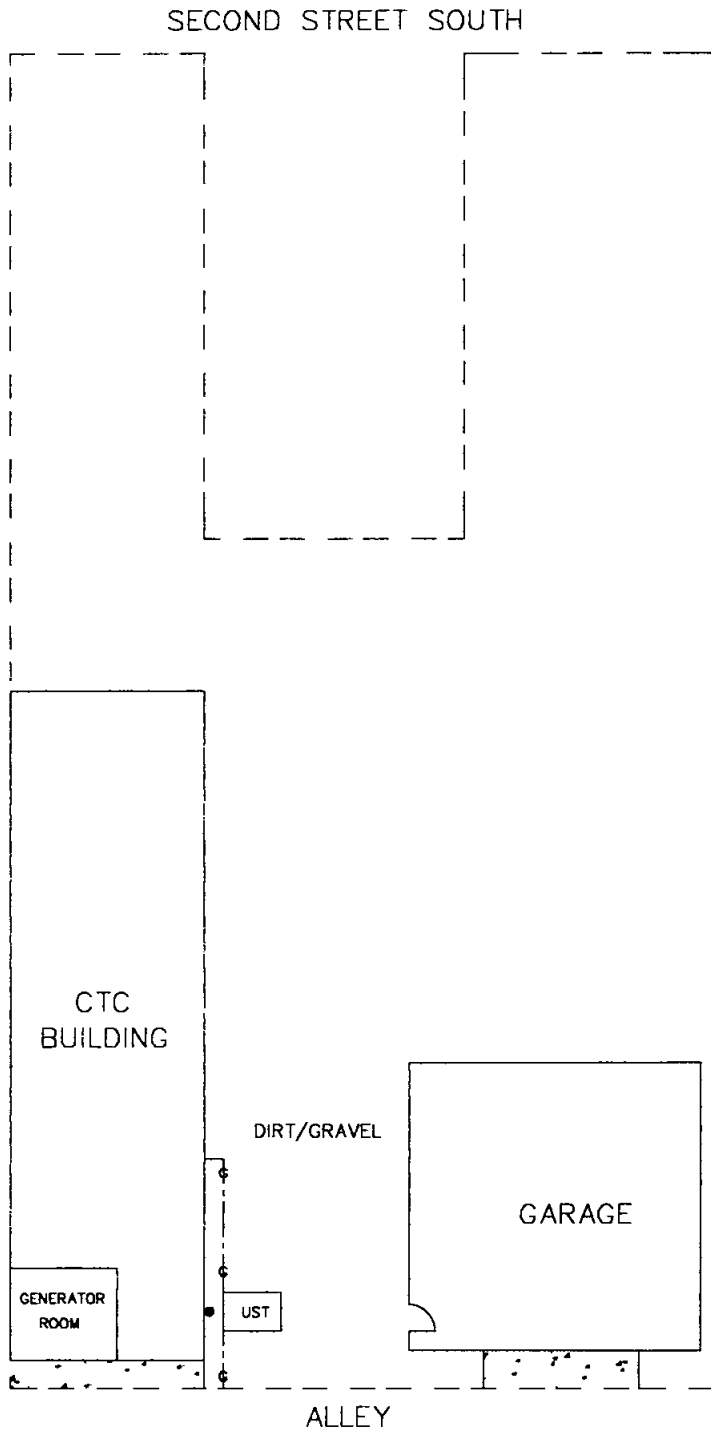
Fax (630) 879-3014





FIGURES





GTE - HALLOCK, MINNESOTA

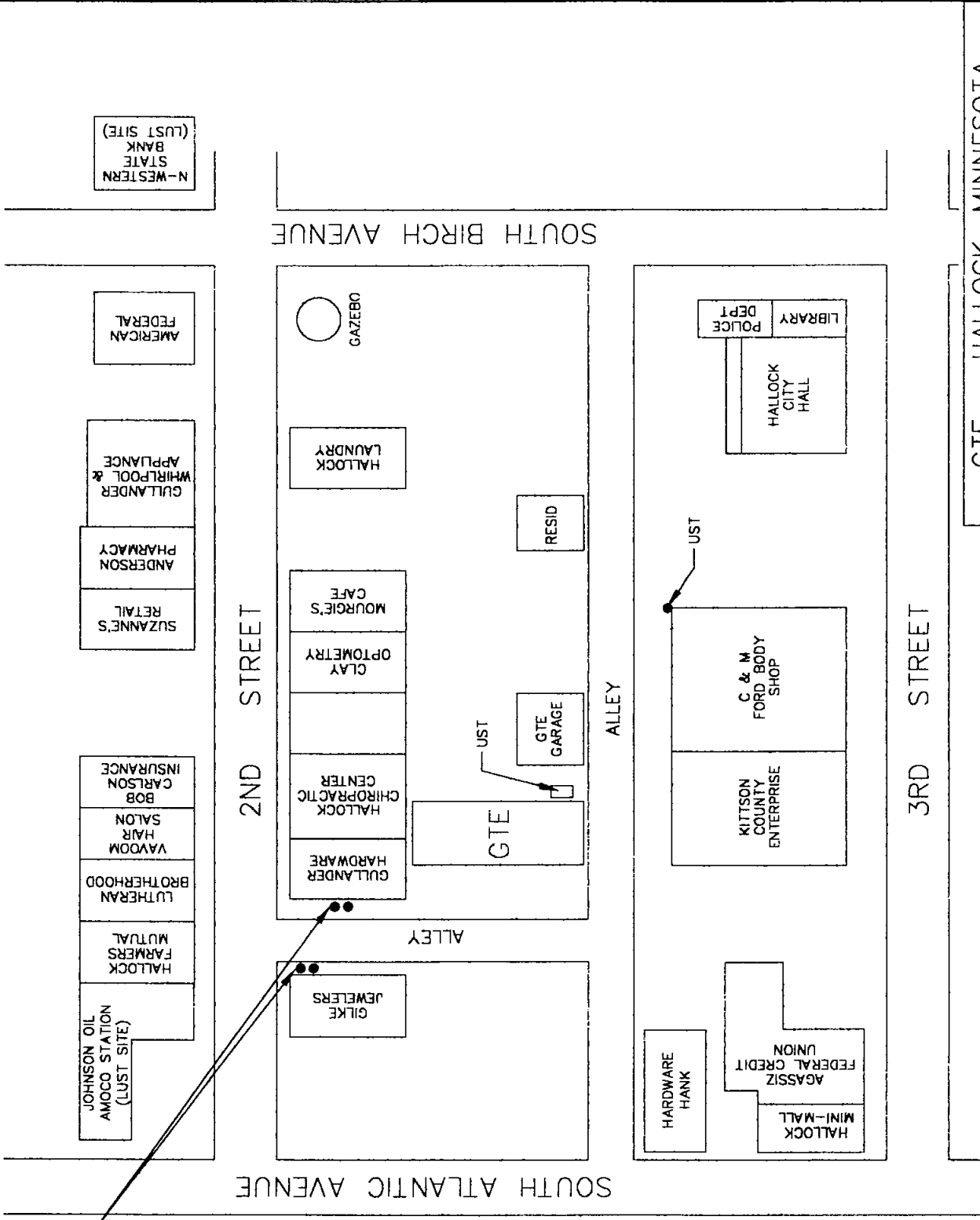
FIGURE 1

SITE LOCATION MAP

SCALE: 1" = 20' DRAWN BY: BP

PROJECT: 96-6176 DATE: 8-19-96

FILL/VENT PIPES
FOR PROBABLE
BASEMENT TANKS



N-WESTERN
STATE
BANK
(LUST SITE)

SOUTH BIRCH AVENUE

2ND STREET

ALLEY

3RD STREET

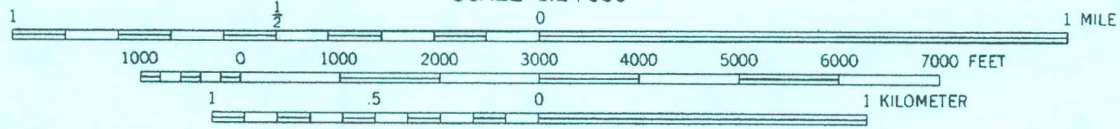
SOUTH ATLANTIC AVENUE

GTE - HALLOCK, MINNESOTA	
FIGURE 1A	
LARGE SCALE SITE MAP	
SCALE: NONE	DRAWN BY: BP
PROJECT: 96-6176	DATE: 8-19-96

AIRES



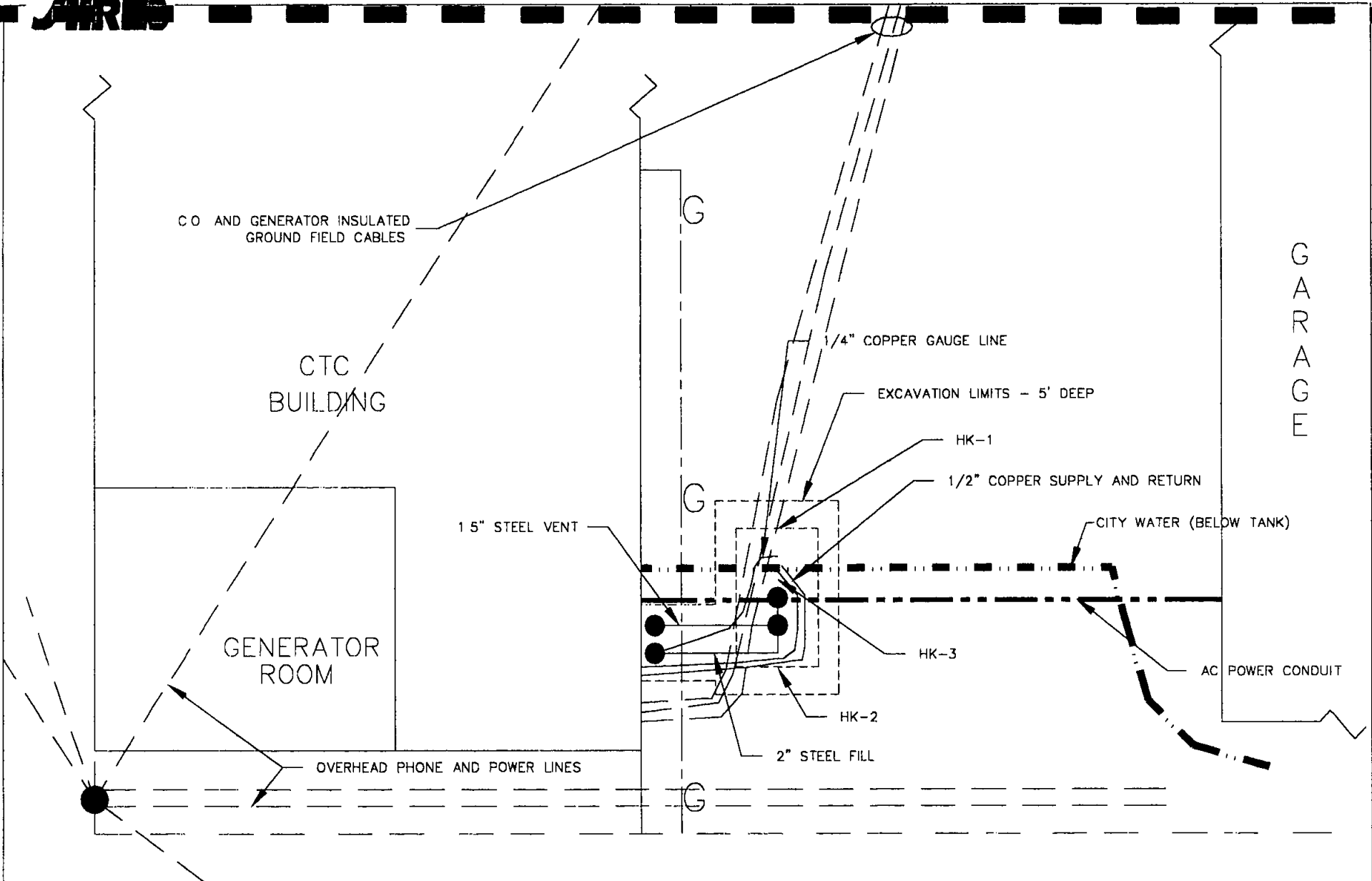
SCALE 1:24 000



HALLOCK, MN 7.5' QUADRANGLE
KITTSOON COUNTY
US DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY
1974
CONTOUR INTERVAL 5 FEET

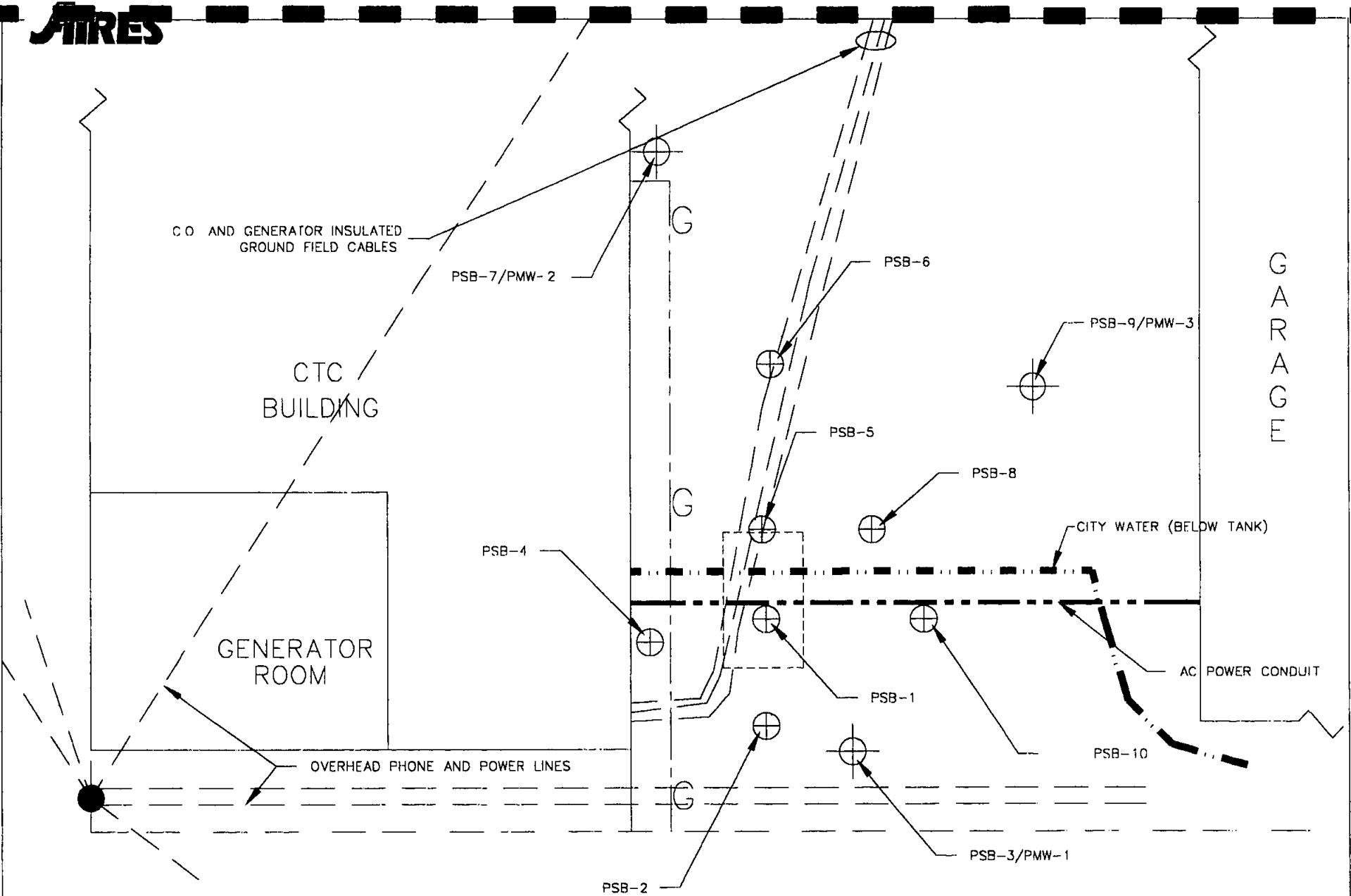


GTE - HALLOCK, MINNESOTA	
FIGURE 1b	
SITE TOPOGRAPHIC MAP	
SCALE: 1:24000	BY: ER
PROJECT: 96-6176	DATE: 8/6/96



	<u>HK-1</u>	<u>HK-2</u>	<u>HK-3</u>
LOCATION	N TANK BASE ● 6.5'	S TANK BASE ● 6.5'	MID TANK BASE. OBVIOUS CONTAMINATION
DRO (Mg/Kg)	3060	BDL	9060
BETX (ppm)	ETHYLBENZENE 0.0081 m & p-XYLENES 0.00155 o-XYLENE & STYRENE 0.0499	BDL	ETHYLBENZENE 1.60 o-XYLENE & STYRENE 4.12 m & p-XYLENES 10.3

GTE -HALLOCK, MINNESOTA	
FIGURE 2	
SITE LAYOUT PLAN	
SCALE: 1" = 5'	DRAWN BY: BP
PROJECT: 96-6176	DATE: 8-19-96



	PROPOSED SOIL BORING LOCATION
PSB-1	
	PROPOSED MONITORING WELL LOCATION
PMW-1	

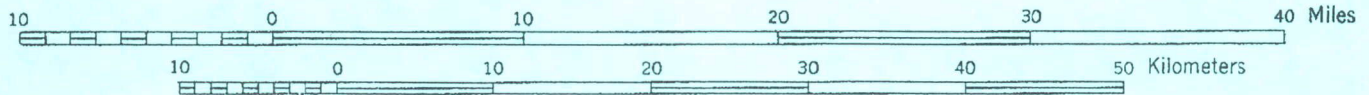


GTE - HALLOCK, MINNESOTA	
FIGURE 2A	
PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS	
SCALE: 1" = 5'	DRAWN BY: BP
PROJECT: 96-6176	DATE: 8-19-96



Scale 1:500,000

1 inch equals approximately 8 miles



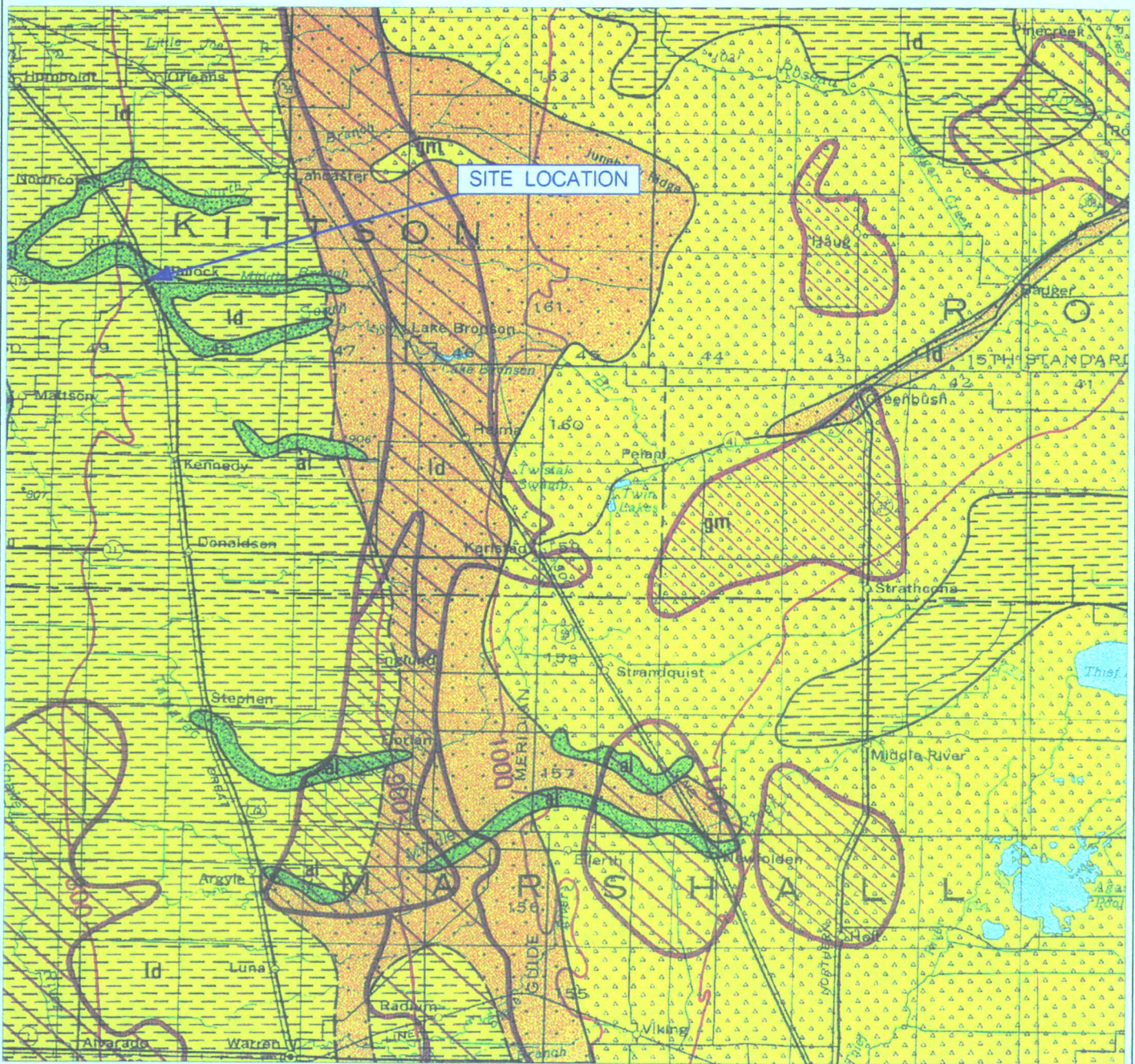
GLACIAL LAKE SEDIMENT—undivided as to moraine association.

