

SITE EVALUATION

**Penta Wood Products, Inc.
Siren, Wisconsin**

PRINTED ON

JUL 21 1987

*Rec'd Aug. 2, 88
L. R. Rly.*

SITE EVALUATION

**Penta Wood Products, Inc.
Siren, Wisconsin**

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 BACKGROUND	2
2.1 HISTORICAL OPERATIONS	2
2.2 REVIEW OF PAST SPILLS AND RESPONSE ACTIONS	3
2.3 PRELIMINARY STUDIES	4
3.0 HYDROGEOLOGIC REVIEW	6
4.0 SITE EVALUATION	8
4.1 EVALUATION OF POTENTIAL SOURCE AREAS	8
4.2 SUMP LEAKAGE TEST	14
4.3 GROUNDWATER EVALUATION	15
4.4 DATA ASSESSMENT	15
5.0 CONCLUSIONS	18
6.0 SCOPE OF WORK - PHASE II	20
6.1 PURPOSE	20
6.2 PHASE II WORK PLAN	20

LIST OF APPENDICES

APPENDIX A	WELL LOGS - COMPANY WELLS
	WELL LOGS - SIREN AREA
	BOREHOLE LOG - PENTA WOOD PRODUCTS
APPENDIX B	SUMP DETAILS: PENTA AND CHEMONITE RETORTS
APPENDIX C	LABORATORY REPORTS SOIL AND GROUNDWATER SAMPLES

LIST OF TABLES

	<u>Following Page</u>
TABLE 2.1 GROUNDWATER ELEVATIONS	5
TABLE 4.1 POTENTIAL SOURCE AREA SAMPLING RESULTS	9
TABLE 4.2 GROUNDWATER SAMPLING RESULTS	15

LIST OF FIGURES

FIGURE 1 SITE LOCATIONS	1
FIGURE 2 SITE PLAN	2
FIGURE 3 GENERALIZED SOIL STRATIGRAPHY	6
FIGURE 4 TEST PIT LOCATIONS	8
FIGURE 5 PROPOSED MONITORING WELL LOCATIONS	20

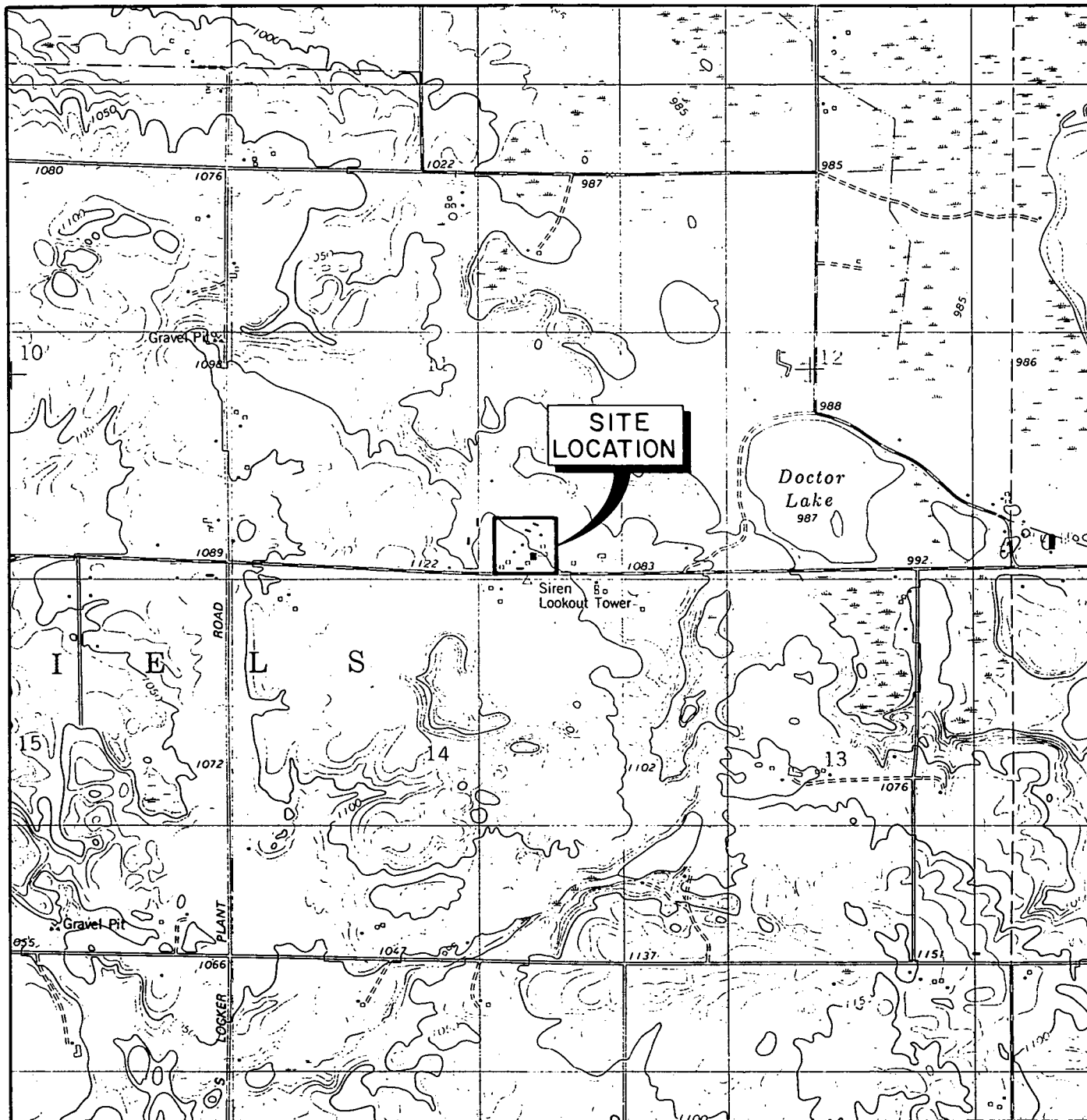
1.0 INTRODUCTION

Penta Wood Products Inc. (PWP) is an operating wood treating facility located in Siren, Wisconsin, which has treated posts and timbers since the 1950s. Figure 1 shows the location of Penta Wood Products Inc.

In 1987, the Wisconsin Department the Natural Resources (DNR) requested that PWP assess the environmental conditions of the Site. Subsequently, Conestoga-Rovers and Associates (CRA) was retained by PWP to develop and implement a work plan to assess potential sources of soil and groundwater contamination.

On August 21, 1987, on behalf of PWP, CRA submitted a Work Plan to assess PWP's operations. On November 3, 1987, CRA received a letter from the Wisconsin DNR approving the Work Plan with the addition of exploring the two treated wood storage areas and taking a sample of the company's water supply well. These additions were incorporated into the investigation which was carried out in 1988.

This report presents the results of CRA's assessment of the PWP site.



SOURCE: USGS TOPOGRAPHIC MAP
SIREN WEST, WIS. QUADRANGLE



SCALE: 1" = 2000'

CRA

figure 1
SITE LOCATION
Penta Wood Products, Inc.

2.0 BACKGROUND

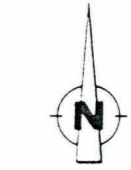
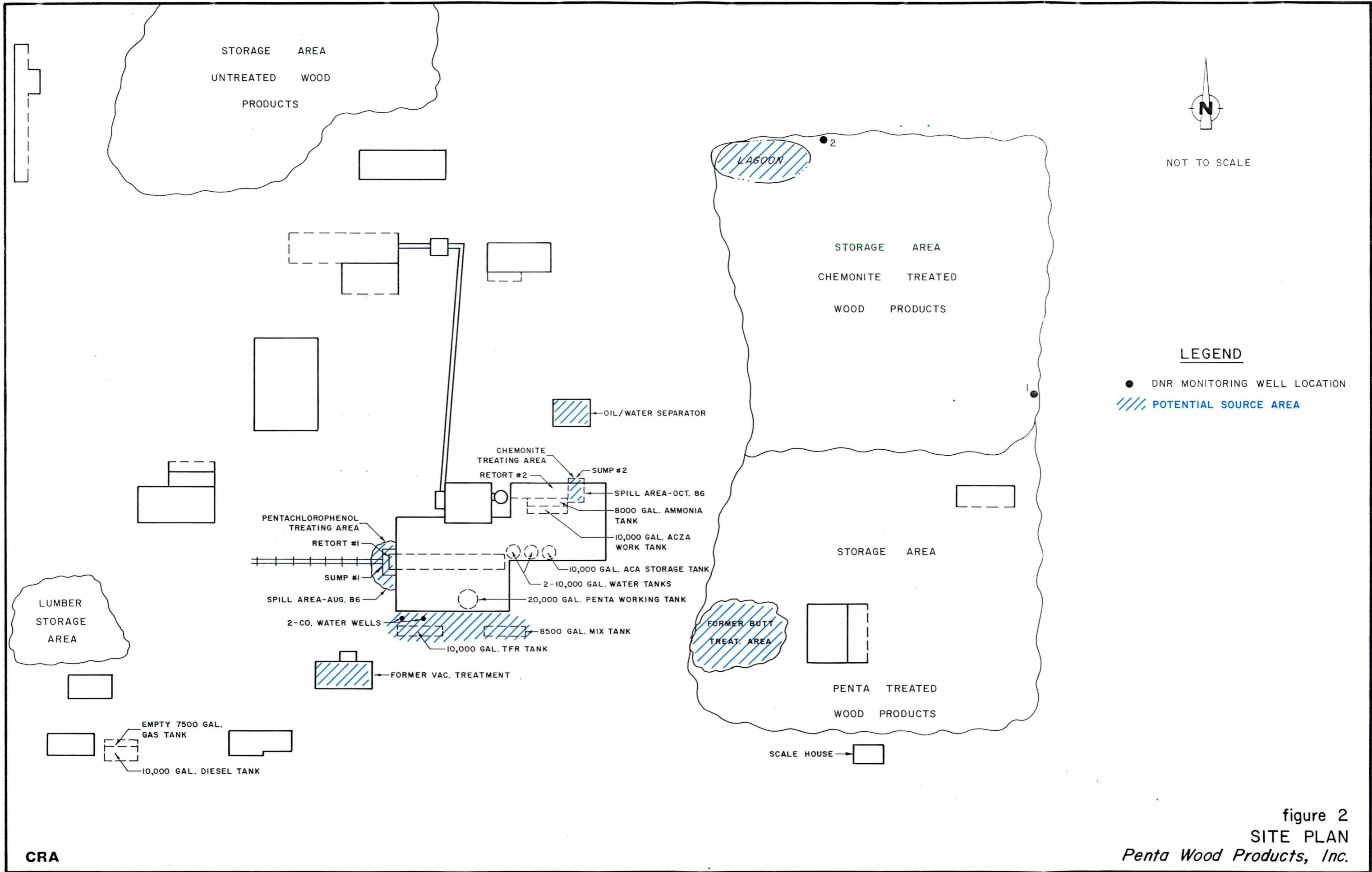
2.1 HISTORICAL OPERATIONS

Penta Wood Products has been treating and preserving wood products since the mid-1950s.

Prior to 1975, Pentachlorophenol was the only chemical used to treat wood products. The wood was treated by either dipping the butt ends of poles and timbers into a open tank of pentachlorophenol or by introducing pentachlorophenol, under a vacuum, into the wood. These two treatment methods were used until 1956 when the first pressure treating cylinder was installed. This method of treating the wood was similar to the vacuum treating method except that the treating cylinder was placed under pressure instead of a vacuum.

In 1975 a second pressure process was added. The treating process was the same as the first pressure treating process. However, a different chemical was used. This chemical, CHEMONITE, is a water borne salt treatment consisting of Arsenate and Copper II Oxide. Both the pentachlorophenol and chemonite pressure treating processes are being utilized at this time.

Figure 2 shows where each of these former and present day treating processes are located.



NOT TO SCALE

LEGEND

- DNR MONITORING WELL LOCATION
- /// POTENTIAL SOURCE AREA

CRA

figure 2
SITE PLAN
Penta Wood Products, Inc.

2.2 REVIEW OF PAST SPILLS AND RESPONSE ACTIONS

This section summarizes past spills of wood treating liquids and associated response actions. This information was gathered from PWP.

In 1986 there were two separate incidences when treating liquids used at the Site were accidentally spilled onto the ground adjacent to the retorts.

The first spill was in August of 1986. The pentachlorophenol treating cylinder had just been filled with a 5 percent solution of pentachlorophenol and the cylinder was being pressurized when the door gasket failed allowing approximately 50 gallons of pentachlorophenol to leak into the sump and onto the surrounding ground. The liquid that leaked into the sump was pumped back into the treating cylinder.

The second spill occurred in October 1986. The chemonite pressure cylinder was being filled with the chemonite treating solution. The cylinder door was not secured and this allowed some 500 gallons of chemonite solution to pass through the crack around the door. Most of the liquid was contained by the sump in front of the cylinder door. Some chemonite solution did leak onto the soil

surrounding the sump. Contaminated soil was excavated and placed in drums for later disposal by Aqua Tech Co. of Port Washington, Wisconsin.

A third spill occurred on April 15, 1988, at the oil/water separator when a valve was accidentally left open and the storage tank overflowed. Some oil contaminated with pentachlorophenol and water flowed onto adjacent soil and pooled in lower spots. Two drums of contaminated soil were scraped up and shipped for off site disposal.

A fourth spill occurred on June 9, 1988. The oil/water separator tank, which is used to hold excess pentachlorophenol treating water prior to use in the chemonite treatment processes was overfilled and some liquid spilled onto the ground. This liquid was pumped into drums and the contaminated soils were excavated and stockpiled on a secured, tarped concrete pad for future disposal.

2.3 PRELIMINARY STUDIES

The Wisconsin DNR conducted a preliminary study at the Site in 1986. This study included the installation of two (2) on site monitoring wells and two

groundwater samples, as well as six soil samples in and around the spill area. Some of the analytical data obtained by the DNR is presented in Section 4.2 of this report along with data developed by this Site Assessment.

Table 2.1 shows well details of the two on-site monitoring wells as well as water level measurements taken on two separate occasions.

There was very little stratigraphic information available from the installation of these wells.

TABLE 2.1
GROUNDWATER ELEVATIONS

<u>Well</u>	<u>Depth¹</u> <u>(ft)</u>	<u>Elevation²</u> <u>(ft)</u>	<u>Water Level</u> <u>Elevation (ft)</u>	
			<u>3/25/88</u>	<u>6/1/88</u>
MW1	95.5	200.00	112.60	112.35
MW2	84.8	194.19	113.43	113.19

Notes:

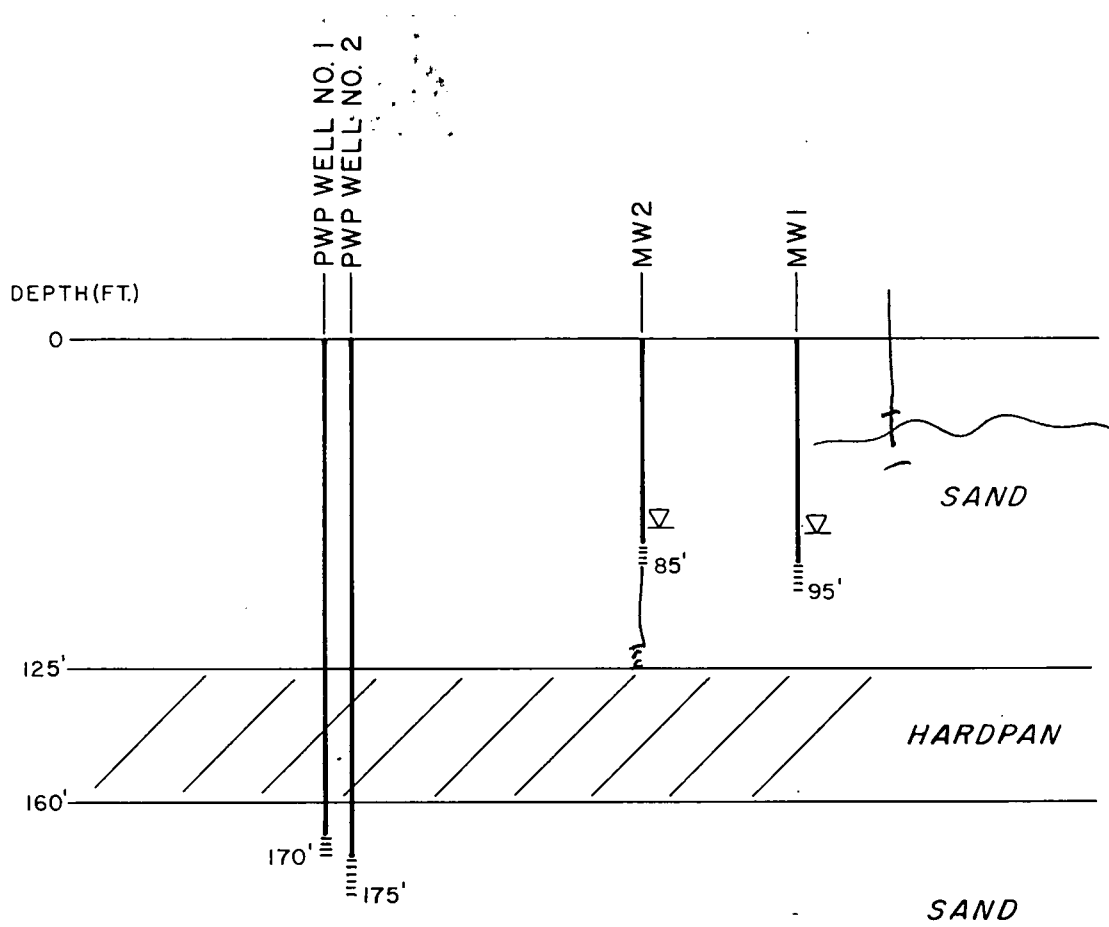
- 1 - Depth from top of inside casing
- 2 - Top of casing elevation relative to MW1
which was assumed to be 200.00

3.0 HYDROGEOLOGIC REVIEW

Information obtained from the Wisconsin Geological and Natural History Survey indicate that there are three geologic units in the vicinity of PWP. This information was in the form of well logs for the PWP's two water supply wells, logs from wells in the Siren area and one borehole log done by the Wisconsin Geologic and Natural History Survey. This information can be found in Appendix A.

The three uppermost geologic units which underlie the PWP site are illustrated on Figure 3.

The first geologic unit is a fine to medium grained sand with occasional seams of gravel, silt and clay. This unit varies in thickness from 10 to 128 feet depending on the ground elevation. Directly under the PWP Site this sand unit is approximately 125 feet thick and is underlain by a less permeable, hardpan unit. This hardpan ranges in thickness from 20 feet to 90 feet thick and is made up of fine sand with a large percentage of clay and/or silt. Under the PWP Site this hardpan is approximately 45 to 50 feet thick and represents the second significant geologic unit. Water accumulates above the hardpan unit as evidenced by the presence of groundwater at monitoring wells MW1 and MW2 installed into the sand layer above the hardpan.



NOT TO SCALE

1

figure 3
GENERALIZED SOIL STRATIGRAPHY
Penta Wood Products, Inc.

CRA

Under this hard pan is another water bearing sand and gravel layer. This water bearing sand appears to be entirely saturated and may even be under artesian conditions. This lower sand unit is the aquifer in which the company water supply wells take their water, as illustrated on Figure 3.

There are several small lakes and ponds around Daniels Township as well as wetland/marshland areas.