- dlc Clay and clayey silt.
- dls Silt and fine sand.

Hobbs and Goebel, 1982,
Geologic Map of Minnesota

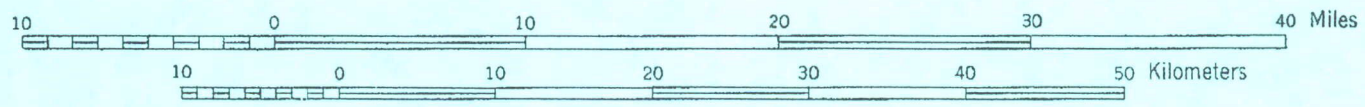


GTE - HALLOCK, MINNESOTA	
FIGURE 2b	
QUATERNARY GEOLOGIC MAP	
SCALE: 1:500,000	BY: ER
PROJECT: 96-6176	DATE: 8/6/96



Scale 1:500,000

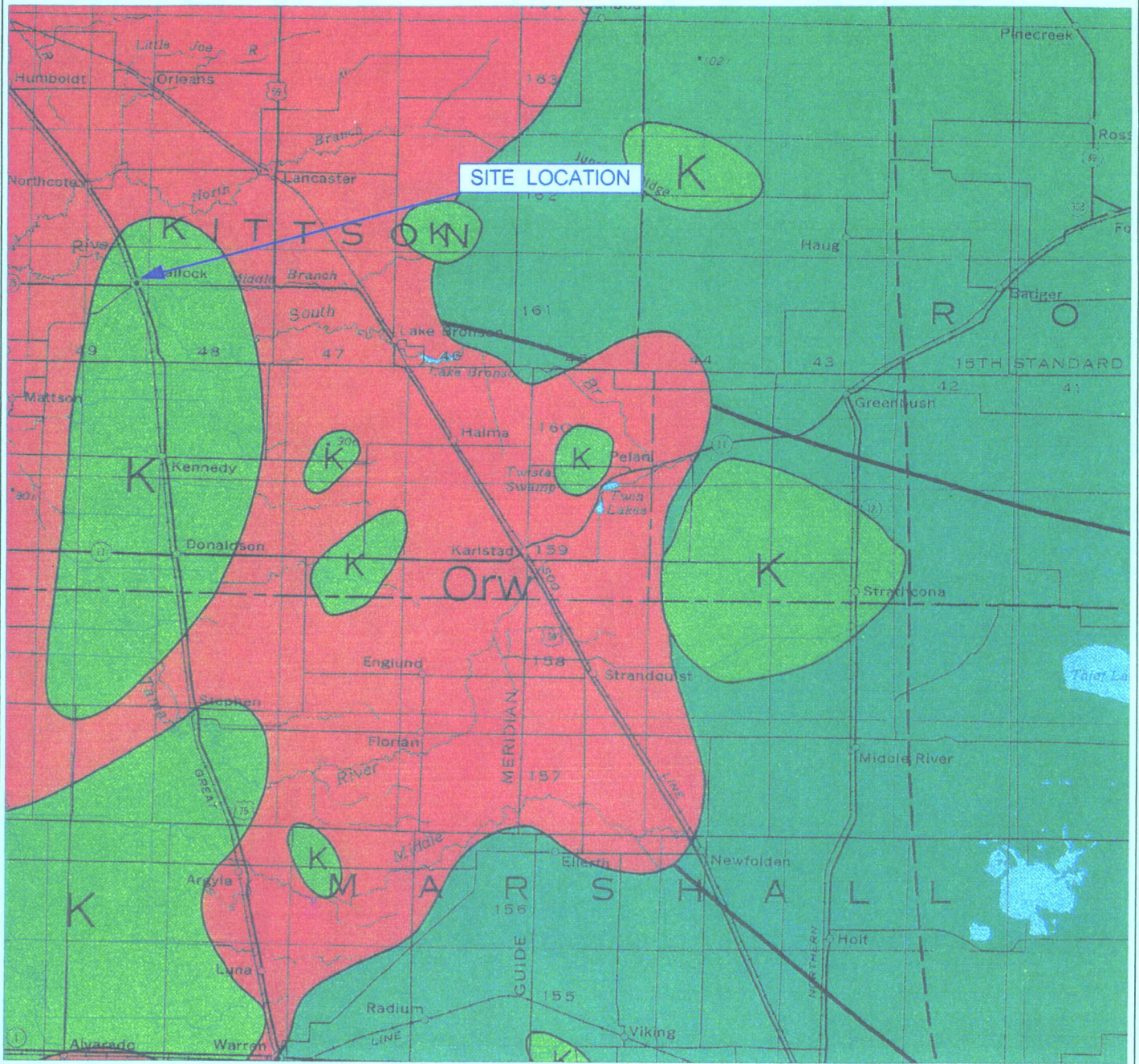
1 inch equals approximately 8 miles



Kanivetsky, 1979, Hydrogeologic Map of Minnesota

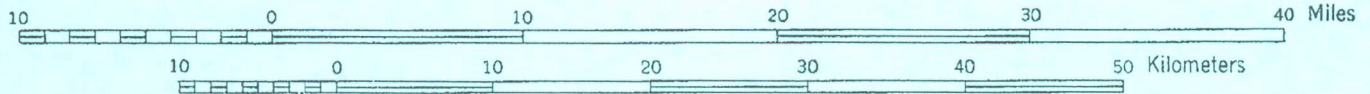


GTE - HALLOCK, MINNESOTA	
FIGURE 2c	
QUATERNARY HYDROGEOLOGIC MAP	
SCALE: 1:500,000	BY: ER
PROJECT: 96-6176	DATE: 8/6/96



Scale 1:500,000

1 inch equals approximately 8 miles



K
Cretaceous Aquifer
 Sandstone, quartzose, fine- to coarse-grained; generally near the base of a dominantly shale-siltstone sequence; commonly overlies a deeply weathered saprolitic zone in crystalline rocks.

Orw
Red River - Winnipeg Aquifer
 Limestone, oolitic limestone, wuggy thin shale partings, sandstone, fine- to medium-grained quartzose, friable or moderately cemented with calcite (Middle Ordovician age).

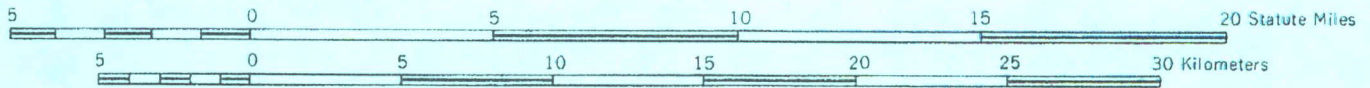
Kanivetsky, 1978, Hydrogeologic Map of Minnesota



GTE - HALLOCK, MINNESOTA	
FIGURE 2d	
BEDROCK HYDROGEOLOGIC MAP	
SCALE: 1:500,000	BY: ER
PROJECT: 96-6176	DATE: 8/6/96



Scale 1:250,000



CONTOUR INTERVAL 50 FEET



Cretaceous rocks, undivided
 Dominantly light olive-gray to medium- and dark-gray shale. Bottom of sequence contains beds of white, calcareous to quartzitic sandstone and scattered thin layers of lignite. Maximum known thickness 15 meters (50 feet).

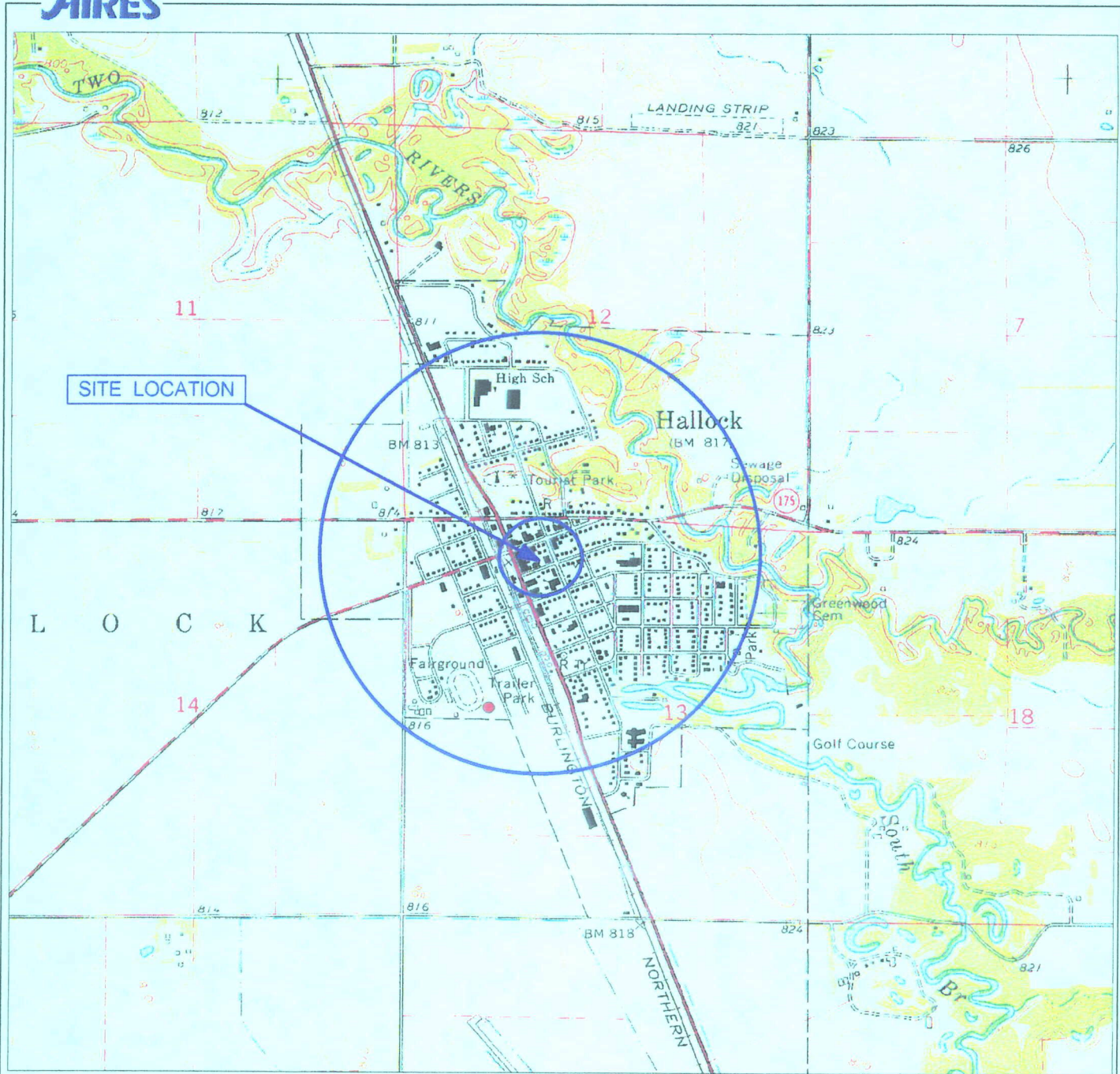


Hallock red beds
 Dominantly pale reddish-brown, dolomitic shale with upper beds of yellowish-gray, cherty dolostone. Maximum known thickness 91 meters (300 feet).

Green, John C., 1982, Geologic Map of Minnesota, Roseau Sheet, Bedrock Geology

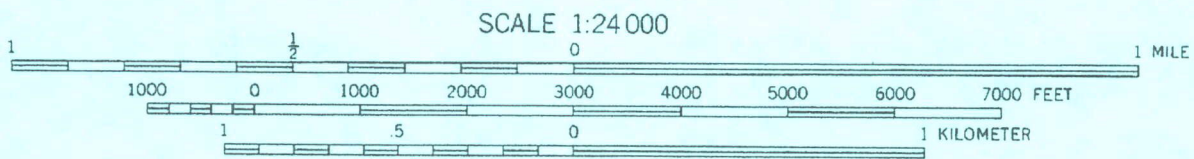


GTE - HALLOCK, MINNESOTA	
FIGURE 2e	
BEDROCK GEOLOGY	
SCALE: 1:500,000	BY: ER
PROJECT: 96-6176	DATE: 8/6/96



● = WELL LOCATION

○ = 500-FOOT AND 1/2-MILE RADII



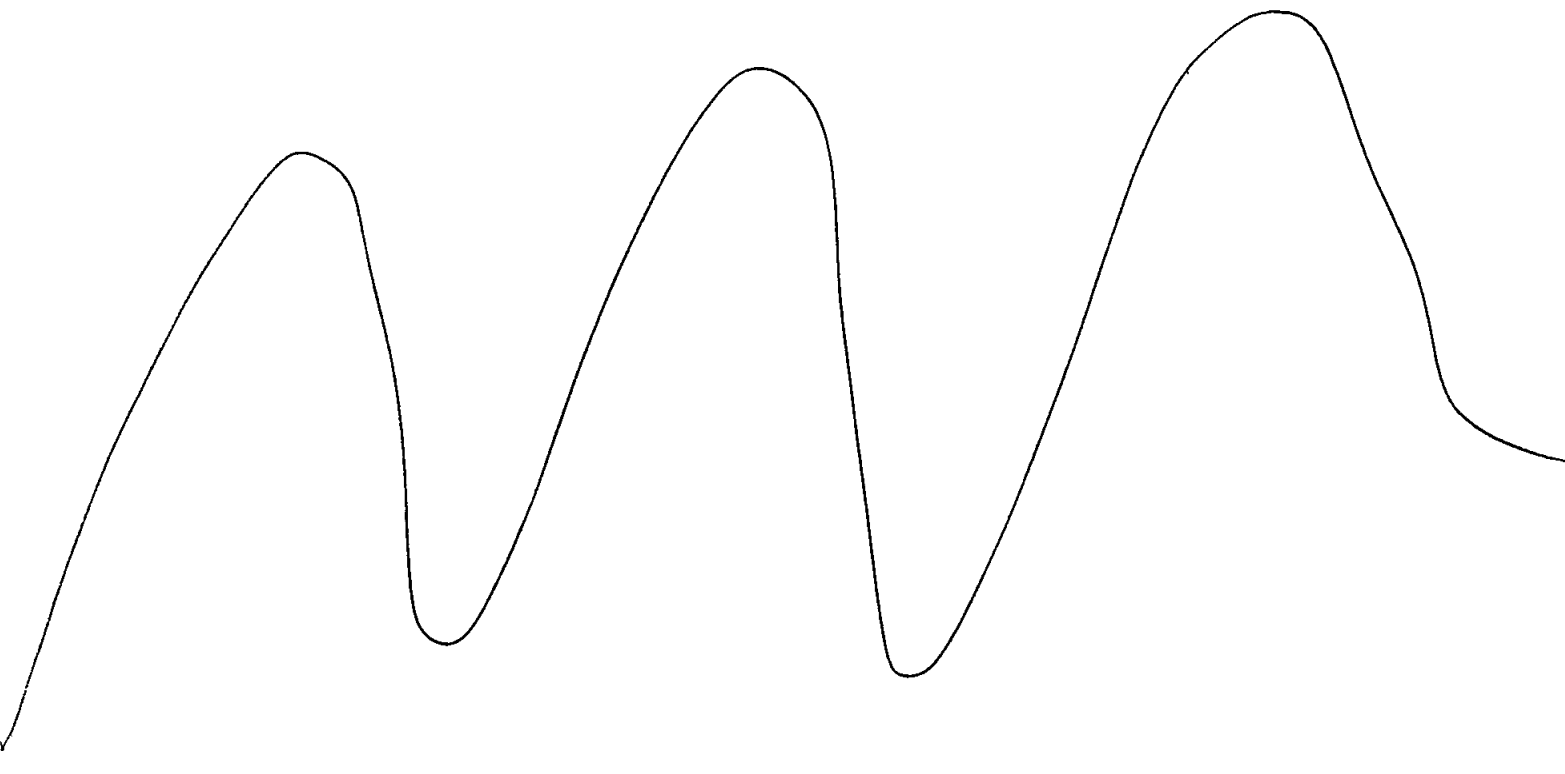
HALLOCK, MN 7.5' QUADRANGLE
 KITTSON COUNTY
 US DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY
 1974
 CONTOUR INTERVAL 5 FEET



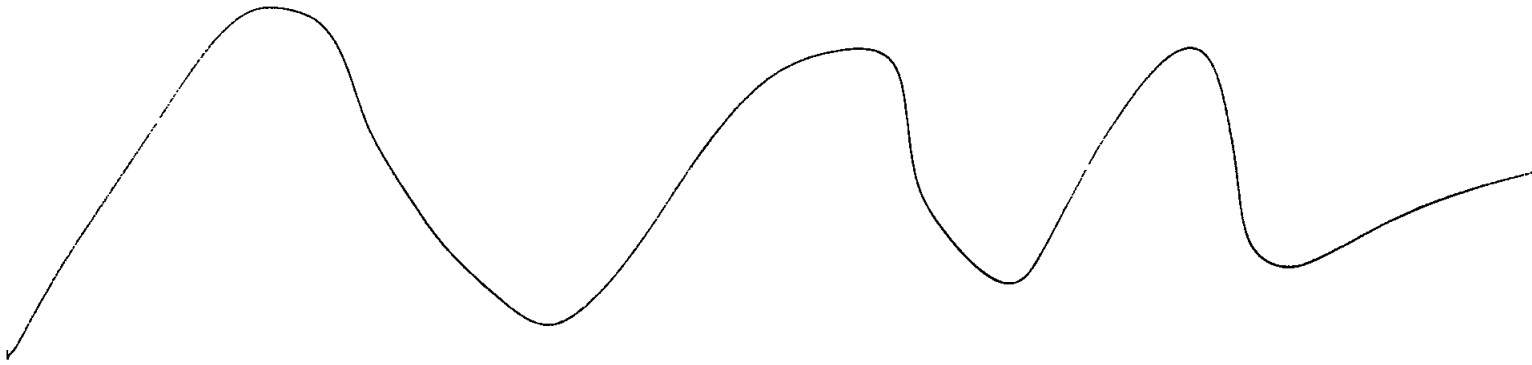
GTE - HALLOCK, MINNESOTA	
FIGURE 4	
WELL LOCATION MAP	
SCALE: 1:24000	BY: ER
PROJECT: 96-6176	DATE: 8/6/96

APPENDIX A

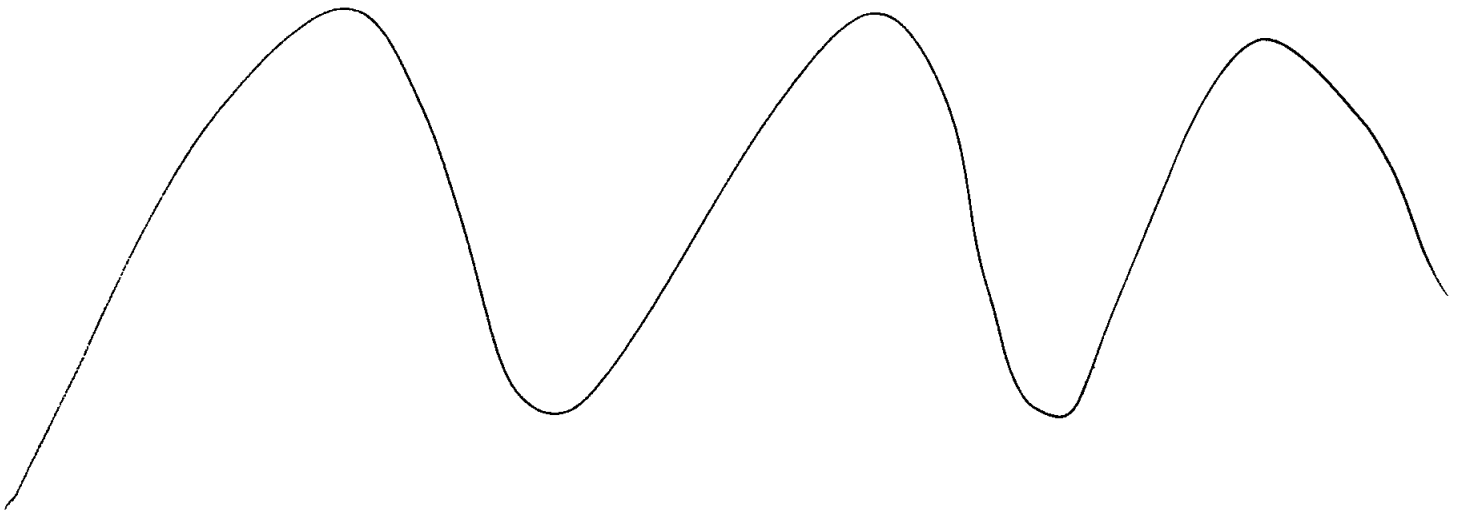
EXCAVATION REPORT WORKSHEET FOR PETROLEUM RELEASE SITES



APPENDIX A - Excavation Report for Petroleum Release Sites

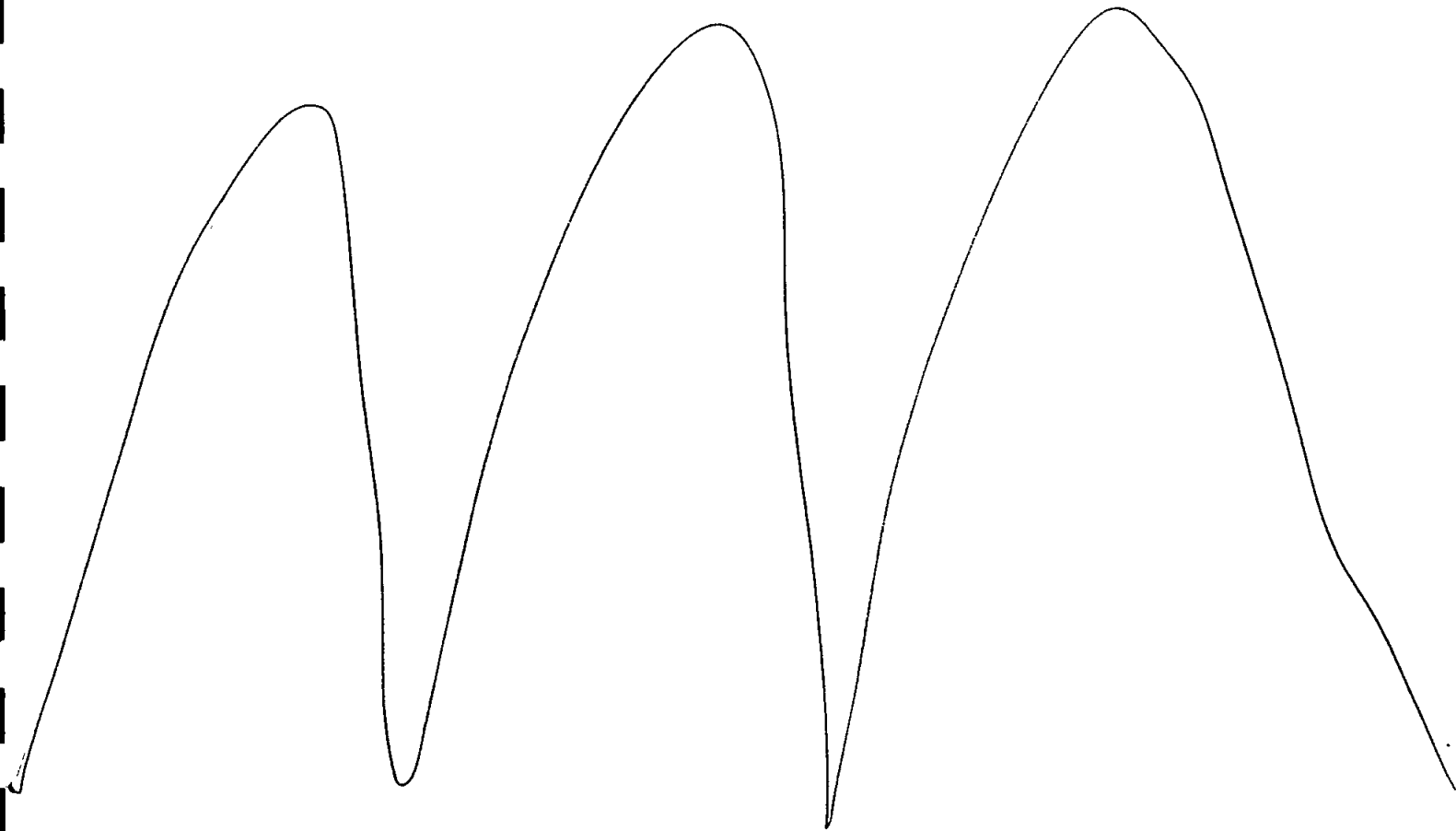


Soils were not removed from the GTE facility in Hallock. Therefore, an Excavation Report Worksheet was not necessary.



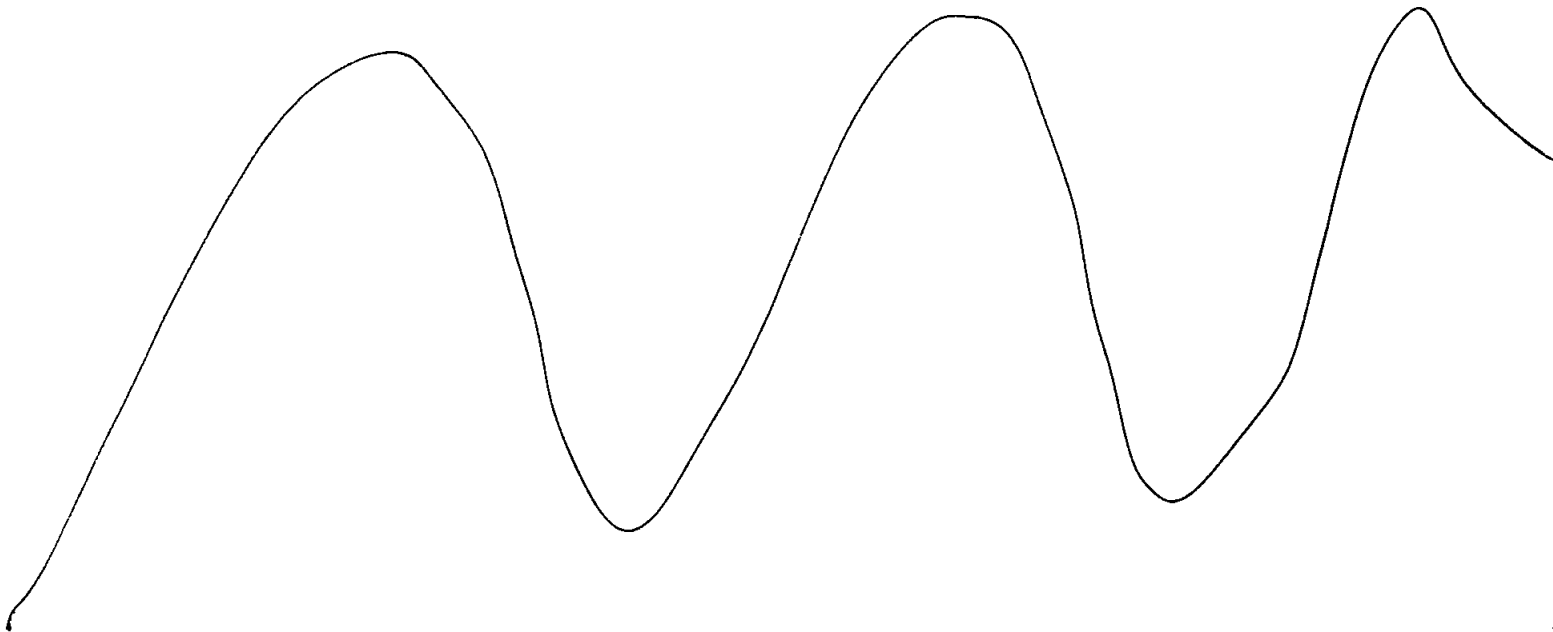
APPENDIX B

LABORATORY ANALYTICAL REPORTS FOR SOIL AND GROUNDWATER



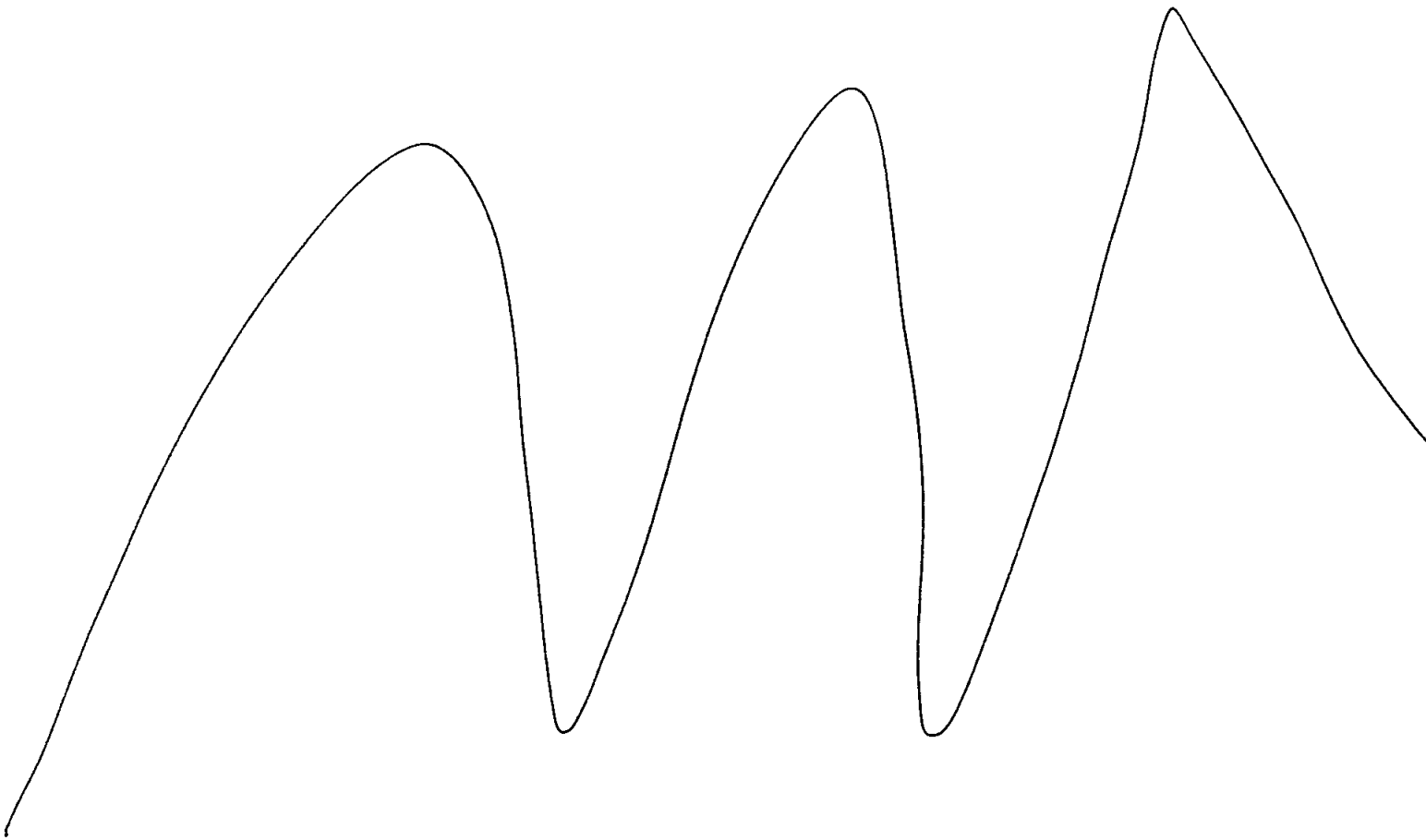
APPENDIX B - Laboratory Analytical Reports for Soil and Groundwater

A subsurface investigation was not able to be conducted at the facility in Hallock; laboratory analytical reports are not available



APPENDIX C

METHODOLOGIES AND PROCEDURES



APPENDIX C - Methodologies and Procedures

The presence of overhead and underground utilities severely restricted the subsurface investigation activities at the GTE facility in Hallock. Minnesota Department of Health restrictions on the location of borings and monitoring wells relative to underground and overhead utilities rendered it impossible to conduct drilling activities. No borings were able to be advanced at the site. In an effort to assess the site as accurately as possible, research was conducted using all available information and maps. All information required in the Remedial Investigation Report Form was collected wherever possible.

References

The source used for each figure is listed on the figure itself. Information regarding the water supply wells and nature of the municipal water supply was obtained from Mr. Hank Noel of the City of Hallock. LUST sites were obtained from the Leaking Underground Storage Tank Section of the Minnesota Pollution Control Agency.

Hydraulic Conductivity

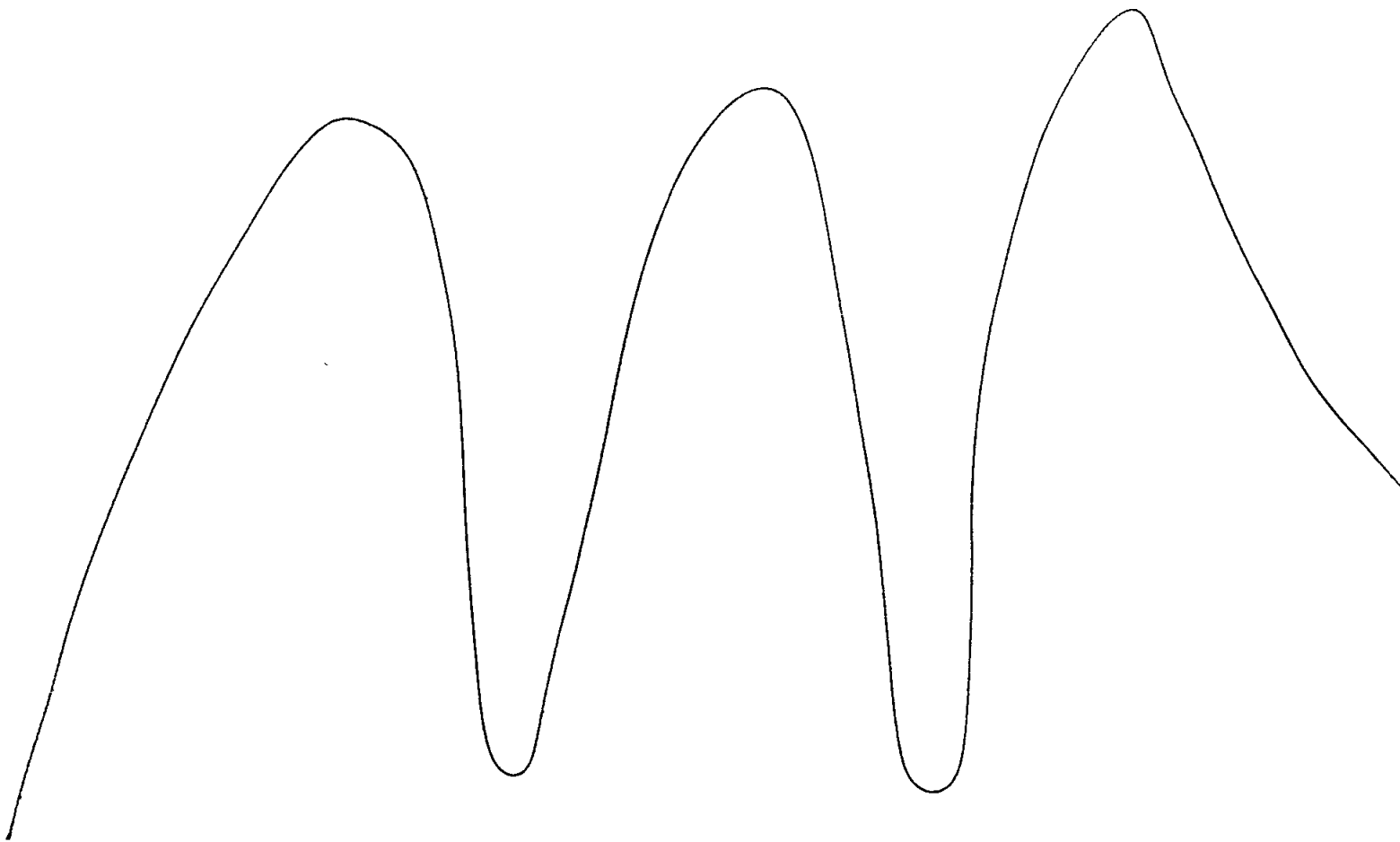
The hydraulic conductivity at the subject site is an estimate. The materials referenced for this information are as follows:

Fetter, C W , Applied Hydrogeology, 3rd ed., Macmillian College Publishing Company, New York, 1994.

Heath, Ralph C , Basic Ground-Water Hydrogeology, USGS Water-Supply Paper 2220, U S Department of the Interior, 1993

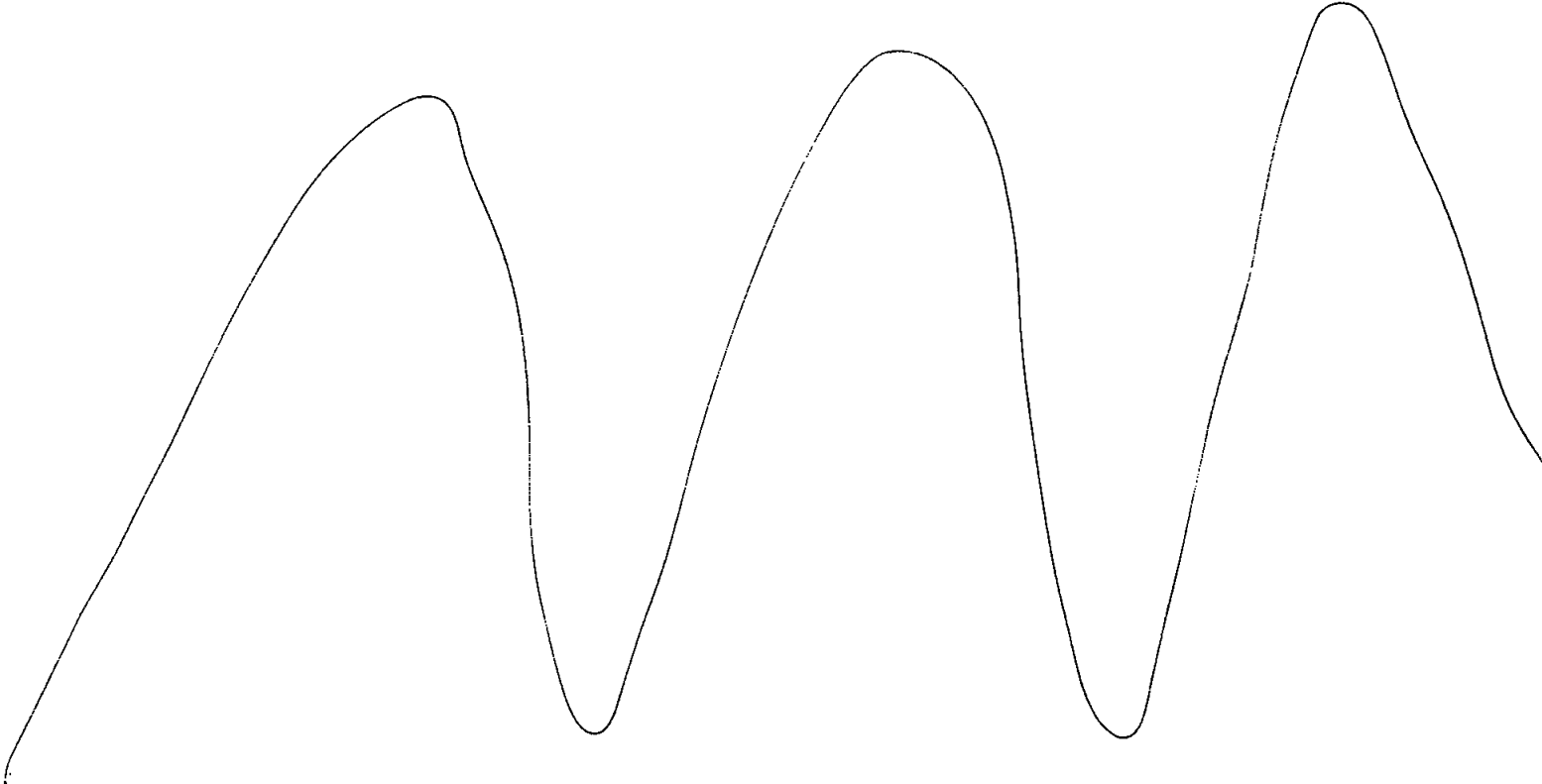
APPENDIX D

SOIL BORING LOGS



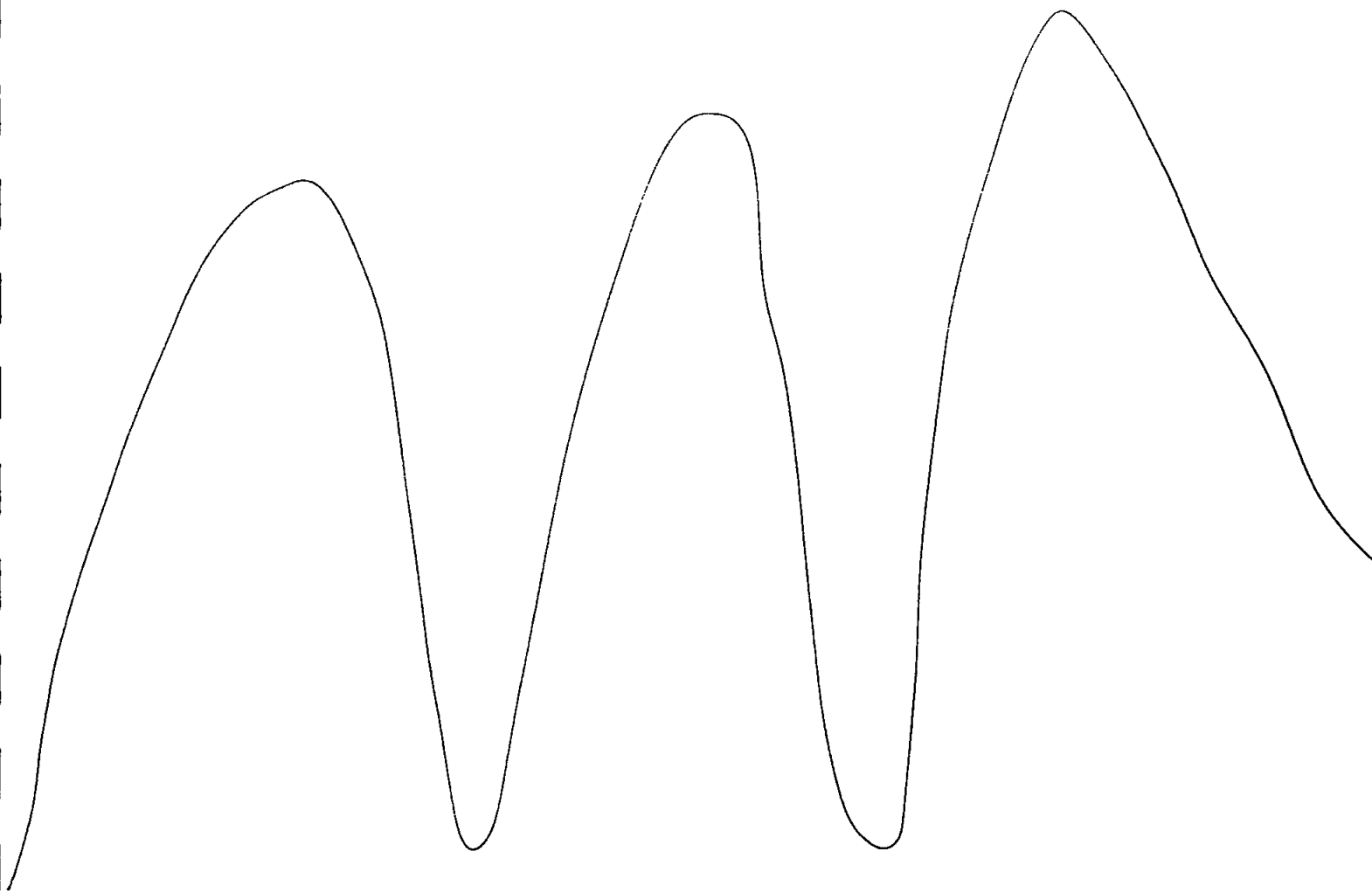
APPENDIX D - Soil Boring Logs

Due to the extensive presence of overhead and underground utilities, soil borings were not advanced at the GTE facility in Hallock, Minnesota