As shown on Figure 1, there is a significant topographic relief east of the Site toward Doctor Lake. This suggests that groundwater within the upper sand unit may migrate eastward toward this wetland area. However, the groundwater flow direction is not known in either the upper or lower sand aquifer.

4.0 SITE EVALUATION

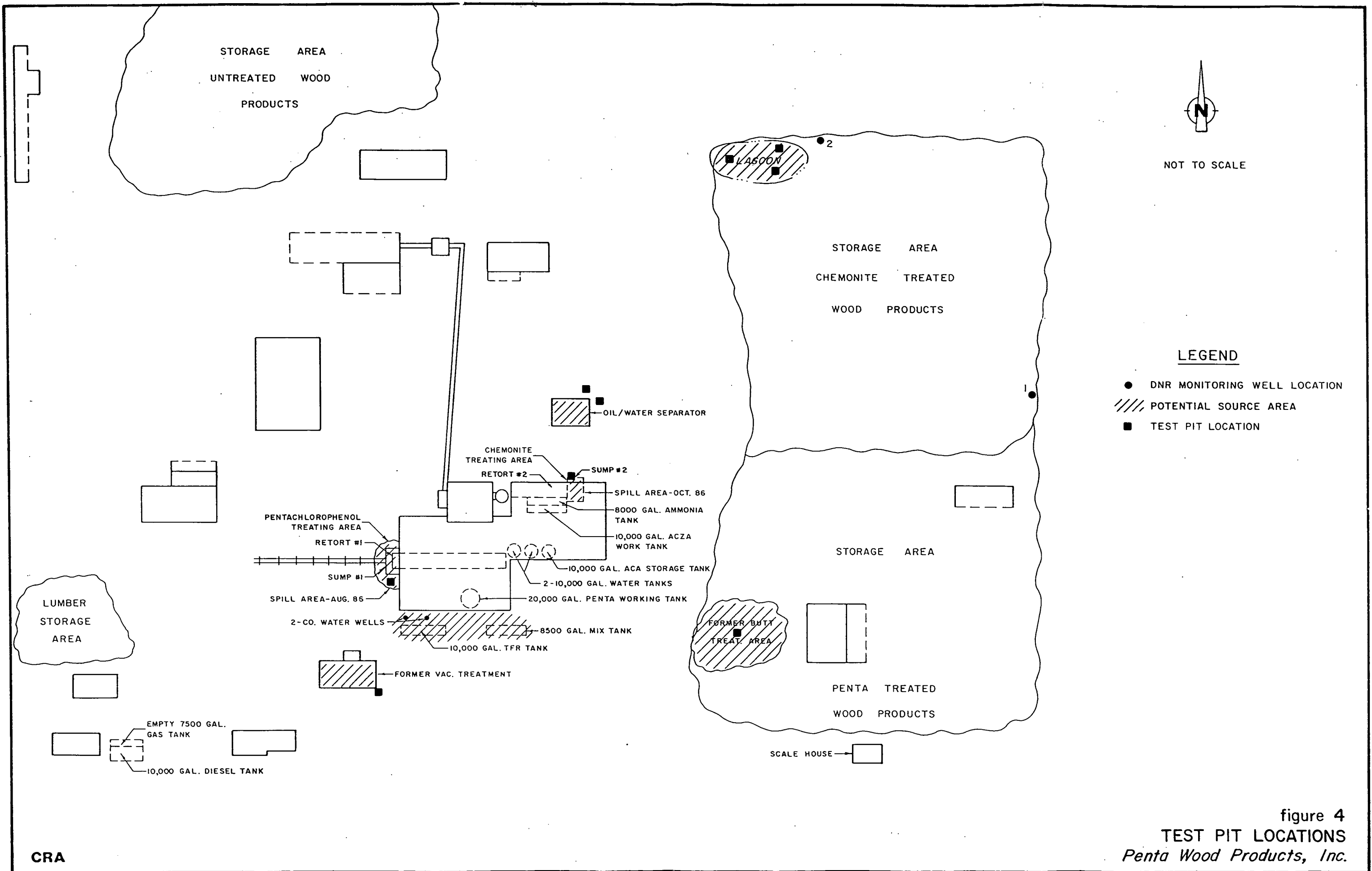
4.1 EVALUATION OF POTENTIAL SOURCE AREAS

On June 1, 1988, CRA conducted a field investigation to identify potential source areas. Nine test pits were excavated in and around areas shown on Figure 2, Scope of Work - Penta Wood Products. The purpose of these test pits was to identify and sample any areas that could contribute to soil and groundwater contamination. Figure 4 shows the locations of these test pits. Table 4.1 summarizes the sampling results. Appendix C provides lab reports for the soil samples taken.

The potential source areas are discussed below:

Potential Source Area #1 - Pentachlorophenol Treating Area

The test pit was located immediately adjacent to and surrounding the retort opening by the pentachlorophenol cylinder and sump, as shown on Figure 4. This is the current pentachlorophenol wood treating area. A soil sample was collected three feet below ground surface in the pentachlorophenol treating area and analyzed for the four process indicator chemicals (arsenic, copper, zinc and



pentachlorophenol). The soil in this test pit had a slight discoloration in the top 1.0 foot and a slight odor from 2.0 to 3.0 feet. There were no photoionization readings above background.

Sample results, shown on Table 4.1, indicate that pentachlorophenol was not detected and metals were not detected at elevated concentrations.

Potential Source Area #2 - Chemonite Treating Area :

A test pit was excavated immediately adjacent to the present chemonite treatment cylinder and sump area. Soils in this test pit were discolored (green) in the top 0.5 foot. There was no odor, and no elevated photoionization readings from this test pit. A soil sample was collected from the test pit at a depth of approximately three feet below ground. This sample exhibited chemonite and pentachlorophenol contamination as evidenced by elevated levels of pentachlorophenol and metals in the soil. Water from the oil/water separator, which contains some pentachlorophenol, is also used in the chemonite treating process.

TABLE 4.1

POTENTIAL SOURCE AREA SAMPLING RESULTS

<u>Potential Source Area</u>	<u>Location</u>	<u>Depth (ft)</u>	<u>Parameters (mg/kg)</u>			
			<u>Arsenic</u>	<u>Copper</u>	<u>Zinc</u>	<u>Pentachlorophenol</u>
1	Pentachlorophenol Treating Area	3'	0.52	20	16	ND
2	Chemonite Treating Area	3'	140	260	23	71
3	Former Lagoon (Composite)	3'	38	63	20	ND
6	Oil/Water Separator	2'	2.4	7.3	6.4	110
7	Chemonite Treated Wood Storage Area (Composite)	1'	150	48	8.1	ND
8	Pentachlorophenol Treated Wood Storage Area (Composite)	1'	4.2	7.0	6.4	ND

Potential Source Area #3 - Lagoon Area

Three test pits were excavated in the area formerly used to hold excess treatment water. As shown on Figure 4, the lagoon is located immediately west of monitoring well MW2. The soils in these test pits showed no visual evidence of contamination, but did have a slight odor. There were no elevated photoionization readings above background.

Three soil samples (one from each lagoon test pit) was collected from a depth of approximately three feet below ground and a composite soil sample was prepared. Sample results (Table 4.1) indicate that pentachlorophenol was not detected. Metals were detected at levels above background (when compared to results collected from the pentachlorophenol treated wood storage area).

Potential Source Area #4 - Former Vacuum Treatment Area

One test pit was excavated in the area adjacent to the former vacuum treatment facility. This building was used prior to 1956 as a pentachlorophenol treatment operation similar to the operations used today and is now being used as a garage. The soils excavated in this test pit exhibited no visual contamination or odor. Soil samples were scanned with a photoionization meter and did not exhibit readings above background.

Given the above, CRA elected not to collect a soil sample for chemical analysis on the basis that there was no evidence of potential contamination.

Potential Source Area #5 - Former Butt Treating Area

One test pit was excavated in the area formerly used to treat pole butts with pentachlorophenol in the early 1950s. This area is located in the present day pentachlorophenol treated wood storage area directly east of the present day garage.

The soils excavated from this test pit did not exhibit any visual contamination or odor. Soil samples were scanned with a photoionization meter and did not exhibit soil vapor readings above background.

Given the above, CRA elected not to collect a soil sample for chemical analysis on the basis that there was no evidence of potential contamination.

Potential Source Area #6 - Oil/Water Separator

Two test pits were excavated in an area located north of the treatment cylinders in the vicinity of the oil/water separator used to temporarily store and separate oil and water. The soils in both of these test pits

had a brown/black discoloration as well as an odor. Both test pits showed elevated photoionization readings. The oil/water mixture is recovered from the pentachlorophenol treatment process. The oil contains pentachlorophenol and is separated from the water in a tank. Recovered oil is reused in the pentachlorophenol treatment process and the water is used as make-up water for the chemonite treatment process.

As discussed in Section 3, two spills have occurred in this area. The two test pits were excavated in areas which visually appeared contaminated. One soil sample was collected from a depth of two feet. Chemical analysis indicates that this sample contains pentachlorophenol (110 mg/kg). Metals concentrations were similar to background levels as would be expected since chemonite is not used in this area.

Potential Source Area #7 -
Chemonite Treated Wood Products Storage Area

This area was added at the request of the Wisconsin DNR in a letter dated October 29, 1987. This area is in and around the chemonite treated wood storage areas. As suggested by DNR, 24 shallow soil samples were collected from locations evenly distributed over the chemonite treated wood storage area shown on Figure 4. One composite soil sample was prepared and analyzed. As shown on Table 4.1,

pentachlorophenol was not detected in this area as would be expected since penta treated wood products are not stored there. However, elevated levels of metals similar to the concentrations found in soil adjacent to the chemonite treating area.

Potential Source Area #8 -
Pentachlorophenol Treated Wood Products Storage Area

This area was also evaluated at the request of the Wisconsin DNR. In a manner similar to the chemonite treated wood products area, CRA collected 24 individual shallow soil samples representing the storage area and prepared one composite sample.