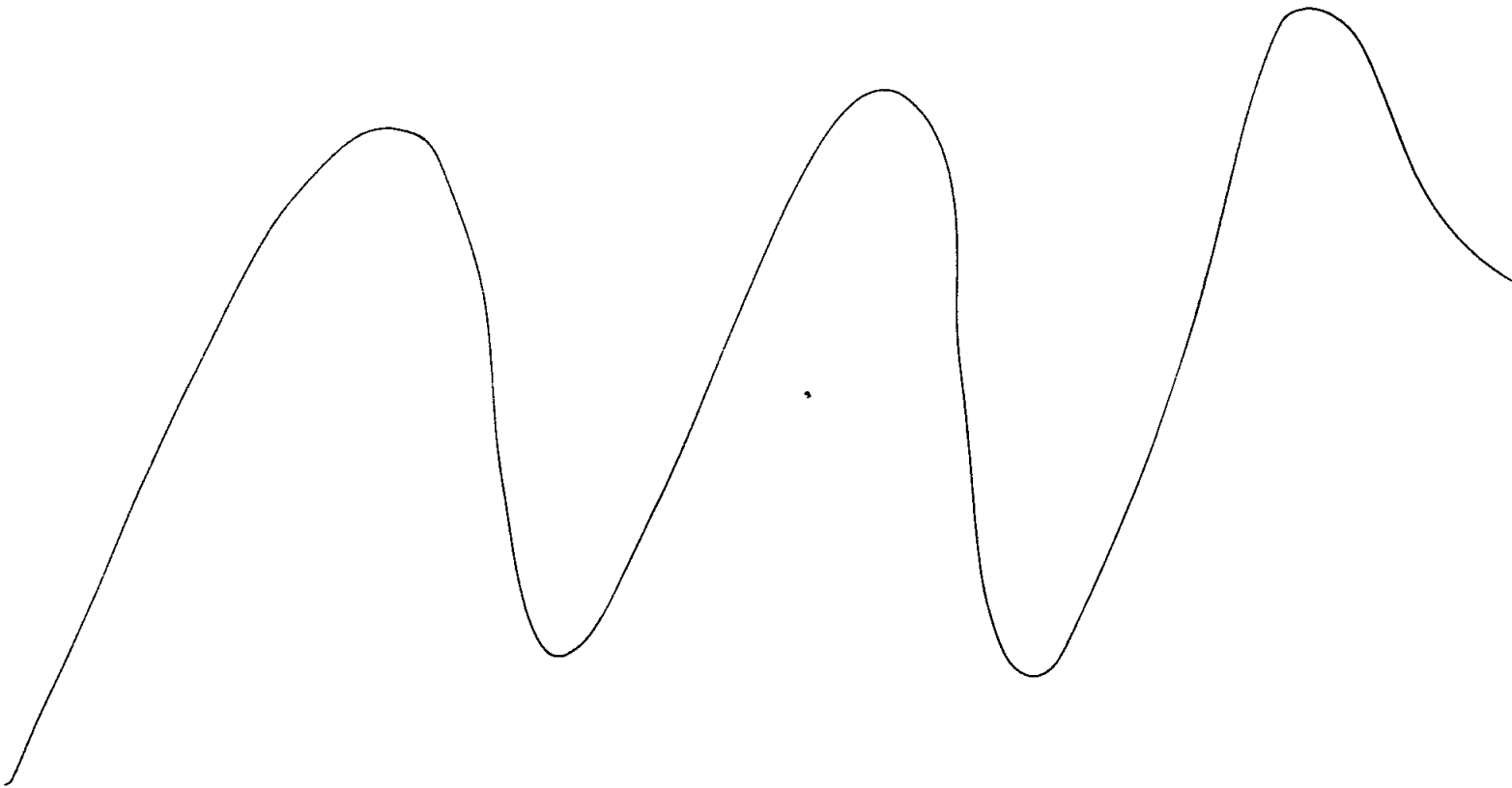
APPENDIX E

MONITORING WELL CONSTRUCTION DIAGRAMS
MINNESOTA DEPARTMENT OF HEALTH WELL RECORDS



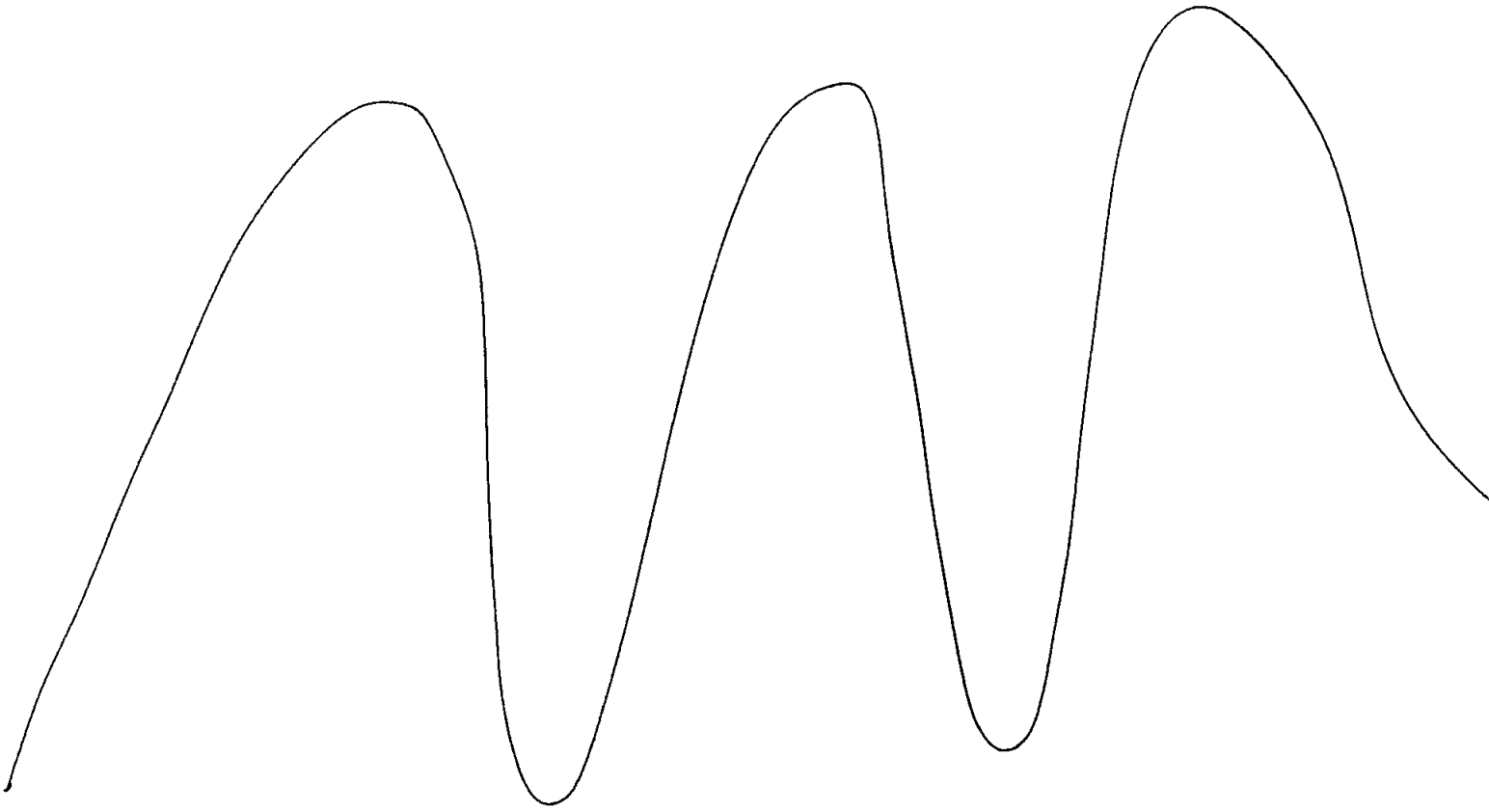
APPENDIX E - Monitoring Well Construction Diagrams & MDPH Well Records

Monitoring wells were not installed at this facility.



APPENDIX F

WATER SUPPLY WELL LOGS



ONR 35001

21596

MINNESOTA
Revised 9/1/80

U S DEPT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

WELL NO 161N49W13BCD01

Recorded by HW.A
from Brietkrietz schd.
GENERAL SITE DATA (0)

SITE SCHEDULE

Date _____

Site Ident No 484605096565201 R-0* T-A* Site-Type 2-W* Data Reliability 3-C U L M*

Project No. 5- District 6-27* State 7-27* County Witson 8-69*

Latitude 9-48:46.06* Longitude 10-09:56.52* Lat-Long Accuracy 11-S F T M* Reporting Agency 4-U.S.G.S.*

Local Number 12-161N49W13BCD01* Location Map 14-HALLOCK

Altitude 16-815* Method of Measurement 17-A L M* Accuracy 18-3* Map Scale 15-24000*

Hydrologic Unit (OWDC) 20-09020312* Date of First Construction 21-08/01/1972*

Depth of Hole 27-529* Depth of Well 28-574* Source of Depth Data 29-S* Topo Setting 19-*

Water Level 30-1.02.05* Date Measured 31-10/05/1972* Source 33-S* Method of Measurement 34-G* Site Status 37-*

Source of Geohydrologic Data 36-S* Pump Used 35-N* Use of Site 23-U* Second Use of Site 301-0* Use of Water 24-U*

OWNER IDENTIFICATION (1)

R-158* T-A D M* Date of Ownership 159-08/01/1972*

Name Last 161-U.S.G.S.HALLOCK First 162-A.R.T.E.S.T.E.S.T.* Middle Initial 163-*

Hallock Test Hole

ADDRESS _____ PHONE _____

OTHER SITE IDENTIFICATION NUMBERS (1)

R-189* T-A D M* Ident 190-* Assigner 191-M.N.U.N.I.Q.U.E.N.O.*

New Card Same R & T Ident 190-* Assigner 191-*

WELL CONSTRUCTION DATA (1)

R-581* T-A D M* Entry No 59-1* Date of Construction Completion 60-08/01/1972* Source of Const Data 64-D*

Name of Contractor/Driller 63-KEYS Method of Construction 65-H* Finish 66-S* Type of Seal 67-B C G Z*

Bottom of Seal 68-4.05* Method of Development 69-* Number of Hours in Development 70-*

CASING SCHEDULE (2)

R-76* T-A D M* Construction Entry No 59-1* New Card for Each Casing With Same R, T & Field 59

Top of Casing Segment Below LSD	Bottom of Casing Segment Below LSD	Diameter of Casing Segment	Casing Material
<u>77# 0.*</u>	<u>78-223.0*</u>	<u>79# 5.*</u>	<u>80-S*</u>
<u>77# -4.*</u>	<u>78-504.0*</u>	<u>79# 2.*</u>	<u>80-S*</u>
<u>77# .*</u>	<u>78-.*</u>	<u>79# .*</u>	<u>80-.*</u>

OPENINGS SCHEDULE (2)

R-82* T-A D M* Construction Entry No 59-1* (Openings Data)

Top of Section Below LSD	Bottom of Section Below LSD	Type of Openings	Type of Material	Diameter of Open Section	Width of Opening
<u>83# 50.4.*</u>	<u>84-514.*</u>	<u>85-S*</u>	<u>86-*</u>	<u>87-2.*</u>	<u>88-.030*</u>

PRODUCTION DATA (1)

R-134 146* T-A D M* Entry No 147-* Date 148- / / *

Discharge 150-* Method of Measurement 152-* Draw-down 309-* Production Level 153-*

Source of Data 155-* Pumping Period 157-* Specific Capacity 272-* Static Level 154-*

LIFT DATA (1)

R-42* T-A D M* Type of Lift 43-A B C J P R S T U Z* Entry No 254-*

Pump Intake Setting 44-* Type of Power 45-* Date 38- / / * Horsepower 46-*

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

MASTER CARD

Record by Brietkrietz Source of data USGS, MGS Date 10-26-72 Map Hallock 15min.
 State Minnesota County 27 Kittson 35
 Latitude: 48° 46' 06" N Longitude: 096° 56' 52" Sequential number: 1
 Lat-long accuracy: 2 r 161 s, R 49 E Sec 13 SE t, SW t, NW t
 Local well number: 161 49 13 BCD 1 Other number: 3 & M
 Local use: KEYS WELL CO Owner or name: Hallock Test
 Owner or name: U S GEOL SURVEY Address: _____
 Ownership: County, Fed (F), City, Corp or Co, Private, State Agency, Water Dist (F)
 Use of Air cond, Bottling, Comm, Devater, Power, Fire, Dom, Irr, Med, Ind, P S, Rec, water: (U)
 Stock, Instit, Unused, Repressure, Recharge, Desal-P S, Desal-other, Other (U)
 Use of well: Anoda, Drain, Seismic, Heat Res, (Φ), Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed. (Φ)
 DATA AVAILABLE: Well data (1) Freq. W/L meas.: Weekly (W) Field aquifer char. ()
 Hyd.-lab. data: _____
 Qual. water data, type: (C)
 Freq. sampling: _____ Pumpage inventory: (Φ) yes no. period: _____
 Aperture cards: _____ yes ()
 Log data: _____ (G R)

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 529 ft 529 Meas. rept. accuracy (4)
 Depth cased: 504 ft 504 Casing type: steel Diam. in (2)
 Finish: porous concrete, gravel w. (perf.), (screen), gravel w. gallery, horiz. open end, (S)
 Method drilled: air rot, (A) bored, (B) cable, (C) dug, (D) jetted, (H) percuss, (J) air rot., (P) reverse, (R) percuss, (T) rotary, (V) driven, (W) wash, (X) other, (H)
 Date drilled: 8-1-72 972 Pump intake setting: _____ ft
 Driller: Keys Well Co. ST. Paul address _____
 Lift (type): air, bucket, cent, jet, (A) multiple, (B) multiple, (C) multiple, (J) multiple, (L) multiple, (M) multiple, (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (V) other, (W) other, (X) other, (H) Deep () Shallow ()
 Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. () Trans. or meter no. _____
 Descrip. MP Center pressure gauge 4.45 ft above LSD, Alt. MP ()
 Alt. LSD: 815 Accuracy: ()
 Water Level +102.05 ft above MP; Ft below LSD +102 Accuracy: (A)
 Date meas: 10-5-72 072 Yield: 1 spm (1) Method determined (1)
 Drawdown: _____ ft Accuracy: _____ Pumping period: _____ hrs
 QUALITY OF WATER DATA: Iron _____ Sulfate _____ Chloride _____ Hard. _____
 Sp. Conduct _____ K x 10 () Temp. _____ °F Data sampled _____
 Taste, color, etc. _____

Well No.

Well No. 161.49.13 bed1

Latitude-longitude

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD

Physiographic Province:

1:2

Section:

B

Drainage Basin:

3:0:W

Subbasin:

Topo of well site: (D) depression, stream channel, dunes, frst, hilltop, sink, swamp. (E) offshore, pediment, hillside, terrace, undulating, valley flat

MAJOR AQUIFER: Ordovician Middle Winnipeg

Lithology: Sandstone Origin: Marine Aquifer Thickness: 158 ft

Length of well open to: 109 ft Depth to top of: 357 ft

MINOR AQUIFER: Lithology: Origin: Aquifer Thickness: ft

Length of well open to: ft Depth to top of: ft

Intervals Screened: 504-514

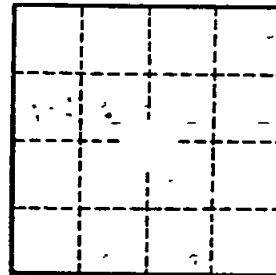
Depth to consolidated rock: 215 ft Source of data: C

Depth to basement: 515 ft Source of data: C

Surficial material: Clay Infiltration characteristics: H.P.

Coefficient Trans: spd/ft Coefficient Storage: ft

Coefficient Perm: gpd/ft² Spec cap: gpd/ft Number of geologic cards: ft



Well No.

223' of 5" csg cemented in 20 sacks cemen

504' of 2" galvanized pipe

10' screen #30 slot from 504'-514'

514' total of 2"

514'-529' open hole in greenstone

filled with (2) 5 gal buckets of
gravel.

405' - 514' Gravel packed with #30 filter
sand (Eau Claire).

405' - to surface Cemented between 5" & 2" casing
with 35 sacks of cement.

HALLOCK TEST HOLE SW1/4 NW 1/4 SEC. 13 T. 161 N., R. 49 W.

The first stratigraphic test hole of the Northwestern Minnesota drilling program was begun July 23, 1972, and was drilled to a total depth of 529 feet. It was completed on August 1, 1972. Two-inch galvanized tubing will be run in this test hole and it will be developed as an observation well for the U.S. Geological Survey.

The lithological log for the well follows:

Pleistocene glacial sediments (0-215 ft., 215 ft. thick)

0-62 ft. Dark gray lacustrine clay

62-215 ft. Gray, clayey glacial till with minor sand and numerous pebbles that are predominantly granite and limestone

Hallock red beds (215-357 ft., 142 ft. thick)

215-223 ft. Soft, light gray claystone grading down into red brown claystone

Five inch casing was set at 223 ft. with 20 sacks of cement

223-247 ft. Soft red brown to light gray claystone with minor medium to dark gray claystone

Core 247-262 ft. (79% recovery)

3 ft. 4 in. to 3 ft. 5 in. of dark to medium gray, fissile shale

3 ft. 11 in. of interbedded sandstone and shale. Sandstone is dense, fine to medium grained, quartzitic, with dense carbonate cement. Shale is medium gray, sandy and fissile

4 ft. 7 in. of light gray, chalky, vuggy limestone

Core 262-273 1/2 ft. (17.4% recovery)

4 1/2 in. of white earthy limestone

1 ft. 3 1/2 in. of light red brown to light green gray mottled claystone

4 in. of white earthy limestone

Core 273 1/2-285 1/2 ft. (58.4% recovery)

Material very soft and broke up in the core barrel.

5 ft. 6 in. to 6 ft. of green gray claystone with minor gray chert

1 ft. of red brown claystone with gray chert

Resumed drilling because of poor core recovery

285-291 ft. Medium gray claystone

291-357 ft, Red brown claystone

Winnipeg Formation (357-515 ft., 158 ft. thick)

357-360 ft. Light gray, fine to medium grained, quartz sandstone with interbedded green gray claystone

Core 360-377 ft. (35.3% recovery)

5 ft. 8 in. of soft, red brown claystone

4 in. of light gray, fine to medium grained, quartz sandstone

Red brown claystone may be material which caved to bottom of hole and squeezed into core barrel.