Analytical results for the composite sample (Table 4.1) did not detect pentachlorophenol. Metals concentrations ranged from less than 4 to 7 mg/kg and similar to the metals concentrations found in soil sampled from the pentachlorophenol treating area. Since chemonite is not used in this area, these metal concentrations are considered representative of background concentrations.

Potential Source Area #9 -
Pentachlorophenol Storage Tank and Mixing Area

This area was not identified as a potential source area until the end of this study phase and was not investigated.

4.2 SUMP LEAKAGE TEST

The concrete sumps in front of each treating cylinder were leak tested to determine whether or not they were contributing to the groundwater and soil problem under the Site. Physical details of these sumps are shown in Appendix B. The sumps were drained of any product and then filled with water. Water level measurements were taken from a fixed reference point over a 48 hour period.

The chemonite retort sump water level did not drop in this 48 hour period.

The penta retort sump water level did drop 0.5 inches in a 48 hour period.

It should be noted that the Chemonite retort sump is housed under a roof and surrounded by three walls thus protecting it from the prevailing seasonal winds. This greatly reduced the chances of evaporation from this sump.

The penta retort sump is not protected from any such structure, and is exposed to the prevailing seasonal winds. It is concluded that this 0.5 inch drop in water level is due to evaporation and that neither sump is leaking.

4.3 GROUNDWATER EVALUATION

As part of the Scope of Work, CRA sampled the two on-site monitoring wells and one of the company water supply wells. The on-site monitoring wells were developed and stabilized prior to collecting the samples. The company water supply well was allowed to purge for 10 minutes prior to sampling. All these wells were sampled for Arsenic, Copper, Zinc and pentachlorophenol. Table 4.2 summarizes the lab results. Appendix C shows the lab reports.

Pentachlorophenol was reported at a concentration of 1300 ug/L in the company water supply well. This concentration was confirmed by a split sample taken by the Wisconsin DNR which also showed a concentration of 1300 ug/L. The second company water supply well was sampled by the State and was found to have a similar concentration of pentachlorophenol.

4.4 DATA ASSESSMENT

Based on the findings of the test pit excavations, soil sample analyses, groundwater analysis and sump leakage test, the following observations are made:

TABLE 4.2

GROUNDWATER SAMPLING RESULTS

<u>Compound</u>	<u>Federal Maximum Contaminant Level (MCL)*</u>	<u>MW1</u>	<u>MW2</u>	<u>PWP #1 (4" dia.)</u>
Arsenic (ug/l)	50	ND	ND	ND
Copper (ug/l)	1,000	ND	ND	20
Zinc (ug/l)	5,000	20	20	ND
Penta- Chlorophenol (ug/l)	200 (proposed MCL)	ND (<0.50)	ND (<0.50)	1300 (1300)

ND - Not detected at or above the Method Detection Limit.

* Reference - 40 CFR 141 and 143

() Wisconsin Department of Natural Resources results from split samples.

1. The presence of pentachlorophenol in groundwater sampled from PWP's production wells suggests that groundwater contamination from PWP operations has occurred. This finding suggests that pentachlorophenol has migrated downward from Potential Source Area #9 into the upper sand aquifer above the hardpan and has leaked to the PWP production wells most likely via the well installation, itself.

The groundwater quality and groundwater flow direction in the upper sand aquifer beneath the operations area is undefined.

2. Three potential source areas represent potential sources of the groundwater contamination by pentachlorophenol. These are the chemonite treating area which exhibited a pentachlorophenol concentration of 71 mg/kg, and the oil/ water separator area which exhibited a pentachlorophenol concentration of 110 mg/kg and the pentachlorophenol mixing and storage area. Neither of these areas lie in close proximity to PWP's production wells. At present it is unclear whether any of these areas may have contributed to groundwater contamination observed at PWP's production wells.

3. Metals concentrations in soil are measured at levels above background in the chemonite treating area and the chemonite treated wood products storage area. However, the levels are not considered significant for surface soils. Further, the levels found are not expected to leach into the groundwater due to the affinity of these metals to adhere to soils. This is supported by the low to non-detectable levels of metals in groundwater samples collected from the two monitoring wells adjacent to the chemonite storage area and the PWP production wells.

5.0 CONCLUSIONS

Based on the findings of the PWP Site Assessment, the following conclusions are made:

1. Metals concentrations above background are present in soils in the chemonite treating and chemonite treated wood products storage areas. These levels are not considered significant with respect to soil contamination or as a potential source of groundwater contamination. Further study with respect to metals at PWP is not required.
2. Pentachlorophenol concentrations were detected in the soil around the oil/water separator area and the chemonite treating area. These areas may represent potential sources of groundwater contamination and require further definition of the vertical and lateral extent of soil contamination.
3. Spills from the oil/water separator have resulted from tank overflows. The potential for recurrence is increased since the water produced from the oil/water separator periodically exceeds the required water demand for the chemonite make up water. An overflow prevention alarm has been installed and water management measures are needed to prevent recurrence of spills in the oil/water separator area.

*Big
Problem
when e
does
excess
Go*

4. Water within the PWP production wells is contaminated with pentachlorophenol. Upon this finding, PWP discontinued use of this water as a drinking water supply, but continued the use of the water for production. The presence of pentachlorophenol in these wells suggests that the upper aquifer beneath potential source area #9 is contaminated with pentachlorophenol. The presence of the low permeable hardpan formation should prevent downward leakage of groundwater contamination to the lower sand aquifer. Contamination in the lower sand aquifer may be the result of leakage via the well casing and may be limited to the immediate vicinity of the production wells.

IT MAY
NOT
HAVE

OR
WHAT
BASES
ASSUMPTION
MAP

6.0 SCOPE OF WORK - PHASE II

6.1 PURPOSE

The purpose of the Phase II work will be as follows:

1. to better define the hydrogeology and stratigraphy under the Site,
2. to determine the groundwater flow direction and rate in the upper sand aquifer,
3. to determine whether the upper sand and lower sand aquifer are interconnected via the production well installation and
4. to determine groundwater quality in the upper sand aquifer.

6.2 PHASE II WORK PLAN

CRA proposes that two additional monitoring wells be installed in locations presented in Figure 5. These wells will be installed with a hollow stem auger drill rig.

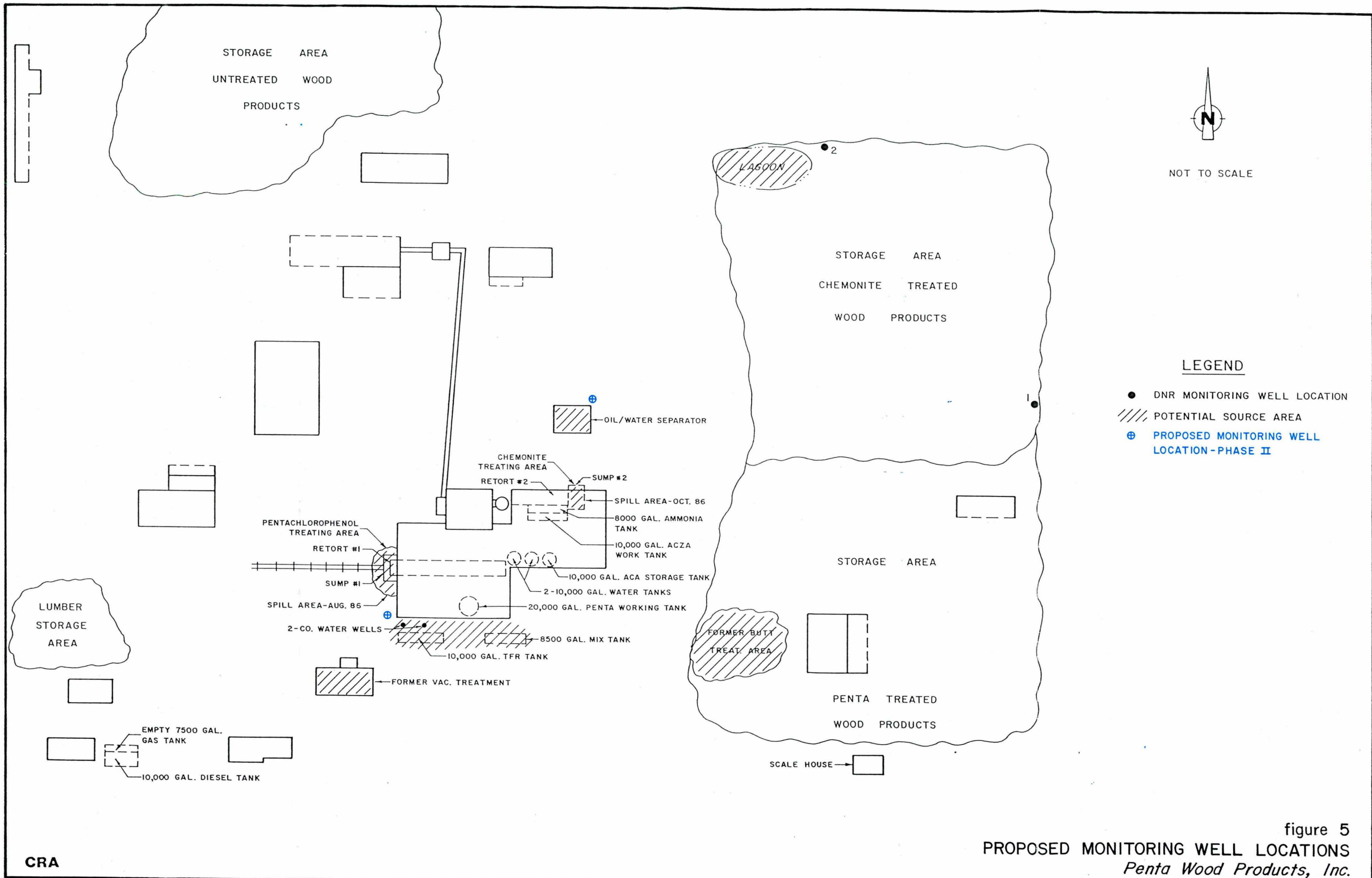


figure 5
PROPOSED MONITORING WELL LOCATIONS
Penta Wood Products, Inc.