Core 377-382 ft. (8% recovery)

4-5 in. of light gray, fine to medium grained, quartz sandstone

Resumed drilling

382-410 ft. Light gray, very friable, fine to medium grained, quartz sandstone

410-500 ft. Soft gray green and variegated claystone. Variegated claystone is light green, maroon and yellow brown

in color. Sand stringers in claystone noted in basal part of interval, especially in 470-475 ft. and 490-500 ft. intervals

500-510 ft. Soft gray green claystone with stringers of medium to very coarse sandstone. Sandstone is mostly quartz with minor jasper and white quartzitic siltstone grains. Minor amounts of sandstone cemented with dense calcite cement

510-515 ft. Blue gray, very plastic clay. (Possibly weathered zone at top of greenstone)

Precambrian basement rock (515-529 ft., 14 ft. drilled)

515-520 ft.. Greenstone

Core 520-529 ft. (94.4% recovery)

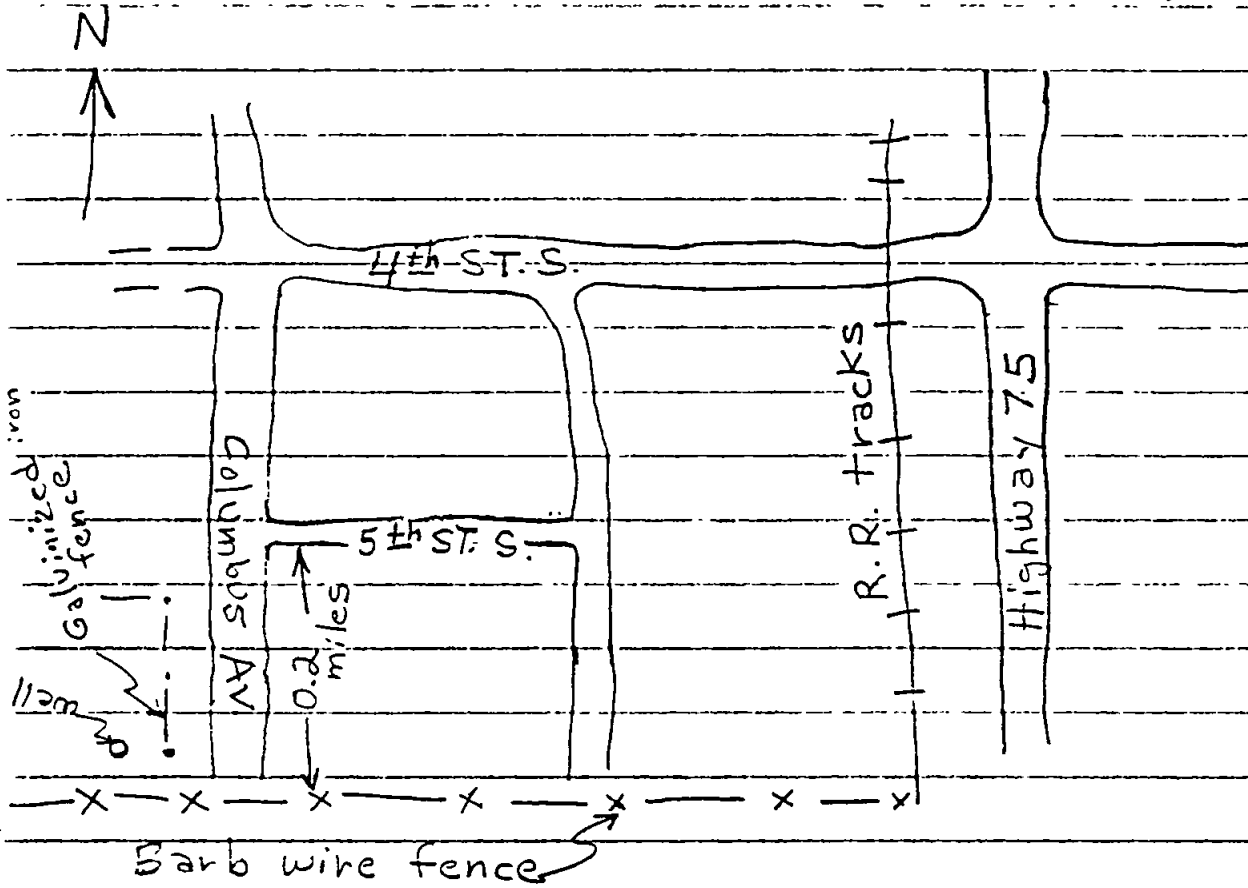
8 ft. 6 in. of greenstone which possesses bedding that is inclined about 50°. Rock is a tuffaceous sandstone. It contains numerous very thin quartz veins. No sulfides were observed.

No gypsum was seen in the Hallock red bed sequence. Paleontologic analysis will indicate whether or not these red beds are the same age as those containing gypsum in Manitoba.

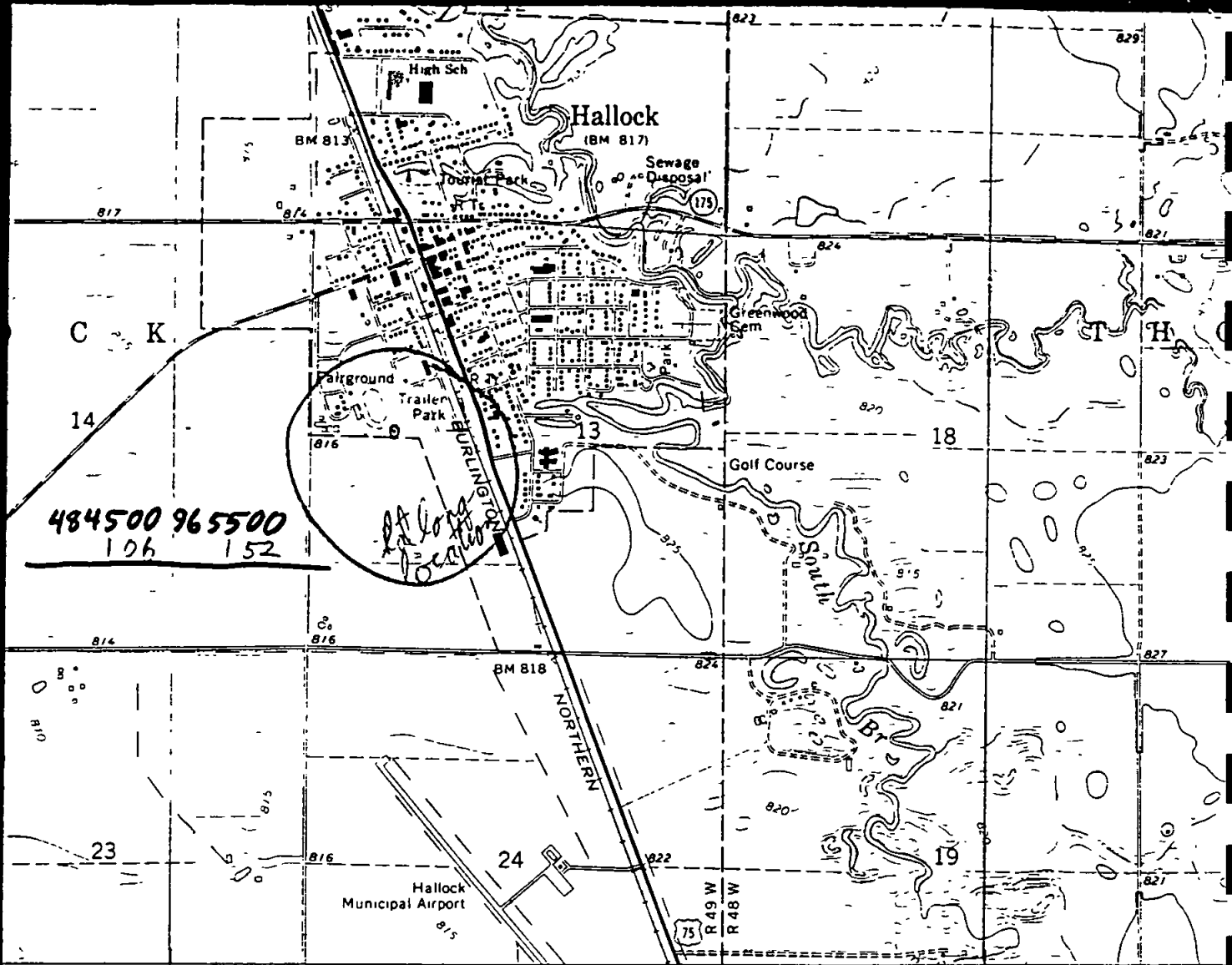
Further petrographic analysis will be made of the cores from the Hallock red bed sequence and the Precambrian greenstone.

Coring was not attempted for much of the Hallock red bed and Winnipeg sandstone and shale sequence because the formations were very soft and sticky and washed away or plugged the core barrel when coring was attempted.

161N 49W 13 BCD 01



Well located SE corner of Fairgrounds

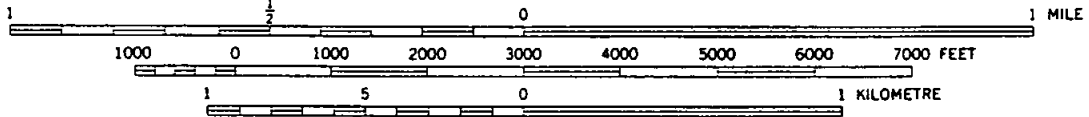


484500 965500
106 152

A Long Beach

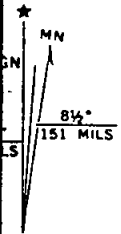
57'30" 651 (KENNEDY) 6681 III NW KENNEDY 8 MI WARREN 41 MI 653 55' 6

SCALE 1 24 000



CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Hallock Quad



974 MAGNETIC NORTH
CENTER OF SHEET



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U S GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

109

WELL NO.: 35001

IXFM4: WELL ADDRESS

U.L.NO. 35 4
CO FORM

NUMBER STREET NO./NAME ROAD DIRECTION
OR ROUTE NAME IDENTIFIER

CITY ZIP

USER DEF.1(A/N): USER DEF.2(I):

IXFM7: REMARKS

U.L.NO. 35 7
CO FORM

CASED: 5", 0-223' AND 2", 0-504'. SCREENED: 504-514'.

REMARKS location SE corner farmhand

BWELL NO.: 35001

WI/WL WLFM1: PRINCIPAL DATA

215966
 N.NO. 35 CO 1 FORM
 161 OWNERSHIP 49 RANGE 13 SECTION BCD SUBSECTION QUAD 815 ELEV
 529
 514
 DEPTH OWINOWIN OWIN OWIN
 RILLED BEDROCK FIRST AQUIFER TOP BOTTOM
 ELEVATON BEDROCK OPEN HOLE UNIT

SOURCE BY METHOD
GEOLOGIC INTERPRETATION

WI/WL WLFM2: WELL CONST. 1.

UN.NO. 35 CO 2 FORM DRILLING: METHOD: M FLUID: _____
 CASING: MATERIAL: 8 JOINTING: _____ TOP: 4 DRIVE SHORE: _____
 CASING 1: 5 in. FROM: 0 TO: 223 ft. OPEN HOLE 1: ___ in. TO: ___
 CASING 2: 2 in. FROM: 0 TO: 504 ft. OPEN HOLE 2: ___ in. TO: ___
 CASING 3: ___ in. FROM: _____ TO: _____ ft. OPEN HOLE 3: ___ in. TO: ___
 _____ : ADDITIONAL CASING INFO. _____ : CASING TYPE

WI/WL WLFM3: SCREEN.

N.NO. 35 CO 3 FORM SCREEN PRESENT: Y FROM: _____ TO: _____
 OPEN HOLE IF NOT SCREENED
 MAKE: _____ TYPE: _____ DIAM: 2
 SLOT/GAUZE: 30 LENGTH: 10 TOP: 504 BOTTOM: 514
 SCREEN 1. SETTING
 SLOT/GAUZE: _____ LENGTH: _____ TOP: _____ BOTTOM: _____
 SCREEN 2. SETTING

WELL NO.: 35001

CWI/WL WLFM4: PUMPAGE TEST

UN. NO. 35 CO 4 FORM

STATIC WATER LEVEL: 102.05 (above ground) DATE TESTED: 7/2 10 5

TEST 1: LEVEL: HOURS: GPM:
TEST 2: LEVEL: HOURS: GPM:
TEST 3: LEVEL: HOURS: GPM:

DRILLER'S NAME:

CWI/WL WLFM5: COMPLETION/GROUT

UN. NO. 35 CO 5 FORM

PORTLESS ADAPTOR: MAKE: MODEL:

BASEMENT OFFSET: >/= 1ft. ABOVE GRND.: 1 PLASTIC CASING PROJECT.:

GROUT 1: TYPE: G FROM: 0 TO: 405/564 AMOUNT: UNITS:
GROUT 2: TYPE: FROM: TO: AMOUNT: UNITS:
GROUT 3: TYPE: FROM: TO: AMOUNT: UNITS:

CWI/WL WLFM6: PUMP.

UN. NO. 35 CO 6 FORM

PUMP INSTALLED?: [check] DATE:

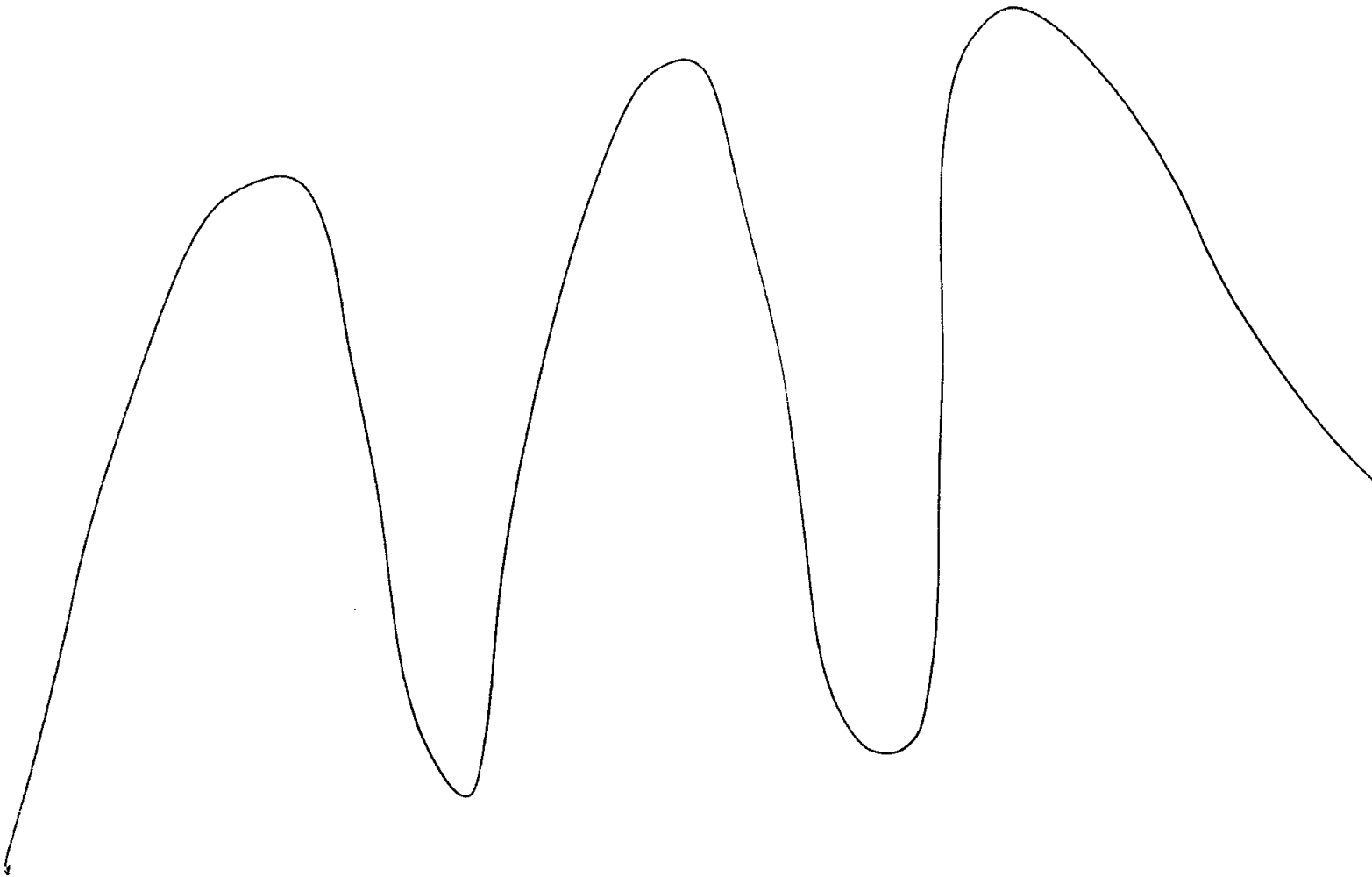
MAKE: MODEL:

H.P.: VOLTS: LENGTH: MATERIAL:
DROP PIPE

CAPACITY: PUMP TYPE:

APPENDIX G

LIST OF ADDRESSES



AUG 0 6 1996



ENVIRONMENTAL SERVICES, Limited

1550 HUBBARD • BATAVIA, IL 60510 • (708) 879-3006 • FAX (708) 879-3014

June 19, 1996

Mr. Hank Noel
City of Hallock
P.O. Box 336
Hallock, MN 56728

RE: List of addresses of city water customers

Dear Mr. Noel:

The purpose of this letter is to follow up the telephone conversation I had with you on June 17, 1996, regarding the city water customers in Hallock.

Our office is in the process of conducting a remedial investigation at a leaking underground storage site in Hallock. The investigation usually entails advancing soil borings and installing monitoring wells in order to collect and analyze soil and groundwater samples to characterize the extent of the release from the tank.

A report on the investigation is then submitted to the Minnesota Pollution Control Agency (MPCA). However, due to the extent of overhead and underground utilities, a subsurface investigation was not able to be conducted at the site. Therefore, it is necessary for our office to gather as much information as possible concerning the nature of the groundwater in the vicinity of Hallock.

Section 8 of the Remedial Investigation Report concerns well receptor information. The purpose of this section is to determine the risk imposed to private drinking water wells, municipal and industrial wells. In this section of the report, the MPCA requests "confirmation of status of water supply from the city utility billing department." I have enclosed a copy of Section 8 and the corresponding Appendix on which I have highlighted the specific request for your reference.

96-6176

AIRES

Mr. Hank Noel
June 19, 1996
Page 2

I contacted the MPCA on the afternoon of Friday, June 14, 1996, requesting that they state exactly what is needed to fulfill the requirement of Section 8 in the report. It was explained to me that a list of the addresses of all residences, businesses, etc. that employ city water is required. Therefore, I am requesting from you a list of all addresses where municipal water is in use.

Additionally, pursuant to Section 8.4, enclosed, please indicate if there are any plans for groundwater development in the city of Hallock. If so, please indicate the location of the groundwater development.

If you have any further questions, please feel free to contact me. Thank you.

Sincerely,



Elizabeth Rachman
Hydrogeologist

EAR:ra
Enclosures

96-6176

Section 8: Well Receptor Information/Assessment

Include in the appendices of this report: 1) a list of addresses within 500 feet from the edge of the plume and confirmation of status of water supply from the city utility billing department; 2) well logs; and 3) map showing ½ mile radius, 500 foot radius, water supply wells, other potential petroleum sources, and addresses for properties within 500 feet.

Table 13.

Complete the following table for all water supply wells located within 500 feet of the edge of the plume and any municipal or industrial wells found within ½ mile. *NONE*

Unique Well #	Ground Elevation	Total Depth (ft)	Base of Casing (ft)	Static Elevation	Aquifer	Use	Owner	Distance & Direction from site

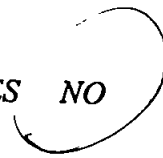
Notes:

- 8.1 Is municipal water available in the area? YES NO
- 8.2 Were all property owners within 500 feet of the nearest edge of the contaminant plume successfully contacted to determine if water wells are present? If No, please explain. YES NO

8.3 Discuss the results of the ground water receptor survey and any analytical results from sampling conducted at nearby water wells. Comment on the risks to water supply wells identified within 500 feet from the edge of the plume as well as the risk posed by or to any municipal or industrial wells found within ½ mile. Specifically indicate whether water supply wells identified utilize the impacted aquifer. (Note: an impacted aquifer separated from another aquifer by a clay lens is not considered a separate aquifer.)

8.4 Are there any plans for groundwater development in the impacted aquifer within one half mile of the site, or one mile down gradient of the site if the aquifer is fractured? Please give the name, title and phone number of the person that was contacted for this information.

YES NO



Phone _____

Section 9: Surface Water Risk Assessment

9.1 Are there any surface waters or wetlands located within 1/4 mile of the site?

YES NO

If YES, indicate its name: _____

9.2 If surface water is present downgradient of the site, is there a clean down gradient soil boring or monitoring well located between the site and the surface water?

YES
NO
N/A

If NO, we assume that contamination discharges to surface water. Therefore, complete the following information:

Name of receiving water: _____

Plume width, (W): _____ feet

Plume thickness, (H): _____ feet

Hydraulic conductivity, (K): _____ gal/day/ft²

Horizontal gradient, (dh/dl): _____ (unitless)

Discharge, (Q) = $H*W*K*(dh/dl)/1440$ _____ gal/min

If YES, identify them and indicate the distance to these features and discuss the contamination risk potential.

Section 10: Vapor Risk Assessment/Survey

10.1 Is there a history of vapor impacts in the vicinity of the site ?

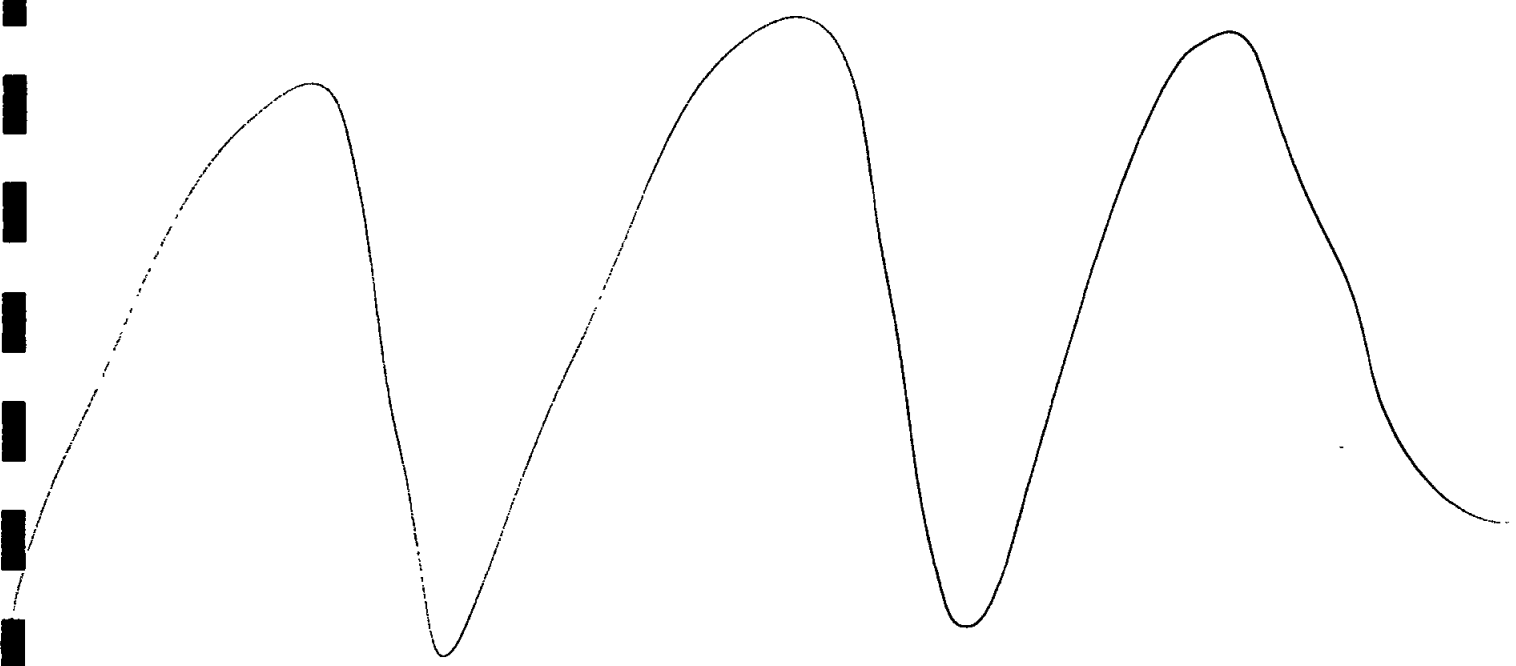
YES NO

If YES, describe:

Section 14: Appendices

Indicate attached appendices.