Split spoon samples will be taken every five feet and the samples will be kept for geologic records. The samples will be classified by the USCS classification system. A final log will be prepared. Selected soil samples will be collected to determine the vertical extent of soil contamination.

The borehole will be advanced to the top of the handpan.

The wells will consist of a precleaned 10 foot long, 2 inch \emptyset stainless steel screen attached to 2" \emptyset black iron riser pipe. A 10 foot silica sand pack will be placed around the screen and a bentonite slurry shall be pumped down on top of the sand pack. The remainder of the annulus shall be grouted to surface with a neat cement/bentonite grout. A locking protective cover and bumper posts shall also be installed.

After the wells have been installed and the grout allowed to cure, the wells will be developed and stabilized until three consecutive readings of pH, conductivity and temperature have been achieved. These wells will then be sampled for pentachlorophenol analysis.

These wells will be surveyed and water levels shall be taken on all monitoring well to more accurately determine groundwater flow directions.

The well installed nearest to the existing company water supply wells shall also be checked, by taking water levels for a 48 hour period to see if the pumping of the company water supply wells has any affect (ie. drawdown) on the upper sand aquifer well. A determination can then be made as to whether or not there is a interconnection between the upper and lower aquifers.

Once all of this data has been received and interpreted, a brief letter report will be written presenting all the new data and conclusions and recommendations. The Phase II report will be completed three months following DNR approval of this Phase II work plan.

A high level alarm has been installed on the oil/water separator tank to provide warning to avoid future tank overflows.

ALARM
NOT
ENOUGH

INSTALL
TANK

In addition, it is acknowledged that PWP is evaluating alternatives to manage excess water resulting from the pentachlorophenol treating process.

All of which is respectfully submitted,

CONESTOGA-ROVERS & ASSOCIATES



Donald H. Haycock, P. Eng.



Ronald Frehner, P. Eng.

APPENDIX A

WELL LOGS - COMPANY WELLS

WELL LOGS - SIREN AREA

BOREHOLE LOG - PENTA WOOD PRODUCTS

WELL CONSTRUCTOR'S REPORT

WISCONSIN STATE BOARD OF HEALTH

Well

1. COUNTY Burnett CHECK ONE Town Village City NAME Daniels

2. LOCATION (Number and Street or 1/4 section, section, township and range. Also give subdivision name, lot and block numbers when available.) SW-SE-Well Tr 38 N-R 17W

3. OWNER AT TIME OF DRILLING Penta Wood Products, Inc.

4. OWNER'S COMPLETE MAIL ADDRESS Arden, Wis.

5. Distance in feet from well to nearest: BUILDING SANITARY SEWER FLOOR DRAIN FOUNDATION DRAIN WASTE WATER DRAIN
 (Record answer in appropriate block) 4 C. I. TILE C. I. TILE SEWER CONNECTED INDEPENDENT C. I. TILE

CLEAR WATER DRAIN SEPTIC TANK PRIVY SEEPAGE PIT ABSORPTION FIELD BARN SILO ABANDONED WELL SINK HOLE
 C. I. TILE 90 95

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

6. Well is intended to supply water for: plant

7. DRILLHOLE						10. FORMATIONS			
Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)	Kind		From (ft.)	To (ft.)
<u>4</u>	<u>Surface</u>	<u>170</u>				<u>sand</u>		<u>Surface</u>	<u>128</u>
						<u>hard pan</u>		<u>128</u>	<u>152</u>

8. CASING, LINER, CURBING, AND SCREEN				
Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)	
<u>4</u>	<u>1 1/2" black</u>	<u>Surface</u>	<u>165 1/2</u>	<u>Clay-ey gravel</u>
				<u>sand</u>
<u>4</u>	<u>Everdure,</u>	<u>165</u>	<u>170</u>	
	<u>2 slot, Johnson screen</u>			

9. GROUT OR OTHER SEALING MATERIAL			
Kind	From (ft.)	To (ft.)	
	<u>Surface</u>		

11. MISCELLANEOUS DATA

Well construction completed on Aug. 24 1966

Yield test: 1 Hrs. at 15 GPM Well is terminated 8 inches above below final grad.

Depth from surface to normal water level 145 ft. Well disinfected upon completion Yes No

Depth to water level when pumping 150 ft. Well sealed watertight upon completion Yes No

Water sample sent to Madison laboratory on: Dec. 14 1966

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

SIGNATURE Wm. K. Beecroft COMPLETE MAIL ADDRESS BEECROFT BROS. WELL DRILLING
Registered Well Driller Clarence & William K. Beecroft
Rt. 2 Box 109
Frederic, Wisconsin 54837

Please do not write in space below

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

WELL CONSTRUCTOR'S REPORT
FORM 3300-15

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

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

1. COUNTY Summit CHECK ONE Town Village City NAME Daniels

2. LOCATION 1/4 Section SE-SE Section 11 Township 38N Range 17W 3. OWNER AT TIME OF DRILLING Kenia Wood products

Grid or street no. Street name ADDRESS Green, Wis.

AND - If available subdivision name, lot & block no. POST-OFFICE

4. Distance in feet from well to nearest:

BUILDING	SANITARY SEWER C. I.	FLOOR DRAIN C. I.	FOUNDATION DRAIN SEWER CONNECTED	WASTE WATER DRAIN C. I.
<u>7</u>	<u>120</u>			

SEWER WATER DRAIN C. I.	SEPTIC TANK	PIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
	<u>140</u>		<u>160</u>					

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

5. Well is intended to supply water for: Industry

6. DRILLHOLE						9. FORMATIONS			
Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)	Kind	From (ft.)	To (ft.)	
<u>10</u>	Surface	<u>20</u>				<u>sand & gravel</u>	Surface	<u>125</u>	
<u>6</u>	<u>20</u>	<u>175</u>				<u>hard pan</u>	<u>125</u>	<u>170</u>	
						<u>sand</u>	<u>170</u>	<u>175</u>	
						<u>hard pan</u>	<u>175</u>		

7. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
<u>6</u>	<u>19.45 # black steel T+C</u>	Surface	<u>170 1/2</u>
<u>5</u>	<u>Johnson screen</u>		
	<u>Everdure</u>		
	<u>No 15 slot 16 9/12</u>	<u>174 1/2</u>	

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
<u>Cuttys</u>	Surface	<u>20</u>

10. TYPE OF DRILLING MACHINE USED

Cable Tool Direct Rotary Reverse Rotary

Rotary - air w/drilling mud Rotary - hammer with drilling mud & air Jetting with Air Water

Well construction completed on June 14 1973

11. MISCELLANEOUS DATA

Yield test: 7 Hrs. at 35 GPM

Depth from surface to normal water level 135 ft.

Depth to water level when pumping 160 ft.

Water sample sent to _____ laboratory on: _____ 19__

Well is terminated 10 inches above below final grade

Well disinfected upon completion Yes No

Well sealed watertight upon completion Yes No

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

SIGNATURE _____ COMPLETE MAIL ADDRESS _____

Registered Well Driller

Please do not write in space below

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

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side.

1. County Burnett Town Danville
Village
City Check one and give name

2. Location Ed-20-R-E-402 Good lot 5 38 17
Name of street and number of premise or Section, Town and Range numbers

3. Owner or Agent Ed Ahnquist or SW, NE, sec. 13
Name of individual, partnership or firm

4. Mail Address Green Wis
Complete address required

5. From well to nearest: Building 4 ft; sewer 20 ft; drain _____ ft; septic tank 20 ft;
dry well or filter bed _____ ft; abandoned well _____ ft.

6. Well is intended to supply water for: Home

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
<u>4</u>	<u>1</u>	<u>104</u>			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
<u>4</u>	<u>Steel</u>	<u>1</u>	<u>104</u>

9. GROUT:

Kind	From (ft.)	To (ft.)

11. MISCELLANEOUS DATA:

Yield test: Cent Hrs. at 6 GPM.
Depth from surface to water-level: 30 ft.
Water-level when pumping: 15 ft.
Water sample was sent to the state laboratory at:
Madison on March 4 1959
City

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
<u>Sand/gravel</u>	<u>1</u>	<u>80</u>
<u>hard pan</u>	<u>80</u>	<u>98</u>
<u>gravel</u>	<u>98</u>	<u>104</u>

RECEIVED

MAR 9 1959

ENVIRONMENTAL SANITATION

Construction of the well was completed on:

Feb 27 1959

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

Was the well disinfected upon completion?
Yes No _____

Was the well sealed watertight upon completion?
Yes No _____

Signature Wm Prescott
Registered Well Driller

Class Falls Wis
Complete Mail Address

Please do not write in space below

Rec'd _____ No. _____
Ans'd _____
Interpretation _____

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

NOTE:

White Copy - Division's Copy
 Green Copy - Driller's Copy
 Yellow Copy - Owner's Copy