- Appendix A* Excavation Report Worksheet for Petroleum Release Sites.
- Appendix B* Laboratory analytical reports for soil and ground water.
- Appendix C* Methodologies and procedures, including field screening of soil, other field analyses, soil boring, soil sampling, well installation, and water sampling.
- Appendix D* Geologic logs for each well or boring using attached template.
- Appendix E* Well construction diagrams and copies of the Minnesota Department of Health Well Record using attached template.
- Appendix F* Copies of water supply well logs with legible unique numbers.
- Appendix G* A list of addresses within 500 feet from the edge of the plume and confirmation of status of water supply from the city utility billing department.



0025	FARMERS OIL COMPANY		PO BOX 198	KENNEDY, MN 56733
0030	PEARSON AUTO	914 S ATLANTIC	PO BOX 425	HALLOCK, MN 56728
0035	H E. EVERSON	906 S ATLANTIC AVE	PO BOX 820	HALLOCK, MN 56728
0036	JANSEN MACHINE	EILEEN R JANSEN	ROUTE 1 BOX 68	HALLOCK, MN 56728
0040	VALLEY VIEW MOTEL	808 S ATLANTIC	PO BOX 787	HALLOCK, MN 56728
0041	VALLEY VIEW MOTEL ISLAND UNIT	808 S ATLANTIC	PO BOX 787	HALLOCK, MN 56728
0045	SALON 75	728 S ATLANTIC	PO BOX 25	HALLOCK, MN 56728
0050	GATEWAY MOTEL	702 S ATLANTIC	PO BOX 403	HALLOCK, MN 56728
0055	VALLEY VIEW MOTEL TRAILER #1	% BOB CLIMER	PO BOX 787	HALLOCK, MN 56728
0067	VALLEY VIEW MOTEL TRAILER #3	% BOB CLIMER	PO BOX 787	HALLOCK, MN 56728
0070	VALLEY VIEW MOTEL TRAILER #5	% BOB CLIMER	PO BOX 787	HALLOCK, MN 56728
0075	VALLEY VIEW MOTEL TRAILER #6	% BOB CLIMER	PO BOX 787	HALLOCK, MN 56728
0080	P K.M BUILDING	601 S ATLANTIC		WARREN, MN 56762
0085	OTTER TAIL WAREHOUSE	546 S ATLANTIC	PO BOX 850	HALLOCK, MN 56728
0090	FAMILY RESTAURANT	% KELLY LAVATY	PO BOX 46	HUMBOLDT, MN 56731
0095	JOHNSON STANDARD	502 S ATLANTIC	PO BOX 907	HALLOCK, MN 56728
0105	NORTHERN PLAINS AGENCY	442 S ATLANTIC	PO BOX 844	HALLOCK, MN 56728

08/01/96

CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
0110	HALLOCK EAGLES CLUB	418 S ATLANTIC	PO BOX 936	HALLOCK, MN 56728
0116	NORTHERN AIR	406 S ATLANTIC	PO BOX 302	HALLOCK, MN 56728
0120	CAMPBELL'S LIQUOR STORE	350 S ATLANTIC	PO BOX 805	HALLOCK, MN 56728
0125	HALLOCK PLUMBING AND HEATING	25 4TH STREET SE	PO BOX 785	HALLOCK, MN 56728
0130	THOMPSON PERFORMANCE	336 S ATLANTIC AVE	PO BOX 132	HALLOCK, MN 56728
0135	COAST TO COAST	326 S ATLANTIC	PO BOX 310	HALLOCK, MN 56728
0140	MINI MALL	290 S ATLANTIC	JOE BOUVETTE	HALLOCK, MN 56728
0145	STERLING INC	290 S ATLANTIC	PO BOX 40	HALLOCK, MN 56728
0156	WIESE, RANDY	234 S ATLANTIC	PO BOX 575	HALLOCK, MN 56728
0170	GULLANDER HARDWARE	224 S ATLANTIC	PO BOX 937	HALLOCK, MN 56728
0180	JOHNSON OIL	146 S ATLANTIC	PO BOX 907	HALLOCK, MN 56728
0194	EDS ELECTRONICS	130 S ATLANTIC	PO BOX 129	HALLOCK, MN 56728
0200	BAKKEN BOOTS	103 N ATLANTIC	PO BOX 482	HALLOCK, MN 56728
0210	CENEX OF HALLOCK\DRAYTON	16 S ATLANTIC	PO BOX 549	HALLOCK, MN 56728
0215	RYDEN DEVELOPMENT	102 E BROADWAY	PO BOX 11	HALLOCK, MN 56728
0225	FIRE HALL	110 E BROADWAY		HALLOCK, MN 56728
0230	U S. POST OFFICE	105 S BIRCH AVE	PO BOX 9998	HALLOCK, MN 56728
0234	AMERICAN FEDERAL BANK	157 2ND STREET SE	PO BOX 189	HALLOCK, MN 56728
0245	GULLANDER APPLIANCES	121 2ND STREET SE	PO BOX 937	HALLOCK, MN 56728
0250	CARRIERE, DAN RENTAL	131 2ND STREET SE	PO BOX 820	HALLOCK, MN 56728
0255	SUZANNE BY VAL	117 2ND STREET SE	PO BOX 367	HALLOCK, MN 56728
0256	SUZANNE BY VAL-METER #2	117 2ND ST SE	PO BOX 367	HALLOCK, MN 56728
0260	STATE FARM INSURANCE	% 808 CARLSON	PO BOX 157	KARLSTAD, MN 5673
0265	LUTHERAN BROTHERHOOD	23 2ND STREET SE	PO BOX 486	HALLOCK, MN 56728
0270	FARMERS MUTUAL INSURANCE	21 2ND STREET SE	PO BOX 695	HALLOCK, MN 56728
0275	GILLIE JEWELRY	28 2ND STREET SE	PO BOX 490	HALLOCK, MN 56728
0285	LUNDBOHM, JACK D C	112 2ND STREET SE	PO BOX 576	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
0290	MCALLEN AND RUTZ OPT CLINIC	114 2ND STREET SE	PO BOX 910	HALLOCK, MN 56728
0295	AMERICAN FAMILY INSURANCE	118 2ND STREET SE	PO BOX 95	HALLOCK, MN 56728
0300	MARGIE'S CAFE	128 2ND STREET SE	PO BOX 35	HALLOCK, MN 56728
0305	C AND C LAUNDRY	146 2ND STREET SE	PO BOX 434	HALLOCK, MN 56728
0316	GTE		PO BOX 152127	IRVING, TX 75015
0325	KITTSOON COUNTY ENTERPRISE	109 3RD STREET SE	PO BOX 730	HALLOCK, MN 56728
0330	C AND M FORD BODY SHOP	123 3RD STREET SE	106-630	HALLOCK, MN 56728
0336	CITY HALL	163 3RD STREET SE	PO BOX 336	HALLOCK, MN 56728
0340	CRANE JOHNSON LUMBER	172 3RD STREET SE	PO BOX 250	HALLOCK, MN 56728
0355	GRACE LUTHERAN RENTAL	107 4TH STREET SE	PO BOX 489	HALLOCK, MN 56728
0360	GRACE LUTHERAN CHURCH	321 S BIRCH AVE	PO BOX 489	HALLOCK, MN 56728
0365	GUSTAFSON, LU	178 4TH STREET SE	209-242	HALLOCK, MN 56728
0375	CHRISTENSEN, VERA Y	136 4TH STREET SE	PO BOX 249	HALLOCK, MN 56728
0380	BEDARD, DWIGHT	120 4TH STREET SE	PO BOX 862	HALLOCK, MN 56728
0384	STEEN, HELMER	110 4TH STREET SE	PO BOX 63	HALLOCK, MN 56728
0394	HARTWIG AIRCRAFT	WINNIPEG ST ANDREWS	512 AIRLINE ROAD	WINNIPEG R1A 3P3,
0400	SWAN, DOROTHY	107 5TH STREET SE	PO BOX 42	HALLOCK, MN 56728
0411	CAMACHO, MACARIO AND TAMAMI	125 5TH STREET SE	GEN DELIVERY	HALLOCK, MN 56728
0415	ST PATRICK'S CHURCH	170 5TH STREET SE	PO BOX 519	HALLOCK, MN 56728
0420	SOLE, DALE	108 6TH STREET SE	PO BOX 462	HALLOCK, MN 56728
0426	REESE, DELORES	143 6TH STREET SE	105-531	HALLOCK, MN 56728
0430	NYEGAARD, CURTIS	167 6TH STREET SE	PO BOX 434	HALLOCK, MN 56728
2005	ANDERSON, KATHY	110 6TH STREET SE	PO BOX 213	HALLOCK, MN 56728
2010	BERGMAN, JIM	142 6TH STREET SE	PO BOX 763	HALLOCK, MN 56728
2015	STEEN, MINORA	166 6TH STREET SE	PO BOX 142	HALLOCK, MN 56728
2020	KLEGSTAD, MICHELLE	163 7TH STREET S	PO BOX 475	HALLOCK, MN 56728
2025	ANDERSON, DAVID R.	139 7TH STREET SE	PO BOX 701	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
2030	OLSON, GREG	109 7TH STREET SE	PO BOX 383	HALLOCK, MN 56728
2034	JACKSON, DONNA	110 S 7TH STREET	PO BOX 684	HALLOCK, MN 56728
2035	JANSEN, RANDALL	EILEEN R JANSEN	ROUTE 1 BOX 68	HALLOCK, MN 56728
2040	ENGLUND, LARI-ANN	703 S BIRCH AVE	PO BOX 441	HALLOCK, MN 56728
2045	JOHNSON, MIKE	801 S BIRCH AVE	PO BOX 126	HALLOCK, MN 56728
2050	FERGUSON, BOB	805 S BIRCH AVE	PO BOX 6	HALLOCK, MN 56728
2051	BRYDEN, MARJORIE	711 S BIRCH AVE	PO BOX 711	HALLOCK, MN 56728
2055	COSTIN 8 PLEX	809 BIRCH AVE	PO BOX 658	HALLOCK, MN 56728
2060	JOHNSON, MORRIS	901 S BIRCH AVE	PO BOX 473	HALLOCK, MN 56728
2067	CHAPUT, DAVID	909 S BIRCH AVE	PO BOX 58	HALLOCK, MN 56728
2080	HAMILTON, DONNA	921 S BIRCH AVE	PO BOX 184	HALLOCK, MN 56728
2085	HECKMAN, TODD	925 S BIRCH AVE	PO BOX 656	HALLOCK, MN 56728
2090	WILSON, ORVILLE	1021 S BIRCH AVE	PO BOX 67	HALLOCK, MN 56728
2095	CARLSON, EDWIN	1027 S BIRCH AVE	PO BOX 284	HALLOCK, MN 56728
2100	TRI, JIM	1029 S BIRCH AVE	PO BOX 97	HALLOCK, MN 56728
2105	PEARSON, PERRY	1033 S BIRCH AVE	PO BOX 591	HALLOCK, MN 56728
2110	TURGEON, KELLY	1037 S BIRCH AVE	PO BOX 311	HALLOCK, MN 56728
2121	JOHNSON, ELDEN	1040 SE ELM AVE	PO BOX 804	HALLOCK, MN 56728
2122	FAILING, RICK	1030 S ELM AVE	PO BOX 566	HALLOCK, MN 56728
2123	BERGERON, DEAN	1022 SE ELM AVE	PO BOX 302	HALLOCK, MN 56728
2124	EUKEL, KEN	1018 S ELM AVE	BOX 501	HALLOCK, MN 56728
2125	BEDARD, WALTER	203 11TH STREET S	PO BOX 281	HALLOCK, MN 56728
2126	OLSONAWSKI, JOHANNA	1032 SE ELM AVE	PO BOX 313	HALLOCK, MN 56728
2127	SOBERASKI, RODNEY	1002 S ELM AVE	PO BOX 744	HALLOCK, MN 56728
2128	INGEMAN, BRUCE	1019 S FOREST AVE	PO BOX 272	HALLOCK, MN 56728
2129	ENGLUND, JEFF	1037 S FOREST AVE	PO BOX 441	HALLOCK, MN 56728
2130	SYLVESTER, KALVIN	201 11TH AVE S	PO BOX 242	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
2135	CARRIERE, CONNIE	1026 S BIRCH AVE	PO BOX 773	HALLOCK, MN 56728
2140	TURESON, ALFRED	1020 S BIRCH AVE	224-696	HALLOCK, MN 56728
2145	KNUDSON, CHRISTI	1022 S BIRCH AVE	PO BOX 204	HALLOCK, MN 56728
2150	KITTSOON MEMORIAL HOSPITAL	1010 S BIRCH AVE	METER NO 1	HALLOCK, MN 56728
2155	KITTSOON MEMORIAL HOSPITAL	1010 S BIRCH AVE	METER NO 2	HALLOCK, MN 56728
2157	KITTSOON MEMORIAL HOSPITAL	1010 S BIRCH AVE	METER NO 3	HALLOCK, MN 56728
2158	KITTSOON MEMORIAL NURSING HOME	1010 S BIRCH AVE	PO BOX 700	HALLOCK, MN 56728
2159	KITTSOON MEMORIAL NURSING HOME	1010 S BIRCH AVE	METER NO 2	HALLOCK, MN 56728
2160	UNRAU, JOHN	901 S ELM AVE	PO BOX 172	HALLOCK, MN 56728
2161	HANSON, MARV	1004 S FOREST AVE	PO BOX 249	HALLOCK, MN 56728
2165	MC GOVERN, WILLIS	905 S ELM AVE	215-626	HALLOCK, MN 56728
2170	NELSON, WALLACE	210 11TH STREET S	PO BOX 276	HALLOCK, MN 56728
2175	ASSEMBLY OF GOD CHURCH	1100 S BIRCH AVE	PO BOX 507	HALLOCK, MN 56728
2180	BERNSTROM, ROGER	202 11TH STREET SE	PO BOX 813	HALLOCK, MN 56728
2181	OLSON, ROD	1021 S FOREST AVE	PO BOX 182	HALLOCK, MN 56728
2183	AIPPERSPACH, DERALL	1017 S FOREST AVE	PO BOX 754	HALLOCK, MN 56728
2186	ANDERSON, PAM	507 9TH STREET SE	PO BOX 222	HALLOCK, MN 56728
2187	WARNER, KAREN	808 S BIRCH AVE	PO BOX 321	HALLOCK, MN 56728
2188	CHARON, HARLAN	1001 S FOREST AVE	PO BOX 836	HALLOCK, MN 56728
2189	MORRISON, MIKE	1009 S FOREST AVE	PO BOX 459	HALLOCK, MN 56728
2190	KOOP, GARY	802 S BIRCH AVE	PO BOX 363	HALLOCK, MN 56728
2195	KASPROWICZ, GREG	710 S BIRCH AVE	PO BOX 154	HALLOCK, MN 56728
2205	FILTRATION PLANT	211 7TH STREET SE	PO BOX 336	HALLOCK, MN 56728
2210	HAGEN, TRISHA	218 6TH STREET SE	PO BOX 27	HALLOCK, MN 56728
2215	TURESON, JIM	214 6TH STREET SE	PO BOX 81	HALLOCK, MN 56728
2220	GORSUCH, SCOTT	210 6TH STREET SE	PO BOX 274	HALLOCK, MN 56728
2225	ANDERSON, PAUL	204 6TH STREET SE	PO BOX 455	HALLOCK, MN 56728

08/01/96

CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
2226	HUNT, RAY	520 S BIRCH AVE	PO BOX 275	HALLOCK, MN 56728
2230	KEMP, HAROLD	514 S BIRCH AVE	PO BOX 668	HALLOCK, MN 56728
2235	WOLLIN, MIKE	209 6TH STREET SE	PO BOX 611	HALLOCK, MN 56728
2240	NELSON, DENNIS	217 6TH STREET SE	277-376	HALLOCK, MN 56728
2245	BERG, TIM	221 5TH STREET SE	PO BOX 654	HALLOCK, MN 56728
2250	WALTERS, KENNETH	220 S CEDAR AVE	261-614	HALLOCK, MN 56728
2255	NORDLING, DONALD	505 S CEDAR AVE	PO BOX 604	HALLOCK, MN 56728
2261	BAKKEN, VI	214 5TH ST SE	PO BOX 722	HALLOCK, MN 56728
2265	LINDSTROM, CLARECE	210 5TH STREET SE	112-627	HALLOCK, MN 56728
2270	MC ENELLY, CRAIG	206 5TH STREET SE	PO BOX 702	HALLOCK, MN 56728
2275	GATHERIDGE, RUTH	204 5TH STREET SE	PO BOX 412	HALLOCK, MN 56728
2281	LOER, HERMAN	203 5TH STREET SE	PO BOX 82	HALLOCK, MN 56728
2285	MIKOLAJCZYK, GRACE	205 5TH STREET SE	PO BOX 627	HALLOCK, MN 56728
2290	HOMSTAD, CHARLES	209 5TH STREET SE	PO BOX 791	HALLOCK, MN 56728
2295	MASLOSKI, JIM	215 5TH STREET SE	PO BOX 295	HALLOCK, MN 56728
2300	ANDERSON, KEITH	219 5TH STREET SE	PO BOX 880	HALLOCK, MN 56728
2310	DAHLMAN, CAROL	218 4TH STREET SE	PO BOX 271	HALLOCK, MN 56728
2315	LOCKEN, MARTIN	214 4TH STREET SE	PO BOX 162	HALLOCK, MN 56728
2320	JOHNSON, INEZ	206 4TH STREET SE	PO BOX 446	HALLOCK, MN 56728
2325	LERDAHL, WANDA	202 4TH STREET SE	PO BOX 174	HALLOCK, MN 56728
2330	LINDEGARD, RICK	410 S BIRCH AVE	PO BOX 353	HALLOCK, MN 56728
2335	FLOWER SHOP	326 S BIRCH AVE	PO BOX 355	HALLOCK, MN 56728
2340	KITTON LOCKER PLANT	322 S BIRCH AVE	PO BOX 188	HALLOCK, MN 56728
2350	WILSON LANDSCAPING AND GRNHSE	209 4TH STREET SE	PO BOX 442	HALLOCK, MN 56728
2370	ERICKSON, ANNE	212 3RD STREET SE	PO BOX 512	HALLOCK, MN 56728
2375	ST JOHNS EPISCOPAL	218 3RD STREET SE	PO BOX 187	HALLOCK, MN 56728
2385	SORENSEN, OREL	202 3RD STREET SE	PO BOX 492	HALLOCK, MN 56728