AUG 30 1982

1. COUNTY Burnett		CHECK (✓) ONE: <input checked="" type="checkbox"/> Town <input type="checkbox"/> Village <input type="checkbox"/> City		Name Daniels	
2. LOCATION Section or Gov't. Lot Sw-Sw Section 13 Township, Range 38N 17W		3. NAME <input checked="" type="checkbox"/> OWNER <input type="checkbox"/> AGENT AT TIME OF DRILLING CHECK (✓) ONE Mrs. Wilber Petersen			
OR - Grid or Street No. Street or Road Name		ADDRESS			
AND - If available subdivision name, lot & block No.		POST OFFICE Siren, W.S.		ZIP CODE	
4. Distance in feet from well to nearest: (Record answer in appropriate block) 5'		Building		Sanitary Bldg. Drain	
		Sanitary Bldg. Sewer		Floor Drain Connected To:	
		Storm Bldg. Drain		Storm Bldg. Sewer	
		C.I. Other		C.I. Other C.I. Sewer Other Sewer C.I. Other C.I. Other	
Street Sewer		Other Sewers		Foundation Drain Connected to:	
San. Storm C.I. Other		Sewer Sewage Sump Clearwater Dr.		Sewage Sump C.I. Other Clearwater Sump	
		Clearwater Dr.		Clearwater Sump	
Privy		Pet Waste Pit		Pit: Nonconforming Existing	
		Well Pump Tank		Subsurface Pumproom Nonconforming Existing	
				Barn Gutter	
				Animal Barn Pen	
				Animal Yard	
				Silo With Pit	
				Glass Lined Storage Facility	
				Silo w/o Pit	
				Earthen Silage Storage Trench Or Pit	
				Earthen Manure Basin	
Temporary Manure Stack or Platform		Watertight Liquid Manure Tank or Basin		Manure Pressure Pipe	
				Subsurface Gasoline or Oil Tank	
				Waste Pond or Land Disposal Unit (Specify Type)	
				Manure Storage Basin	
				Concrete Floor Only	
				Concrete Floor and Partial Concrete Walls	
5. Well is intended to supply water for: Home		9. FORMATIONS			
		Kind		From (ft.) To (ft.)	
6. DRILLHOLE		Hardpan		Surface 15	
Dia. (in.) From (ft.) To (ft.)		Sand & Gravel		15 148	
8 15 15					
4 15 148					
7. CASING, LINER, CURBING AND SCREEN					
Material, Weight, Specification					
Mfg. & Method of Assembly					
Dia. (in.) From (ft.) To (ft.)					
4" New 10.29 H20		Surface 144 3/4			
4" #10 SS Howard Smith Tele.		144 3/4 148			
8. GROUT OR OTHER SEALING MATERIAL		10. TYPE OF DRILLING MACHINE USED			
Kind From (ft.) To (ft.)		<input checked="" type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary-hammer w/drilling mud & air <input type="checkbox"/> Jetting with			
Clay slurry Surface 15		<input type="checkbox"/> Rotary-air w/drilling mud <input type="checkbox"/> Rotary-hammer & air <input type="checkbox"/> Air			
		<input type="checkbox"/> Rotary-w/drilling mud <input type="checkbox"/> Reverse Rotary <input type="checkbox"/> Water			
11. MISCELLANEOUS DATA		Well construction completed on July 10 19 82			
Yield Test: 1 Hrs. at 20 GPM		Well is terminated 16 inches <input checked="" type="checkbox"/> above final grade <input type="checkbox"/> below			
Depth from surface to normal water level 110 Ft.		Well disinfected upon completion <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Depth of water level when pumping 120 Ft. Stabilized <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Well sealed watertight upon completion <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Water sample sent to Madison laboratory on July 12 19 82					

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

Signature **[Signature]** Business Name and Complete Mailing Address **Dan Petersen & Son, Inc.**

WELL CONSTRUCTOR'S REPORT
FORM 3300-15

JUN 4 1975

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

NOTE

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

1. COUNTY Burnett CHECK ONE Town Village City NAME Daniels

2. LOCATION - 1/4 Section SW 5 Township 78N Range 12W 3. OWNER AT TIME OF DRILLING Leonard Clay

OR - Grid or st. ADDRESS Rt. 1

AND - If av. POST OFFICE Siren, Wis.

4. Distance (Record) These are all the reports available - not very many!

C.I.	SANITARY SEWER		FLOOR DRAIN		FOUNDATION DRAIN		WASTE WATER DRAIN	
	C.I.	TILE	C.I.	TILE	SEWER CONNECTED	INDEPENDENT	C.I.	TILE
<u>None</u>	<u>15</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>

C.I.	TL	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
<u>None</u>	<u>30'</u>	<u>None</u>	<u>75</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)
None

5. Well is intended to supply water for: Private residence

6. DRILLHOLE						9. FORMATIONS			
Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)	Kind	From (ft.)	To (ft.)	
<u>8</u>	<u>Surface</u>	<u>20</u>				<u>sand & gravel</u>	<u>Surface</u>	<u>15</u>	
<u>4</u>	<u>20</u>	<u>158</u>				<u>gravel & clay</u>	<u>15</u>	<u>70</u>	
						<u>gravel</u>	<u>70</u>	<u>158</u>	

7. CASING, LINER, CURBING, AND SCREEN				
Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)	
<u>4</u>	<u>Std. BIK. Pipe 11#/ft. T&C</u>	<u>Surface</u>	<u>154</u>	
<u>4</u>	<u>S.S. #18 slot well screen</u>	<u>154</u>	<u>158</u>	

8. GROUT OR OTHER SEALING MATERIAL			10. TYPE OF DRILLING MACHINE USED			
Kind	From (ft.)	To (ft.)	<input checked="" type="checkbox"/> Cable Tool	<input type="checkbox"/> Direct Rotary	<input type="checkbox"/> Reverse Rotary	
<u>clay slurry</u>	<u>Surface</u>	<u>20</u>	<input type="checkbox"/> Rotary - air w/drilling mud	<input type="checkbox"/> Rotary - hammer with drilling mud & air	<input type="checkbox"/> Jetting with <input type="checkbox"/> Air <input type="checkbox"/> Water	

11. MISCELLANEOUS DATA

Yield test: 3 Hrs. at 13 GPM

Well construction completed on 5-5-1975

Well is terminated 10 inches above below final grade

Depth from surface to normal water level 125' ft. Well disinfected upon completion Yes No

Depth to water level when pumping 132 ft. Well sealed watertight upon completion Yes No

Water sample sent to Madison laboratory on: 4-22-1975

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seepage pits, etc., should be given on reverse side.

SIGNATURE Robert Clark Registered Well Driller COMPLETE MAIL ADDRESS Rt. 3 Fredonia, Wis.

1. COUNTY: Burnett CHECK ONE Town Village City NAME Daniels

2. LOCATION (Number and Street or 1/4 section, section, township and range. Also give subdivision name, lot and block numbers when available.)
SW-SE Sec. 11, Twp. 38N R. 17W.

3. OWNER AT TIME OF DRILLING Penta Hood Products Inc. Waterloo, Iowa

4. OWNER'S COMPLETE MAIL ADDRESS Business, This

5. Distance in feet from well to nearest:

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

(Record answer in appropriate block) 4

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

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

Well is intended to supply water for: plant

DRILLHOLE						10. FORMATIONS			
Dis. (in.)	From (ft.)	To (ft.)	Dis. (in.)	From (ft.)	To (ft.)	Kind	From (ft.)	To (ft.)	
<u>4</u>	Surface	<u>170</u>				<u>sand</u>	Surface	<u>128</u>	
						Clayey gravel	<u>128</u>	<u>152</u>	

8. CASING, LINER, CURBING, AND SCREEN			
Dis. (in.)	Kind and Weight	From (ft.)	To (ft.)
<u>4</u>	<u>11# black</u>	Surface	<u>165 1/2</u>
<u>4</u>	<u>Enurdure</u>	<u>165</u>	<u>170</u>
	<u>No 20 slot</u>		
	<u>Al. fittings</u>		

GROUT OR OTHER SEALING MATERIAL			
Kind	From (ft.)	To (ft.)	
	Surface		

9. MISCELLANEOUS DATA

Well construction completed on Aug 24 1966

Well is terminated 8 inches above below final grade

Well disinfected upon completion Yes No

Well sealed watertight upon completion Yes No

Depth from surface to normal water level 145 ft.

Depth to water level when pumping 150 ft.

Water sample sent to _____ laboratory on: Dec. 15 1966

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

SIGNATURE _____ COMPLETE MAIL ADDRESS _____

Registered Well Driller

Please do not write in space below

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

Well name Penta Test Hole #3 County: Burnett
Town of Daniels Completed... 7/23/85
Owner.... Dept. of Natural Resources Field check. WG&NHS-M. Lemcke
Address.. Box 7921 Altitude.... 1123' ETM
Madison, WI 53707 Use..... Test
Driller.. Wis. Geological & Natural History Static w.l.. ~130"
Engineer. Survey Spec. cap...
R.17 W.
T. 38
N.
Sec. 14

Location: NE corner, NW 1/4, sec. 14, T38N, R17W Quad. Siren West 7 1/2'

Drill Hole						Casing & Liner Pipe or Curbing							
Dia.	from	to	Dia.	from	to	Dia.	Wgt. & Kind	from	to	Dia.	Wgt. & Kind	from	to
5 1/2"	0	160'					No construction						

Drilling method: auger
Samples from 0 to 160' Rec'd: 12/5/85
Grout from to

Studied by: Terrence P. Killeen
Issued: 6/2/86

Formations: Drift
Remarks:
No Well Constructor's Report Received

LOG OF WELL:

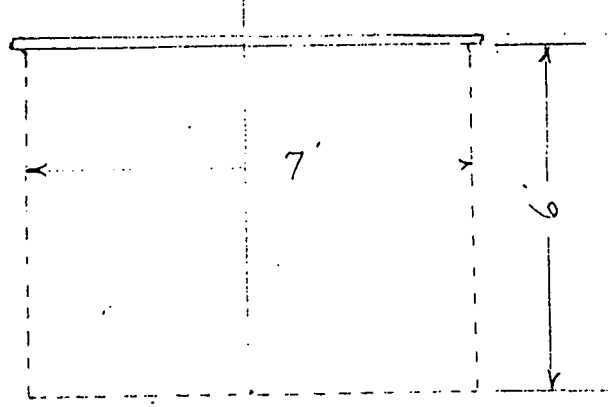
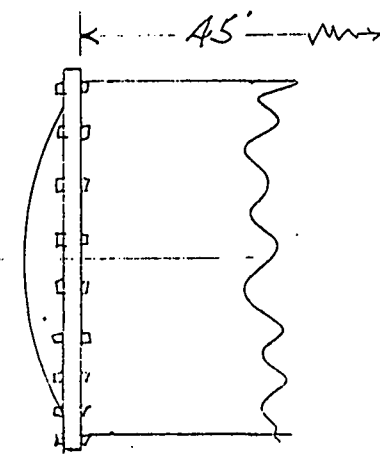
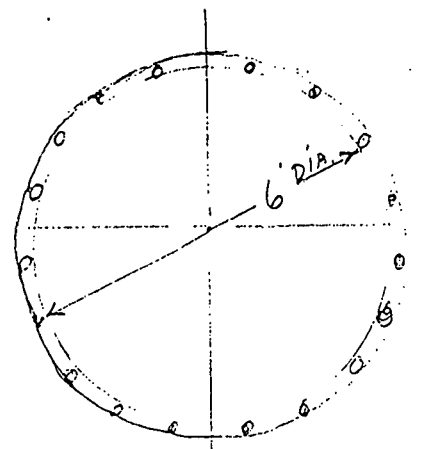
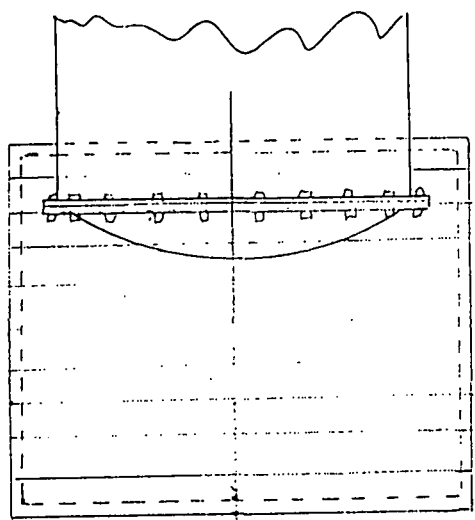
Depths	Graphic Section	Rock Type	Color	Grain Size		Miscellaneous Characteristics
				Mode	Range	
0-5		Sand & silt	Dk rd bn	C	Vfn/VC	Siliceous. Much gravel(Gran/L peb). Little clay.
5-10		Sand	"	"	"	Much gravel(Gran/M peb), silt, little clay.
10-15		"	"	"	"	Same.
15-20		Gravel	Mixed	S peb	Gran/VL peb	Grnt, volc, rhy, qtzt, ss(hem, sil cem), qtz, sts, sch, trap, Mch snd, st, Ltl cl.
20-25		"	"	"	"	Same but little silt, trace clay.
25-30		"	"	M peb	Gran/L peb	Grnt, sch, qtzt, volc, rhy, ss(sil, hem cem), sts, qtz, cht, trap, Mch snd.
30-35		"	"	VLP	Gran/VL peb	Volc, qtzt, Ltl sand, Tr silt, clay. Ltl st, Tr cl.
35-40		"	"	L peb	"	Volc, grnt, rhy, qtzt, qtz, hem cemtd ss, sts, Mch snd, Tr silt, clay.
40-45		"	"	S peb	Gran/M peb	Same plus silica cemented sandstone, chert, but little silt.
45-50		"	"	"	Gran/L peb	Volc, grnt, qtzt, qtz, sch, hem cemtd ss, cht, oolic cht(hemic ool).
50-55		"	"	"	"	Same plus sil cemtd ss, trap, Mch snd, Ltl st, Tr cl.
55-60		"	"	M peb	"	Volc, qtzt, grnt, rhy, qtz, hem cemtd ss, sts, trap, Mch snd, Ltl st.
60-65		"	"	S peb	"	Same plus silica cemtd sandstone, chert, schist. Tr cl.
65-70		"	"	"	"	Volc, grnt, rhy, qtzt, sch, ss(sil, hem cem), sts, cht, qtzt, trap, Mch
70-75		"	"	"	"	Same. snd, Ltl st, Tr cl.
75-80		"	"	"	Gran/M peb	Same but trace silt.
80-85		"	"	"	"	Volc, grnt, rhy, qtzt, sch, qtz, ss(sil, hem cem), sts, cht, trap, Mch snd.
85-90		"	"	"	"	Same. Ltl st, Tr cl.
90-95		"	"	"	"	"
95-100		"	"	"	"	"
100-105		"	"	"	"	"
105-110		"	"	"	"	Rhy, volc, sch, qtzt, cht, qtz, ss(sil, hem cem), sts, trap, Mch snd, Ltl
110-115		"	"	M peb	"	Same plus granite. st, Tr cl.
115-120		"	"	"	Gran/VL peb	Volc, qtzt, rhy, qtz, ss(sil, hem cem), cht, sts, trap, Mch snd, Ltl st,
120-125		"	"	S peb	Gran/L peb	Same but much silt, little clay. Tr cl.
125-130		Sand	Strg brown	C	Vfn/VC	Much gravel(Gran/M peb), silt, Little clay.
130-135		"	Yl rd bn	"	"	Same but little gravel(Gran/S peb).
135-140		"	"	M/C	"	Much silt, Little gravel(Gran/S peb), clay.
140-145		"	"	C	"	Same but much gravel(Gran/M peb).
145-150		"	Red brown	M/C	"	Much silt, Little gravel(Gran/M peb), clay.
150-155		Sand & silt	"	C	"	Calcareous, Much clay, little gravel(Gran/S peb).
155-160		Gravel	Mixed	S peb	Gran/L peb	Volcanics, quartzite, schist, quartz, siltstone, sandstone, silice, hematite cement, chert. Much sand, silt. Little clay.

APPENDIX B

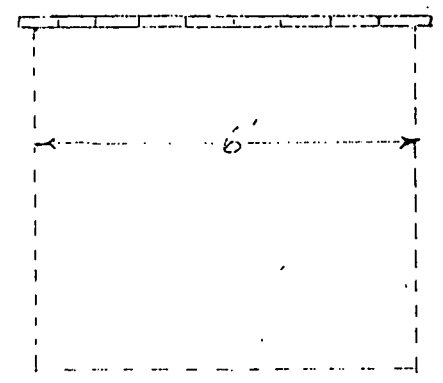
SUMP DETAILS:

PENTA AND CHEMONITE RETORTS

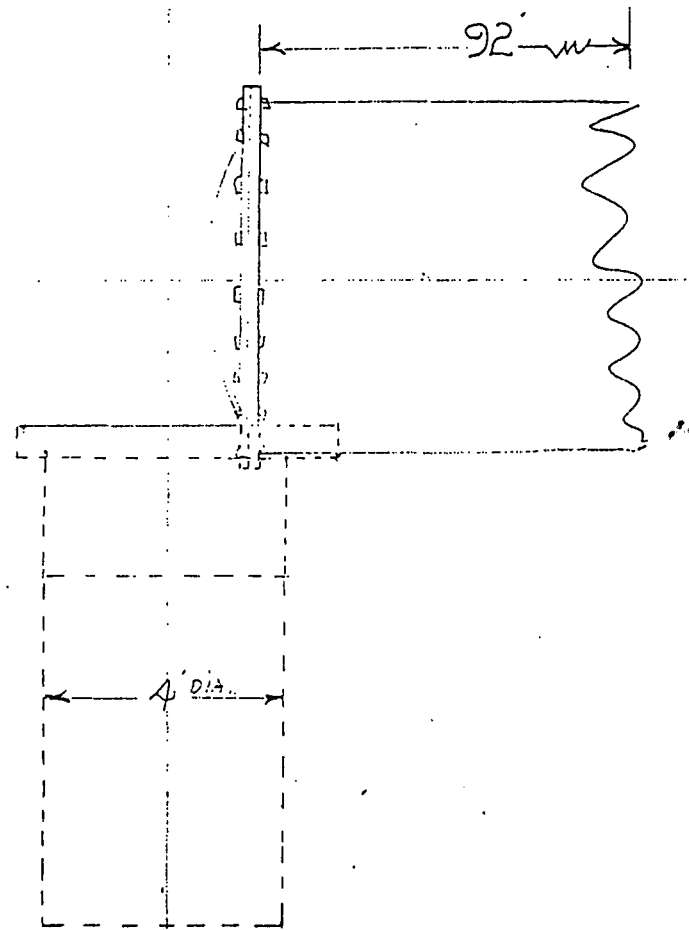
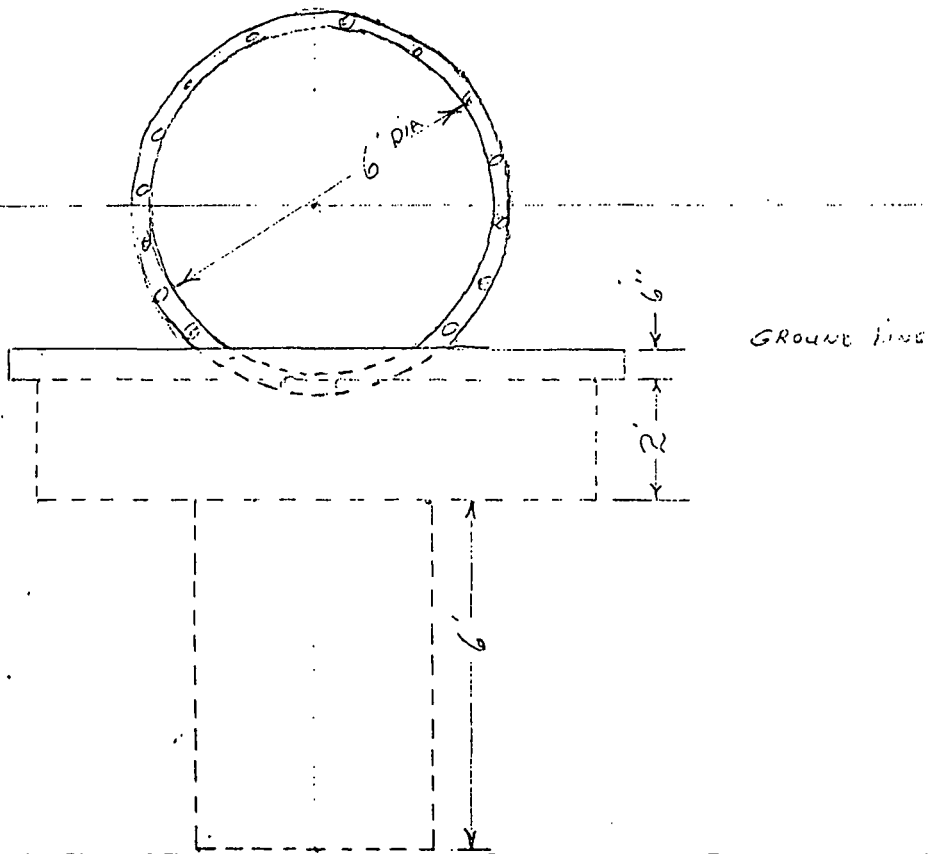
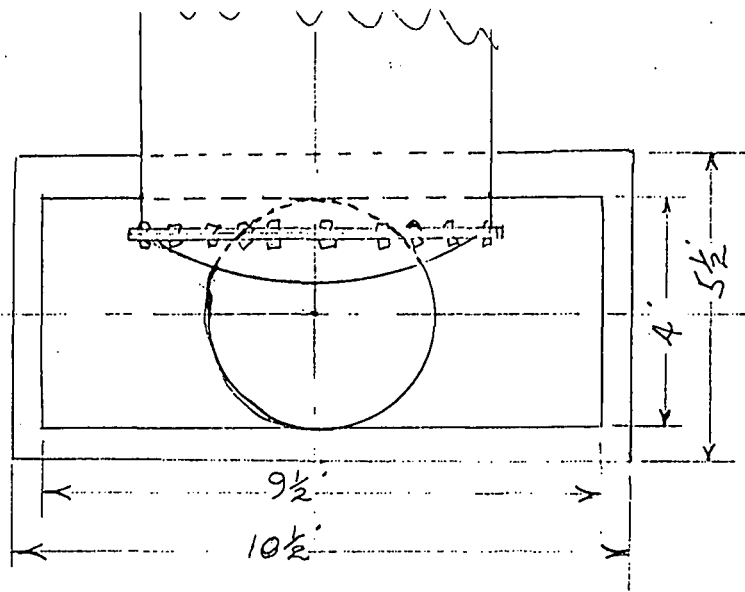
CHEMONITE TREATMENT
CYLINDER & SUMP
PENTA WOOD PRODUCTS, ILL.
5-1-87