08/01/96

CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
2390	BRINK, SOBOLIK, SEVERSON, MALM	207 S BIRCH AVE	PO BOX 790	HALLOCK, MN 56728
2393	DAHL HATTON MUIR & REESE LTD	720 6TH STREET SE	PO BOX 698	HALLOCK, MN 56728
2395	STANISLOSKI, TIM	205 3RD STREET SE	PO BOX 812	HALLOCK, MN 56728
2400	BERGH, JOHN	209 3RD STREET SE	PO BOX 263	HALLOCK, MN 56728
2405	OLSONAWSKI, CINDY	215 3RD STREET SE	PO BOX 194	HALLOCK, MN 56728
2410	HOMSTAD, RUTH	211 S CEDAR AVE	PO BOX 688	HALLOCK, MN 56728
2417	ANDERSON, VERN	207 S CEDAR AVE	PO BOX 64	HALLOCK, MN 56728
2420	ANDERSON, VERN	222 2ND STREET SE	PO BOX 64	HALLOCK, MN 56728
2425	TAYLOR, SCOTT	218 2ND STREET SE	PO BOX 37	HALLOCK, MN 56728
2435	SJOSTRAND APTS	204 2ND STREET SE	PO BOX 357	HALLOCK, MN 56728
2445	NORTHWESTERN STATE BANK	203 2ND STREET SE	PO BOX 760	HALLOCK, MN 56728
2450	C AND M FORD	209 2ND STREET SE	106-630	HALLOCK, MN 56728
2455	OTTER TAIL POWER COMPANY	215 2ND STREET SE	PO BOX 850	HALLOCK, MN 56728
2460	HUGHES FUNERAL HOME	221 2ND STREET SE	PO BOX 905	HALLOCK, MN 56728
2465	MASONIC LODGE	104 S CEDAR AVE	PO BOX 52	HALLOCK, MN 56728
2470	KITTSON AUTO AND IMPL	15 N ATLANTIC	PO BOX 399	HALLOCK, MN 56728
2475	KITTSON AUTO	15 N ATLANTIC	PO BOX 399	HALLOCK, MN 56728
2480	FARMERS STORE	24 E BROADWAY AVE	PO BOX 69	HALLOCK, MN 56728
2490	HALLOCK AMBULANCE SERVICE	125 E BROADWAY	PO BOX 700	HALLOCK, MN 56728
3006	WHITE, JEFF	115 MAYPLACE	PO BOX 7	HALLOCK, MN 56728
3020	JOHNSON, EDMUND	203 E BROADWAY	PO BOX 777	HALLOCK, MN 56728
3035	SWANSON, MYRON	330 2ND STREET SE	PO BOX 113	HALLOCK, MN 56728
3040	HOWE, JEANINE	318 2ND STREET SE	PO BOX 582	HALLOCK, MN 56728
3045	FERTIG, DAVID	314 2ND STREET SE	PO BOX 341	HALLOCK, MN 56728
3050	KNUTSON, RUBY	310 2ND STREET SE	PO BOX 544	HALLOCK, MN 56728
3051	PEMBERTON, BILL	210 S CEDAR AVE	219-993	HALLOCK, MN 56728
3060	SATTERLUND, DICK	303 3RD STREET SE	PO BOX 343	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
3065	BERG, EMMETT	315 3RD STREET SE	PO BOX 22	HALLOCK, MN 56728
3070	SHOCKLEY, TIM	321 3RD STREET SE	PO BOX 342	HALLOCK, MN 56728
3075	MALM, ROGER	323 3RD STREET SE	PO BOX 775	HALLOCK, MN 56728
3080	HAUBRICH, HAROLD	372 3RD STREET SE	PO BOX 538	HALLOCK, MN 56728
3085	SWANSON, JILL	415 3RD STREET SE	PO BOX 543	HALLOCK, MN 56728
3090	ANDERSON, JIM	421 3RD STREET SE	PO BOX 451	HALLOCK, MN 56728
3095	OLSON, ANDY	326 3RD STREET SE	PO BOX 161	HALLOCK, MN 56728
3105	PETERSON, MIKE	318 3RD STREET SE	PO BOX 626	HALLOCK, MN 56728
3110	SNARE, KENNETH	314 3RD STREET SE	PO BOX 35	HALLOCK, MN 56728
3121	CRAIGMILE, JANELLE	310 3RD STREET SE	PO BOX 401	HALLOCK, MN 56728
3127	BERGH, JAY	310 S CEDAR AVE	PO BOX 26	HALLOCK, MN 56728
3130	THORSON, TERRY	305 4TH STREET SE	PO BOX 593	HALLOCK, MN 56728
3135	BOCKWITZ, AUDREY	315 4TH STREET SE	PO BOX 85	HALLOCK, MN 56728
3136	HERITAGE RESIDENCE	410 S CEDAR AVE	PO BOX 906	HALLOCK, MN 56728
3140	KITTSOON CENTRAL ELEMENTARY	411 4TH STREET SE	PO BOX 670	HALLOCK, MN 56728
3149	MINSKE, BERNICE	401 4TH STREET SE	PO BOX 725	HALLOCK, MN 56728
3151	NOEL, HENRY	405 S ELM AVE	265-543	HALLOCK, MN 56728
3160	SUNBY, MEL	415 S ELM AVE	223-706	HALLOCK, MN 56728
3165	MISSION COVENANT CHURCH	421 S ELM AVE	PO BOX 417	HALLOCK, MN 56728
3170	KITTSOON COUNTY COURTHOUSE	410 5TH STREET SE	PO BOX 848	HALLOCK, MN 56728
3180	JOHNSON, TODD	604 S DOUGLAS AVE	PO BOX 294	HALLOCK, MN 56728
3185	JOHNSON, MYLES	610 S DOUGLAS AVE	PO BOX 157	HALLOCK, MN 56728
3190	KLEGSTAD, ERNIE	614 S DOUGLAS AVE	PO BOX 733	HALLOCK, MN 56728
3200	CERKOWNIAK, ANNIE	622 S DOUGLAS AVE	PO BOX 505	HALLOCK, MN 56728
3205	KLEGSTAD, TOM	704 S DOUGLAS AVE	PO BOX 631	HALLOCK, MN 56728
3210	PETERSON, PAUL	714 S DOUGLAS AVE	PO BOX	HALLOCK, MN 56728
3215	HARTWIG AIRCRAFT	720 S DOUGLAS AVE	PO BOX 400	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
3224	KOOP, WILBUR	726 S DOUGLAS AVE	PO BOX 518	HALLOCK, MN 56728
3225	JOHNSON, GARY	412 7TH STREET SE	PO BOX 277	HALLOCK, MN 56728
3230	SOBERASKI, MARY	703 S ELM AVE	PO BOX 422	HALLOCK, MN 56728
3235	PEARSON, KRIS	709 S ELM AVE	PO BOX 444	HALLOCK, MN 56728
3240	BLOMQUIST, DANNY	715 S ELM AVE	PO BOX 124	HALLOCK, MN 56728
3245	HARMSEN, RITA	721 SOUTH ELM AVE	PO BOX 457	HALLOCK, MN 56728
3250	SWANSON, LEONARD	805 S ELM AVE	PO BOX 69	HALLOCK, MN 56728
3255	EASTON, JANINE	702 S ELM AVE	PO BOX 727	HALLOCK, MN 56728
3262	LANCTOT, THOMAS	710 SO ELM AVENUE	PO BOX 156	HALLOCK, MN 56728
3265	JOHNSON, CECIL	714 S ELM AVE	PO BOX 33	HALLOCK, MN 56728
3271	SOBOLIK, BRAD	804 S ELM AVE	PO BOX 233	HALLOCK, MN 56728
3275	REFF, JACK	805 S FOREST AVE	PO BOX 253	HALLOCK, MN 56728
3280	HOLMGREN, VENDELL	721 S FOREST AVE	PO BOX 580	HALLOCK, MN 56728
3285	PANTZER, KENNETH	711 S FOREST AVE	PO BOX 415	HALLOCK, MN 56728
3290	WILSON, DEAN	707 S FOREST AVE	PO BOX 924	HALLOCK, MN 56728
3291	CARLSON, DAVID	520 7TH STREET SE	PO BOX 488	HALLOCK, MN 56728
3295	LUND, JUNE	702 S FOREST AVE	PO BOX 906	HALLOCK, MN 56728
3300	CLOW, RAYMOND	710 S FOREST AVE	PO BOX 532	HALLOCK, MN 56728
3305	STANNAGE, SAM	720 S FOREST AVE	PO BOX 364	HALLOCK, MN 56728
3315	DUCKSTAD, JARED	816 8TH STREET SE	PO BOX 143	HALLOCK, MN 56728
3316	SMOLAK, RAY	618 8TH STREET S	PO BOX 686	HALLOCK, MN 56728
3320	ANDERSON, DORIS	715 S GROVE AVE	PO BOX 4	HALLOCK, MN 56728
3325	DREWLOW, MARLIN	709 S GROVE AVE	PO BOX 895	HALLOCK, MN 56728
3330	NORDLING, DONNA	618 7TH ST SE	PO BOX 308	HALLOCK, MN 56728
3335	GATHERIDGE, ELIZABETH	702 7TH STREET SE	PO BOX 834	HALLOCK, MN 56728
3340	FORFANG, CURTIS	710 7TH STREET SE	PO BOX 232	HALLOCK, MN 56728
3345	OLSON, TIM	718 S GROVE AVE	PO BOX 310	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
3346	RENVILLE, LEONARD	710 8TH STREET S	PO BOX 2	HALLOCK, MN 56728
3350	GAETZ, DAN	837 8TH STREET S	PO BOX 484	HALLOCK, MN 56728
3355	WILLIAMS, LOWELL	716 7TH STREET SE	PO BOX 88	HALLOCK, MN 56728
3360	CARRIERE, DUANE	719 7TH STREET SE	PO BOX 460	HALLOCK, MN 56728
3361	CARRIERE, DUANE	719 7TH STREET SE	PO BOX 460	HALLOCK, MN 56728
3365	DOCKIN, ALFRED	714 6TH STREET SE	PO BOX 155	HALLOCK, MN 56728
3370	DAHL, CONRAD	720 6TH STREET SE	PO BOX 734	HALLOCK, MN 56728
3380	GARCIA, ESTEBAN	722 6TH STREET SE	GEN DELIVERY	HALLOCK, MN 56728
3385	CLAY, PAUL	604 SOUTH GROVE AVE	PO BOX 595	HALLOCK, MN 56728
3390	NORDINE, KEN	610 S GROVE AVE	PO BOX 273	HALLOCK, MN 56728
3395	RYNNING, GLADYS	614 S GROVE AVE	221-647	HALLOCK, MN 56728
3405	LONG, DELORES	619 S GROVE AVE	PO BOX 158	HALLOCK, MN 56728
3410	GIERSZEWSKI, CHARLES	615 S GROVE AVE	PO BOX 672	HALLOCK, MN 56728
3420	HANSON, JOANN	601 S GROVE AVE	209-736	HALLOCK, MN 56728
3435	VISNESS, RON	614 S FOREST AVE	PO BOX 651	HALLOCK, MN 56728
3441	GUSTAFSON, TIM	624 FOREST AVE	PO BOX 937	HALLOCK, MN 56728
3445	PEARSON, MARK	521 7TH STREET SE	PO BOX 425	HALLOCK, MN 56728
3450	HANSON, CLARICE	517 7TH STREET SE	PO BOX 173	HALLOCK, MN 56728
3455	GLIDDEN, FRED JR	615 S FOREST AVE	PO BOX 112	HALLOCK, MN 56728
3465	ANDERSON, BOB	607 S FOREST AVE	PO BOX 4	HALLOCK, MN 56728
3475	REESE, JEFF	504 6TH STREET SE	PO BOX 382	HALLOCK, MN 56728
3480	REESE, CHARLES	606 S ELM AVE	PO BOX 413	HALLOCK, MN 56728
3490	SORENSEN, RUBY	614 S ELM AVE	230-332	HALLOCK, MN 56728
3500	TURNER, HAROLD	622 S ELM AVE	PO BOX 535	HALLOCK, MN 56728
4005	KLEIN, DAVE	617 S ELM AVE	PO BOX 339	HALLOCK, MN 56728
4010	OVEREND, PAT	615 S ELM AVE	PO BOX 835	HALLOCK, MN 56728
4020	GREENBERG, PAUL	503 ELM AVE	PO BOX 87	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
4025	TUSOW, DALE	509 6TH STREET SE	PO BOX 358	HALLOCK, MN 56728
4035	SLUSAR, SCOTT	519 S FOREST AVE	PO BOX 398	HALLOCK, MN 56728
4040	HUNT, EARL	511 S FOREST AVE	PO BOX 542	HALLOCK, MN 56728
4045	TURESON, ELAINE	522 5TH STREET SE	PO BOX 81	HALLOCK, MN 56728
4060	WALLENBERG, WES	522 5TH STREET SE	PO BOX 712	HALLOCK, MN 56728
4065	NIELSEN, HARVEY	531 S ELM AVE	218-042	HALLOCK, MN 56728
4070	CAMPBELL, NEIL	416 S ELM AVE	PO BOX 805	HALLOCK, MN 56728
4075	LARSON, WALTER	410 S ELM AVE	PO BOX 244	HALLOCK, MN 56728
4080	DONNER, RICHARD	402 S ELM AVE	PO BOX 875	HALLOCK, MN 56728
4085	STENQUIST, JOHN	505 4TH STREET SE	PO BOX 12	HALLOCK, MN 56728
4090	BEDARD, PAT	320 S ELM AVE	PO BOX 762	HALLOCK, MN 56728
4091	BEDARD, PAT	314 S ELM AVENUE	PO BOX 762	HALLOCK, MN 56728
4100	ANDERSON, DON	514 3RD STREET SE	PO BOX 335	HALLOCK, MN 56728
4105	GUSTAFSON, CEDRIC	511 3RD STREET SE	PO BOX 481	HALLOCK, MN 56728
4115	RYDEN, DAVID	315 S FOREST AVE	221-508	HALLOCK, MN 56728
4120	DAHLGREN, VERNE	323 S FOREST AVE	PO BOX 301	HALLOCK, MN 56728
4125	HANSON, KEVIN	327 S FOREST AVE	PO BOX 103	HALLOCK, MN 56728
4130	OLSON, HELEN	516 4TH STREET SE	PO BOX 785	HALLOCK, MN 56728
4135	EGGERLING, KRISTIN	520 4TH ST SE	PO BOX 328	HALLOCK, MN 56728
4137	DUGUAY, KARI	413 S FOREST AVE	PO BOX 494	HALLOCK, MN 56728
4138	NW MULTI COUNTY HRA 4	413 S FOREST AVE	PO BOX 1522	MENTOR, MN 56736
4145	HOLM, GARY	417 S FOREST AVE	PO BOX 175	HALLOCK, MN 56728
4146	BENGTSON, LEONARD	521 5TH STREET SE	201-793	HALLOCK, MN 56728
4150	YOUNGGREN, JOHN	422 S FOREST AVE	PO BOX 776	HALLOCK, MN 56728
4153	LANG, JERRY	510 S FOREST AVE	PO BOX 74	HALLOCK, MN 56728
4155	KLEGSTAD, ROBERT	514 S FOREST AVE	PO BOX 404	HALLOCK, MN 56728
4160	AHLGREN, HAZEL	515 S GROVE AVE	254-393	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
4165	WINGER, SUE	509 S GROVE AVE	PO BOX 613	HALLOCK, MN 56728
4172	OGOREK, TERRY	505 S GROVE AVE	PO BOX 224	HALLOCK, MN 56728
4175	STANNAGE, SAM	501 S GROVE AVE	PO BOX 364	HALLOCK, MN 56728
4180	TURNER, JOYCE	506 S GROVE AVE	PO BOX 693	HALLOCK, MN 56728
4185	WELESKI, SHANE	510 S GROVE AVE	PO BOX 653	HALLOCK, MN 56728
4190	DANFORTH, STELLA	514 S GROVE AVE	PO BOX 700	HALLOCK, MN 5628
4195	OLSON, HARLEY	518 S GROVE AVE	PO BOX 214	HALLOCK, MN 56728
4200	PETERSON, RICHARD	514 S GROVE PLACE	PO BOX 111	HALLOCK, MN 56728
4205	VAGLE, JOHN	504 S GROVE PLACE	PO BOX 861	HALLOCK, MN 56728
4215	MINSKE, DARRIN	502 S GROVE PLACE	PO BOX 331	HALLOCK, MN 56728
4220	KRASKA, BRIAN	422 S GROVE AVE	PO BOX 394	HALLOCK, MN 56728
4225	YOUNGGREN, LARRY	710 4TH STREET SE	PO BOX 279	HALLOCK, MN 56728
4230	ANDERSON, RICHARD	411 S HOLLY AVE	PO BOX 95	HALLOCK, MN 56728
4235	JOHNSON, HARRIS	410 S HOLLY AVE	212-494	HALLOCK, MN 56728
4240	YOUNGGREN, DIANE	420 S HOLLY AVE	PO BOX 98	HALLOCK, MN 56728
4245	MATTSON, VINCENT	502 S HOLLY AVE	216-311	HALLOCK, MN 56728
4250	NORDINE, JOYCE	508 HOLLY AVE	PO BOX 322	HALLOCK, MN 56728
4255	BALDWIN, MIKE	510 S HOLLY AVE	PO BOX 687	HALLOCK, MN 56728
4259	MATTSON SHOP	VINCENT MATTSON	216-311	HALLOCK, MN 56728
4260	DAVIS, PAT	515 S HOLLY AVE	PO BOX 387	HALLOCK, MN 56728
4265	JOHNSON, JIM	513 S HOLLY AVE	PO BOX 126	HALLOCK, MN 56728
4270	BENGTSON, B MARVIN	509 S HOLLY AVE	PO BOX 351	HALLOCK, MN 56728
4275	BENGTSON, ART	503 S HOLLY AVE	PO BOX 696	HALLOCK, MN 56728
4280	ANDERSON, ROGER	417 S HOLLY AVE	PO BOX 125	HALLOCK, MN 56728
4285	OTTE, TOM	418 S GROVE AVE	PO BOX 104	HALLOCK, MN 56728
4290	KLEGSTAD, KEITH	414 S GROVE AVE	PO BOX 733	HALLOCK, MN 56728
4295	ERICKSON, KELLY	706 4TH STREET SE	PO BOX 877	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
4310	ROSENGREN, KAY	618 4TH STREET SE	PO BOX 177	HALLOCK, MN 56728
4315	CEDERHOLM, DONALD	405 S GROVE AVE	PO BOX 130	HALLOCK, MN 56728
4320	LINDGREN, WILBUR	603 5TH STREET SE	PO BOX 246	HALLOCK, MN 56728
4325	BACKLUND, FOLKE	420 S FOREST AVE	PO BOX 176	HALLOCK, MN 56728
4326	KEENAN, JASON	414 S FOREST AVE	PO BOX 235	HALLOCK, MN 56728
4330	GARZA, EMILIA	410 S FOREST AVE	PO BOX 922	HALLOCK, MN 56728
4335	HANE, JEFF	602 4TH ST SE	PO BOX 790	HALLOCK, MN 56728
4340	HANSON, DALE	606 4TH STREET SE	PO BOX 531	HALLOCK, MN 56728
4345	DALZELL, DAN	328 S FOREST AVE	PO BOX 742	HALLOCK, MN 56728
4350	WALLER, TONI	314 S FOREST AVE	PO BOX 3	HALLOCK, MN 56728
4355	PEMBERTON, JEAN	616 2ND STREET SE	266-503	HALLOCK, MN 56728
4356	VASA HUS	640 2ND STREET SE	216-311	HALLOCK, MN 56728
4360	PASTIR, BRIAN	655 2ND STREET SE	PO BOX 771	HALLOCK, MN 56728
4365	KOSKINJEMI, ERNEST B		1512 GARY AVENUE	DETROIT LAKES, MN
4375	KINKEAD, DENNIS	641 2ND STREET SE	PO BOX 597	HALLOCK, MN 56728
4380	TREUMER, DAVID	631 2ND STREET SE	PO BOX 116	HALLOCK, MN 56728
4390	HENNEN, KEN	619 2ND STREET SE	PO BOX 304	HALLOCK, MN 56728
4395	BRISSON, LIONEL	318 DOWLING AVE EAST	WINNIPEG MANITOBA	CANADA R2C3K7,
4400	HOLMQUIST, CLARICE	609 2ND STREET SE	PO BOX 802	HALLOCK, MN 56728
4405	COSTIN 4-PLEX	601 2ND STREET SE	PO BOX 658	HALLOCK, MN 56728
4406	ANDERSON, LAMAR	511 2ND STREET SE	PO BOX 923	HALLOCK, MN 56728
4410	ANDERSON, MARY ETTA	509 2ND STREET SE	PO BOX 935	HALLOCK, MN 56728
4420	LOSCH, KEN, REVEREND	505 3RD STREET SE	PO BOX 489	HALLOCK, MN 56728
4425	COSTIN, RUTH	521 E BROADWAY	PO BOX 658	HALLOCK, MN 56728
4430	COSTIN, KERRY	505 E BROADWAY	PO BOX 643	HALLOCK, MN 56728
4435	AMANN DAVE	502 2ND STREET SE	PO BOX 674	HALLOCK, MN 56728
4440	ABEL, ERMA	425 3RD STREET SE	PO BOX 814	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
4445	C & M FORD	427 3RD STREET SE	106-630	HALLOCK, MN 56728
4450	KASPROWICZ, SUSIE	422 E BROADWAY ST	PO BOX 54	HALLOCK, MN 56728
4455	HANSON, EVAN	418 E BROADWAY	PO BOX 14	HALLOCK, MN 56728
4460	HEDMAN, CLAYTON	431 E BROADWAY	PO BOX 327	HALLOCK, MN 56728
4465	ESCHLER, DALE	421 E BROADWAY	PO BOX 235	HALLOCK, MN 56728
4470	HANSON, HARRY D D S.	417 E BROADWAY	PO BOX 356	HALLOCK, MN 56728
4475	COLE, JOHN	407 E BROADWAY ST	PO BOX 673	HALLOCK, MN 56728
4481	RUTZ, DUANE	341 E BROADWAY ST	PO BOX 910	HALLOCK, MN 56728
4491	MELIN, GARY	331 E BROADWAY	PO BOX 520	HALLOCK, MN 56728
4495	SJOSTRAND, JIM	325 E BROADWAY	PO BOX 357	HALLOCK, MN 56728
4500	SJOSTRAND, JIM	319 E BROADWAY ST	PO BOX 357	HALLOCK, MN 56728
4505	OLSON, RON	25 SHORT AVE N	PO BOX 785	HALLOCK, MN 56728
4510	WISE, PAT	315 E BROADWAY ST	PO BOX 545	HALLOCK, MN 56728
4515	CAMERON, BOB	311 E BROADWAY	PO BOX 250	HALLOCK, MN 56728
4521	BENGTSON, NORMA	307 E BROADWAY	PO BOX 395	HALLOCK, MN 56728
4530	CARLSON, EARL T	40 N CEDAR AVE	PO BOX 131	HALLOCK, MN 56728
4535	LOEFFLER, TERRY	50 N CEDAR AVE	PO BOX 218	HALLOCK, MN 56728
4540	ANDERSON, HAROLD	115 N CEDAR AVE	PO BOX 99	HALLOCK, MN 56728
5005	BLAZE, TONY	300 2ND STREET NE	PO BOX 191	HALLOCK, MN 56728
5006	BROBECK, BARRY	304 2ND STREET NE	PO BOX 547	HALLOCK, MN 56728
5007	WALLER, KEVIN	306 2ND STREET NE	PO BOX 215	HALLOCK, MN 56728
5008	ADAMSON, ANDY	318 2ND STREET NE	PO BOX 433	HALLOCK, MN 56728
5011	PETERSON, EDWIN	314 2ND STREET NE	PO BOX 111	HALLOCK, MN 56728
5015	TRIPP, REVEREND ROBERT	329 2ND STREET NE	PO BOX 507	HALLOCK, MN 56728
5017	BOROSKI, ANTON	330 2ND STREET NE	PO BOX 431	HALLOCK, MN 56728
5020	LINDER, ROY	340 2ND STREET NE	PO BOX 476	HALLOCK, MN 56728
5025	YOUNGGPEN, LOREN	102 N DOUGLAS AVE	PO BOX 238	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP
5030	QUADE, E.F	202 N DOUGLAS AVE	PO BOX 186	HALLOCK, MN 56728
5035	HUGHES, TOM	302 N DOUGLAS AVE	PO BOX 874	HALLOCK, MN 56728
5040	OLSON, ARNOLD	402 N DOUGLAS AVE	PO BOX 96	HALLOCK, MN 56728
5045	GUSTAFSON, JIM	405 N DOUGLAS AVE	209-306	HALLOCK, MN 56728
5050	BAHR, EARL	337 2ND STREET NE	PO BOX 833	HALLOCK, MN 56728
5060	LYBERG, ANDY	329 2ND STREET NE	215-343	HALLOCK, MN 56728
5065	GUSTAFSON, DELBERT	325 2ND STREET NE	209-218	HALLOCK, MN 56728
5070	PEARSON, SCOTT	319 2ND STREET NE	PO BOX 94	HALLOCK, MN 56728
5075	SOBERASKI, HAROLD	309 2ND STREET NE	PO BOX 366	HALLOCK, MN 56728
5080	WALLER, KEN	303 2ND STREET NE	PO BOX 202	HALLOCK, MN 56728
5085	NORBY, GREG	216 N CEDAR AVE	PO BOX 35	HALLOCK, MN 56728
5095	HALLOCK ARENA	205 4TH STREET NE		HALLOCK, MN 56728
5103	SEVERSON, ROBERT	226 N BIRCH AVE	PO BOX 220	HALLOCK, MN 56728
5110	GLIDDEN, ETHEL	205 2ND STREET NE	PO BOX 803	HALLOCK, MN 56728
5115	STRAND, RITA	209 2ND STREET NE	PO BOX 621	HALLOCK, MN 56728
5120	PLAINE, COREY	215 2ND STREET NE	PO BOX 864	HALLOCK, MN 56728
5125	SHAFER, JIM	219 2ND STREET NE	PO BOX 752	HALLOCK, MN 56728
5135	YOUNGGREN, MAE	121 N CEDAR	PO BOX 776	HALLOCK, MN 56728
5140	THOMPSON, PAUL	214 2ND STREET N	PO BOX 173	HALLOCK, MN 56728
5145	THOMPSON, PAUL	210 2ND STREET NE	PO BOX 171	HALLOCK, MN 56728
5150	MALONEY, DAN	102 N BIRCH AVE	PO BOX 421	HALLOCK, MN 56728
5155	CAMPBELL, PAT	116 N BIRCH AVE	PO BOX 146	HALLOCK, MN 56728
5160	YOUNGGREN, DEAN	120 N BIRCH AVE	PO BOX 821	HALLOCK, MN 56728
5165	BACKOUS, JERRY	118 2ND STREET NE	PO BOX 753	HALLOCK, MN 56728
5170	YOUNGGREN, VERLA	102 2ND STREET NE	PO BOX 278	HALLOCK, MN 56728
5175	BECKEN, DONALD	100 2ND STREET N	PO BOX 411	HALLOCK, MN 56728
5180	ANDERSON, DIANA L	103 2ND STREET NE	PO BOX 521	HALLOCK, MN 56728

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CITY OF HALLOCK
CUSTOMER ACCOUNT LISTING

ACCT #	ACCOUNT NAME	ADDRESS #1	ADDRESS #2	CITY, STATE & ZIP C
5185	WALUKIEWICZ, JOE	111 2ND STREET NE	PO BOX 261	HALLOCK, MN 56728
5190	CZAPIEWSKI, HILARY	115 2ND STREET NE	PO BOX 31	HALLOCK, MN 56728
5200	LINDEGARD, DAVID	119 2ND STREET NE	PO BOX 778	HALLOCK, MN 56728
5201	SOBOLIK, DENNIS	221 N BIRCH AVE	PO BOX 9	HALLOCK, MN 56728
5205	ENDRISS, DAVID	118 4TH STREET NE	PO BOX 842	HALLOCK, MN 56728
5210	PRESBYTERIAN CHURCH	228 N ASH AVE	PO BOX 429	HALLOCK, MN 56728
5215	FOWLER, DELIA	224 N ASH AVE	PO BOX 746	HALLOCK, MN 56728
5220	INGEMAN, MARK	216 N ASH AVENUE	PO BOX 584	HALLOCK, MN 56728
5225	HATTON, MARK	217 N ASH AVE	PO BOX 293	HALLOCK, MN 56728
5235	HATTON, MARY		PO BOX 432	HALLOCK, MN 56728
5240	WIDERSTRAND, ELMER	% LOUISE HALVERSON	8100 WYNNWOOD RD	GOLDEN VALLEY, MN
5245	MATTSON, CASPER	305 N ASH AVE	PO BOX 115	HALLOCK, MN 56728
5250	NILES, JOHN	312 N ATLANTIC	111-958	HALLOCK, MN 56728
5252	FARM CREDIT SERVICES	HIGHWAY 75 N	PO BOX 878	HALLOCK, MN 56728
5260	SUNDBERG, PHIL	216 N ATLANTIC	PO BOX 850	HALLOCK, MN 56728
5265	MONEY, JOHN	17 2ND STREET NE	PO BOX 724	HALLOCK, MN 56728
5270	EHRENSTROM, MYRTLE	% LEONARD EHRENSTROM	RR 2 BOX 33	LAKE BRONSON, MN 5
5285	VOLD, JOEL	20 2ND STREET NE	PO BOX 781	HALLOCK, MN 56728
5290	YOUNGGREN, DAN	16 2ND STREET NE	PO BOX 201	HALLOCK, MN 56728
5300	PEDE, BOB	12 2ND STREET NE	PO BOX 314	HALLOCK, MN 56728
5305	KITTSOON CENTRAL HIGH SCHOOL	444 N ASH AVE	PO BOX 670	HALLOCK, MN 56728

AIRES

ENVIRONMENTAL SERVICES, Limited

1550 HUBBARD

• BATAVIA, IL 60510

• (708) 879 3006

• FAX: (708) 879-3014

FAX TRANSMISSION

Date:

Recipient FAX number: 218-843-2579

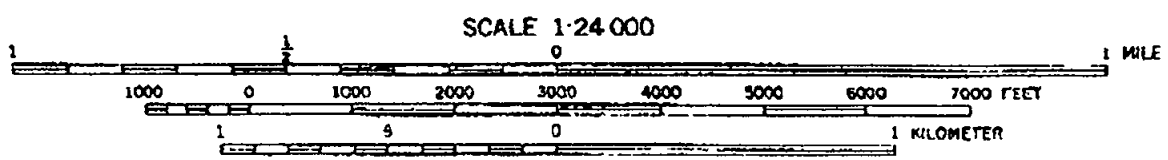
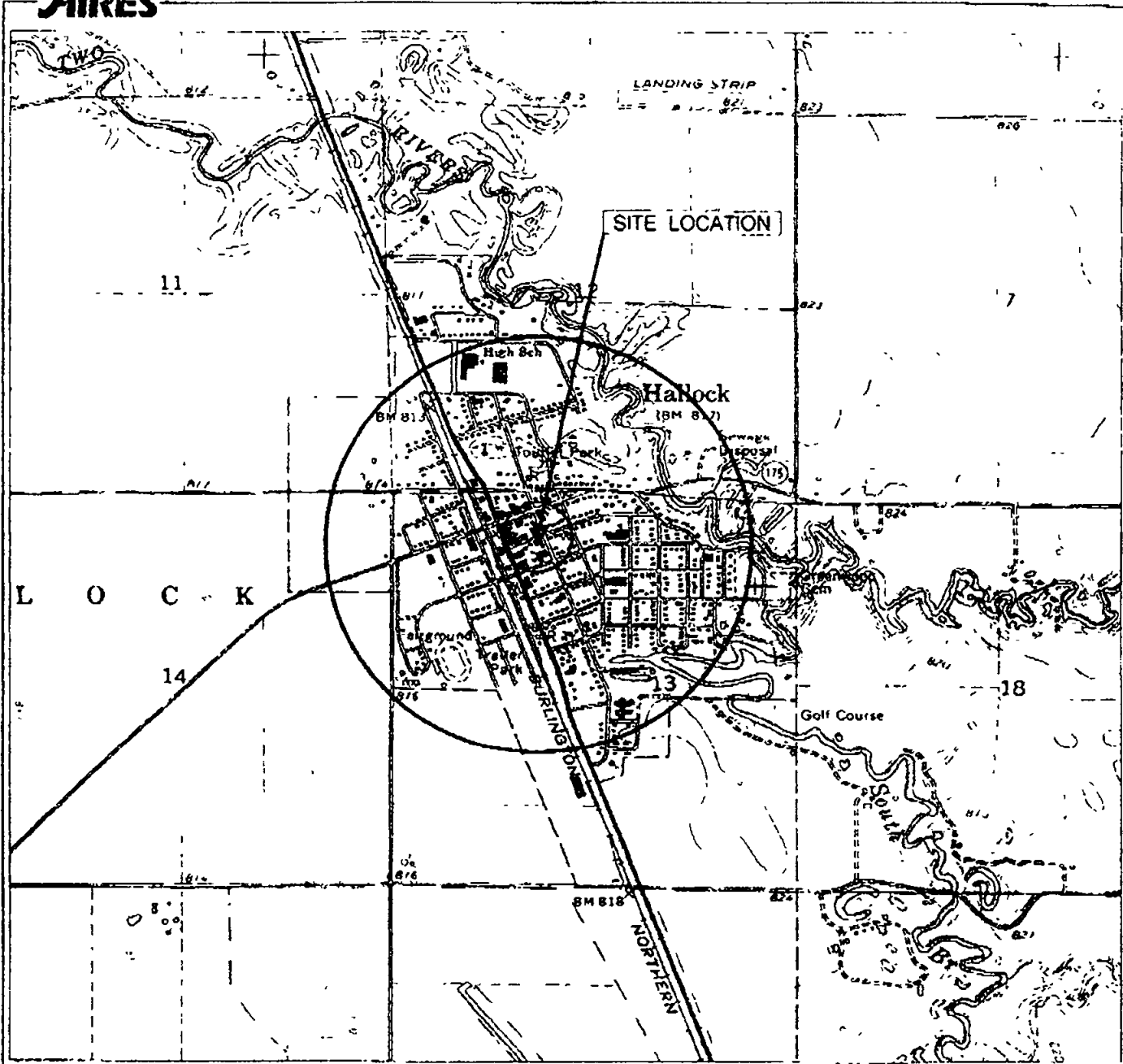
Recipient name & address: MR HANK NOEL
CITY OF HALLOCK
P.O. BOX 336
HALLOCK, MN 56728

Sender's name: ELIZABETH RACHMAN 708-879-3004

Number of pages to follow: 1

Special instructions or comments: THE ADDRESS OF THE SITE
IS: GTE NORTH, INC., 150 S. SECOND STREET, HALLOCK, MN.
THE INNER CIRCLE REPRESENTS 500 FEET. IF YOU
NEED ANYTHING ELSE, FEEL FREE TO CALL THANKS
FOR YOUR HELP! -LIZ

AIRES



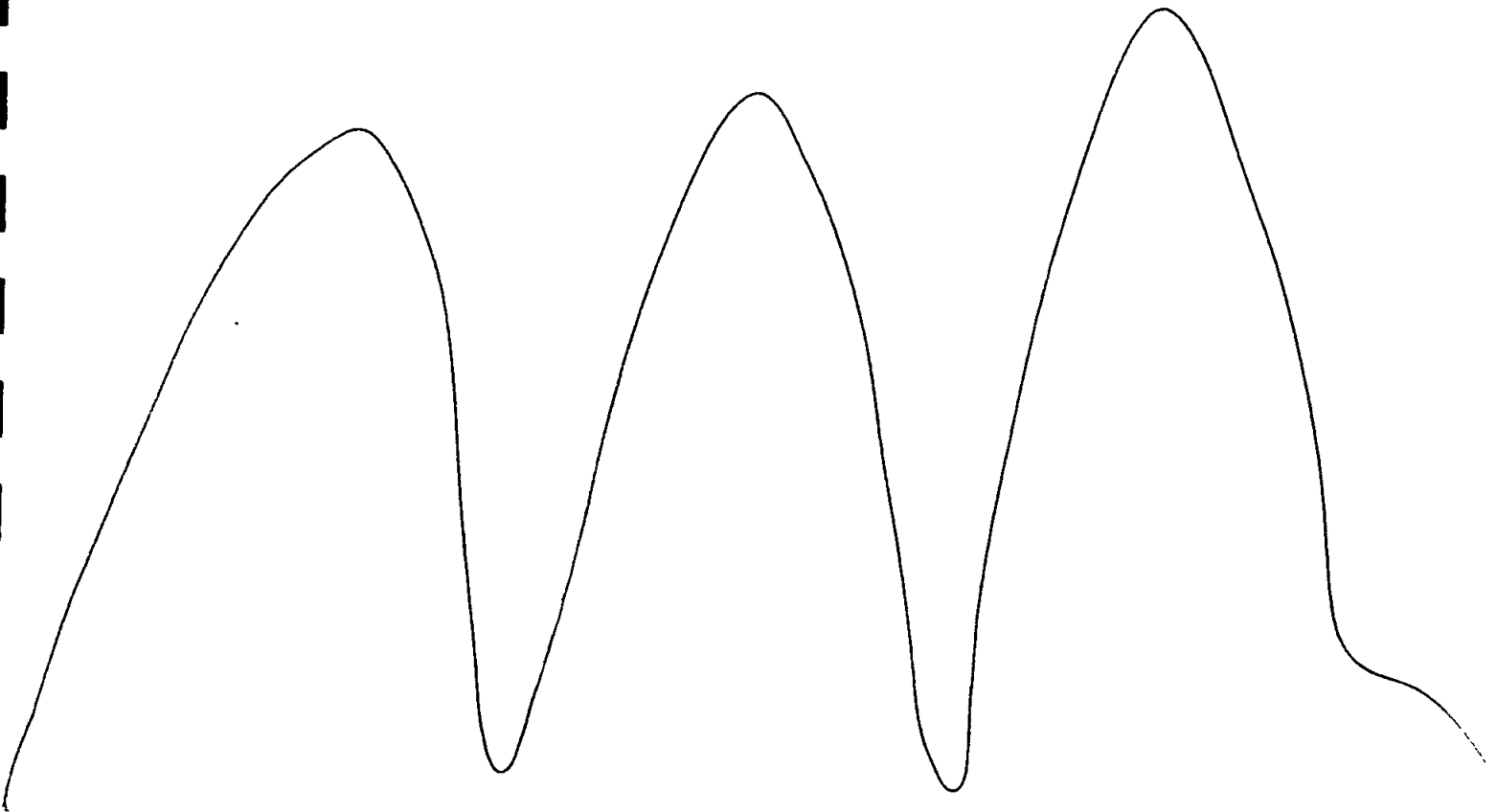
HALLOCK, MN 7.5' QUADRANGLE
 KITSON COUNTY
 DEPARTMENT OF THE INTERIOR/GEOLOGIC SURVEY
 1974
 CONTOUR INTERVAL 5 FEET



GTE - HALLOCK, MINNESOTA	
FIGURE 4	
WELL LOCATION MAP	
SCALE 1:24000	BY ER
PROJECT 96-6176	DATE 7/22/96

APPENDIX H

LIST OF LUST SITES



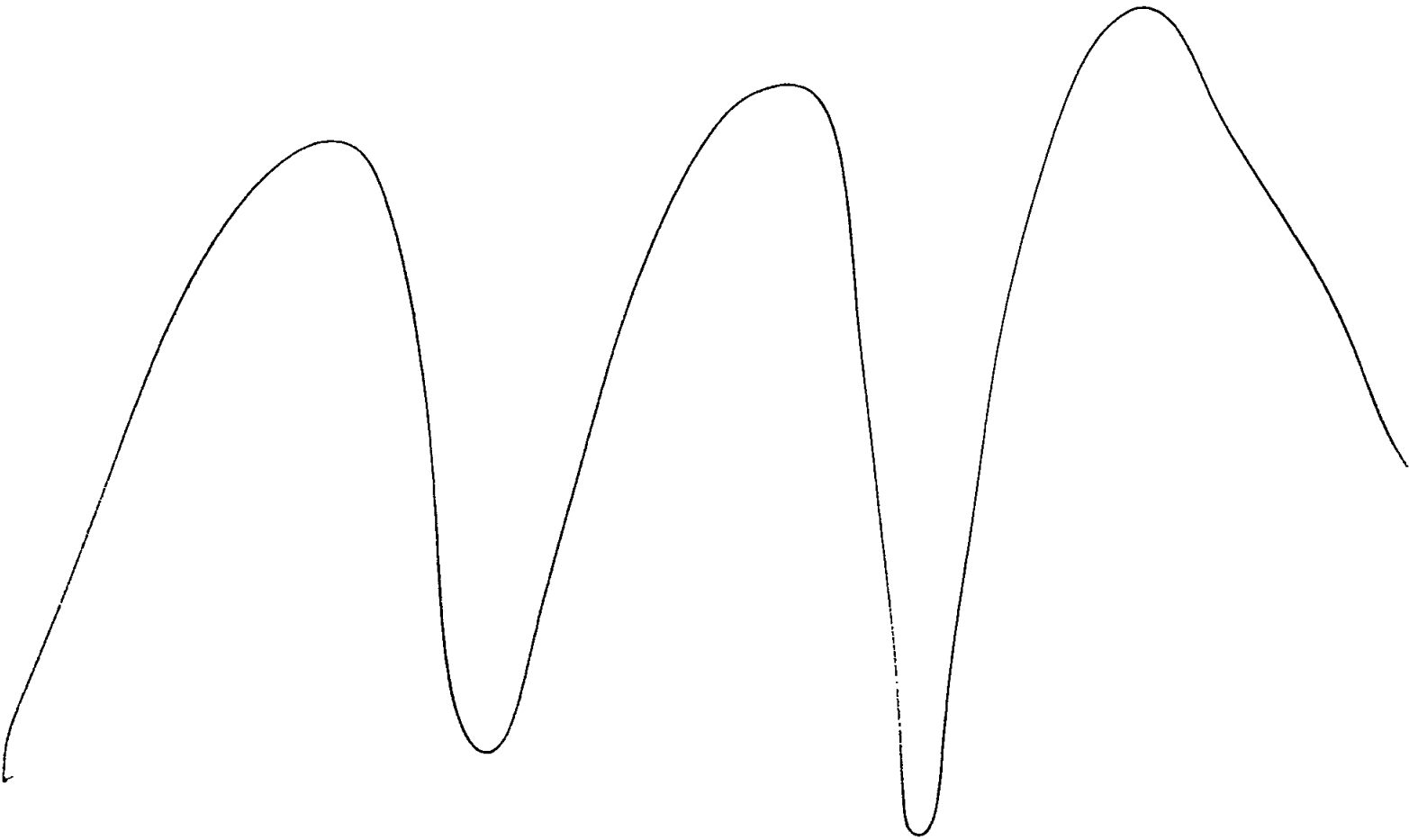
APPENDIX H - List of LUST Sites

Several Leaking Underground Storage Tanks (LUSTs) have been reported in the City of Hallock. Please refer to the table below (sites listed in bold are within 1000 feet of the subject site)

SITE ADDRESS	LEAK #
Cooperative Services 16 North Atlantic	6099
Cooperative Services 16 North Atlantic	8567
Hallock Coop 16 North Atlantic	6391
Hallock Elementary School 411 4th Street South	2128
Hallock High School 44 North Ash	1318
John Urau Property 901 South Elm	5746
Johnson Oil (Standard) 146 South Atlantic	2936
Kittson Oil Implement 15 North Atlantic	2870
MNDOT Hallock Truck 307 South Columbus	1752
Northern Air Radiator 406 South Atlantic	2688
Northwestern State Bank 203 2nd Street South	3290
Pantzer Residence Route 1, Box 116	8568
Ryden Development 346 Atlantic	2761
vacant building 102 East Broadway	4529

APPENDIX I

PHOTOGRAPHS



GTE NORTH, INCORPORATED
HALLOCK, MN



Photo #1
View of GTE facility in Hallock, MN (looking north) showing underground utility locations

Photo #2
View of facility (looking north) showing location of overhead electric lines



GTE NORTH, INCORPORATED
HALLOCK, MN



Photo #3

View of overhead lines at GTE facility as well as property to the west

Photo #4

View of overhead lines at properties west of GTE (looking northwest)



GTE NORTH, INCORPORATED
HALLOCK, MN



Photo #5

View of overhead lines at properties west of GTE and in the alley (looking west northwest)

Photo #6

View of adjacent property. Photograph taken from between the two GTE buildings looking northeast.



GTE NORTH, INCORPORATED
HALLOCK, MN



Photo #7

View of overhead lines in the alley running east of the site

Photo #8

View of overhead lines at the property to the east of the GTE facility