GROUND LINE



PENTA TREATMENT
CYLINDER & SUMP
PENTA WOOD PRODUCTS, INC
5-1-87



APPENDIX C

LABORATORY REPORTS
SOIL AND GROUNDWATER SAMPLES

Conestoga Rovers & Associates, Inc.
382 West County Road D
St. Paul, MN 55112

July 14, 1988
PACE Project Number: 880602519

Attn: Mr. Steven Mockenhaupt

Penta Wood Prod.

Date Sample(s) Collected: 06/01/88
Date Sample(s) Received: 06/02/88

PACE Sample Number:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>142270</u> S-01	<u>142280</u> S-02	<u>142290</u> S-03
Arsenic	mg/kg	0.05	140	0.52	2.4
Copper	mg/kg	0.25	260	20	7.3
Moisture content	%	0.01	6.6	5.5	3.6
Pentachlorophenol	mg/kg	4.7	71	ND	110
Zinc	mg/kg	2.5	23	16	6.4

MDL Method Detection Limit
ND Not detected at or above the MDL.

Mr. Steven Mockenhaupt
Page 2

July 14, 1988
PACE Project Number: 880602519

PACE Sample Number: Parameter	Units	MDL	142300 S-04	142310 S-05	142320 S-06
Arsenic	mg/kg	0.05	38	150	4.2
Copper	mg/kg	0.25	63	48	7.0
Moisture content	%	0.01	6.7	6.0	3.9
Pentachlorophenol	mg/kg	4.7	ND	ND	ND
Zinc	mg/kg	2.5	20	8.1	6.4

MDL Method Detection Limit
ND Not detected at or above the MDL.

The analyses of soil samples were performed 'as received' and do not reflect analyses on a dry weight basis unless indicated.

The data contained in this report were obtained using EPA or other approved methodologies. All analyses were performed by me or under my direct supervision.



Thomas L. Halverson
Inorganic Chemistry Manager



William H. Scruton
Organic Chemistry Manager

Conestoga Rovers & Associates, Inc.
382 West County Road D
St. Paul, MN 55112

April 27, 1988
PACE Project Number: 880328519

Attn: Mr. Steven Mockenhaupt

2140

Date Sample(s) Collected: 03/25/88

Date Sample(s) Received: 03/28/88

PACE Sample Number: 070090 070100 070110

Parameter	Units	MDL	Well #1	Well #2	Company Well
Arsenic	ug/L	1	ND	ND	ND
Copper	mg/L	0.01	ND	ND	0.02
Pentachlorophenol	ug/l	14	ND	ND	1300
Zinc	mg/L	0.01	0.02	0.03	ND

ND Not detected at or above the MDL.
MDL Method Detection Limit

The data contained in this report were obtained using EPA or other approved methodologies. All analysis were performed by me or under my direct supervision.



Thomas L. Halverson
Inorganic Chemistry Manager



William H. Scruton
Organic Chemistry Manager

If New Facility

Bill To: Solid Waste Hazardous Waste Wastewater Water Supply Spills Other

I.D. Number _____ Point/Well # _____ Field No. #3 H₂O Supply County 07 Route Code _____

I.D. Name PENTA WOOD PRODUCTS

P.O. or City Siren, WI

Collection Date 4/3/88 Time: : :

Sample Location

Description _____

Send Report To: Len Polczynski
DKR Cumberland
P.O. Box 397
Cumberland, WI 54829

- MW Monitoring well
- LY Lysimeter
- LE Leachate
- SE Sediment
- SU Surface Water
- PW Private Well
- EF Effluent
- IF Influent
- SO Soil
- OI Oil
- SL Sludge
- OT Other
- OW Waste

Account Number SW010

Collected By Len Polczynski

Phone (715) 822-3590

Check any appropriate:
 S Split E Enforcement B Field Blank
 S Surface Source T Treated

Water System Type (Water Supply Use ONLY)

- M Community-Municipal
- O Community-OTM
- N Non-community
- P Private
- X Non-potable

Sample Type:
 W Raw Water if New Well
 I Miscellaneous Distribution

Chemical Name	Concentration
Gasoline	269
Fuel Oil #1	263
Fuel Oil #2	266
<input checked="" type="checkbox"/> Pentachloroophenol	1300. <u>µg/l</u>

Priority Pollutant Scan (Non-VOC)

Comments: _____

Date Received 87-8 3542 MAR 29 1988
And Sample No. _____

Date Reported APR 5 1988

If New Facility

Bill To: Solid Waste Hazardous Waste Wastewater Water Supply Spills Other

I.D. Number _____ Point/Well # _____ Field No. MW-2 County # 07 Route Code _____

I.D. Name PENTA WOOD PRODUCTS P.O. or City Siren, WI

Collection Date 43/25/88 Time: 11:15 Sample Location MW-2

Description _____

Send Report To:

Len Polczynski
DNR Cumberland
P.O. Box 397
Cumberland, WI 54829

Account Number SWO10

Collected By Len Polczynski

Phone (715) 822-3590

Check any appropriate:
 S Split E Enforcement B Field Blank
 S Surface Source T Treated

- MW Monitoring well EF Effluent OW Waste
- LY Lysimeter IF Influent
- LE Leachate SO Soil
- SE Sediment OI Oil
- SU Surface Water SL Sludge
- PW Private Well OT Other

- Water System Type (Water Supply Use ONLY)
- M Community-Municipal Sample Type:
 - O Community-OTM W Raw Water if New Well
 - N Non-community I Miscellaneous Distribution
 - P Private
 - X Non-potable

Chemical Name	Concentration
Gasoline	269
Fuel Oil #1	263
Fuel Oil #2	265
<input checked="" type="checkbox"/> Pentachlorophenol	< 0.50 ug/l

Priority Pollutant Scan (Non-VOC)

Comments: _____

If New Facility

Bill To: Solid Waste Hazardous Waste Wastewater Water Supply Spills Other

I.D. Number _____ Point/Well # _____ Field No. MW-1 County # 07 Route Code _____

I.D. Name PENTA WOOD PRODUCTS P.O. or City Siren, WI

Collection Date 43/25/88 Time: 10:00 Sample Location MW-1
M M D D Y Y H H M M

Description _____

Send Report To: Len Polczynski
DNR Cumberland
P.O. Box 397
Cumberland, WI 54829

Account Number SW010

Collected By Len Polczynski

Phone (715) 822-3590

Check any appropriate:
 S Split E Enforcement B Field Blank
 S Surface Source T Treated

Chemical Name	Concentration
Gasoline	269 _____
Fuel Oil #1	263 _____
Fuel Oil #2	265 _____
<input checked="" type="checkbox"/> Pentachlorophenol	<u>< 0.50 µg/l</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- MW Monitoring well
- LY Lysimeter
- LE Leachate
- SE Sediment
- SU Surface Water
- PW Private Well
- EF Effluent
- IF Influent
- SO Soil
- OI Oil
- SL Sludge
- OT Other
- OW Waste

Water System Type (Water Supply Use ONLY)

M Community-Municipal Sample Type:

O Community-OTM W Raw Water if New Well

N Non-community I Miscellaneous Distribution

P Private

X Non-potable

Priority Pollutant Scan (Non-VOC)

Comments: _____