

REVISED
CLOSURE OF A
12,000 GALLON UNDERGROUND
DIESEL FUEL STORAGE TANK
AT
PARAGON ELECTRIC COMPANY
TWO RIVERS, WISCONSIN

PREPARED FOR:
RICHARD LUBENOW
PARAGON ELECTRIC COMPANY
606 PARKWAY BOULEVARD
TWO RIVERS, WISCONSIN

*Injection
Molding
Dept.
RWC
8-22-06*

PREPARED BY:
TIMOTHY E. WIMMER
PROJECT MANAGER
CBC ENVIRONMENTAL SERVICES
140 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154

JUNE 26, 1990

TABLE OF CONTENTS

	<u>Page</u>
I. <u>INTRODUCTION</u>	1
II. <u>SITE LOCATION AND DESCRIPTION</u>	1
III. <u>UNDERGROUND STORAGE TANK REMOVAL</u>	1
Permits	
Excavation	
Soils Assessment	
Ground Water Assessment	
Soil Analysis	
Ground Water Analysis	
IV. <u>SITE GEOLOGY</u>	3
Regional Geology	
Site Geology	
V. <u>CONCLUSIONS</u>	3
VI. <u>RECOMMENDATIONS</u>	4
VII. <u>DISCLAIMER</u>	4

LIST OF TABLES

<u>Table</u>	<u>Follows Page</u>
1. Photoionization Detector Results.	3
2. Laboratory Results - Soil	3

LIST OF APPENDICES

Appendix

- A. Underground Storage Tank Removal Permit
- B. Laboratory Reports - Soil
- C. Laboratory Report - Ground Water

I. INTRODUCTION

Paragon Electric Company, Incorporated, retained Chem-Bio Corporation (CBC) Environmental Services of Oak Creek, Wisconsin, to perform an underground storage tank closure and soil assessment. This report details the work conducted at the 606 Parkway Boulevard, Two Rivers, Wisconsin, facility.

II. SITE LOCATION AND DESCRIPTION

The property assessed is located in the Southwest 1/4 of the Northeast 1/4 of Section 2, Township 19 North, Range 24 East, Manitowoc County, Wisconsin. Specifically, the facility is located due west of the intersection of Lowell Street and Roosevelt Avenue, in the city of Two Rivers (see Figure 1).

A building used for the manufacturing of timers, time switches and sub-fractional motors and office space is located on 26.77 acres of land. The western portion of the facility is bordered by a parking area. The north and east sides of the facility are bordered by 7th Street and Bucholz Street respectively. The southern portion is bordered by a bituminous driveway. The bituminous drive is paralleled by tracks owned by the Chicago and Northwestern Railroad.

III. UNDERGROUND STORAGE TANK REMOVAL

During the week of April 25, 1989, CBC supervised the removal of the following underground storage tank system.

<u>Tank ID</u>	<u>Tank Volume Gallons)</u>	<u>Substance Stored</u>
#1	12,000	Diesel Fuel

Location of this tank system is found in Figure 2.

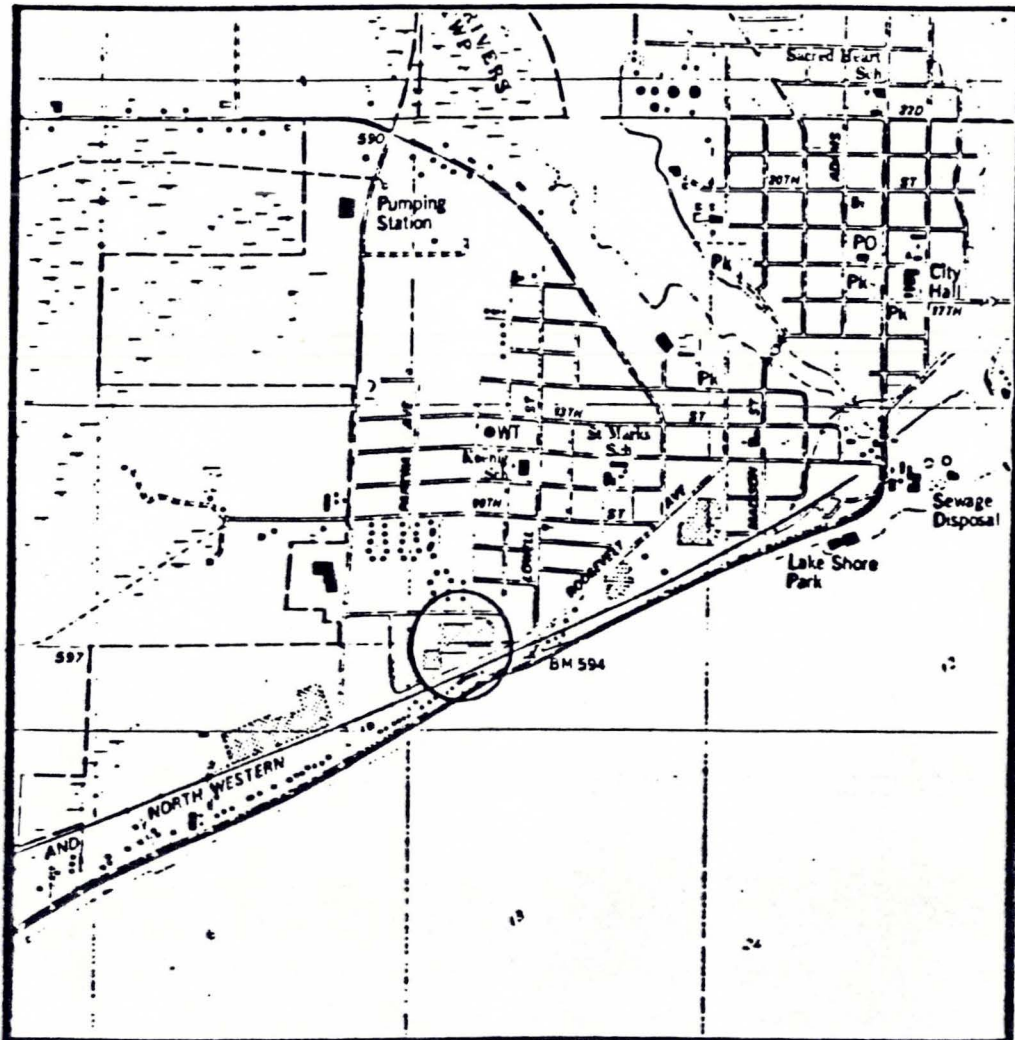
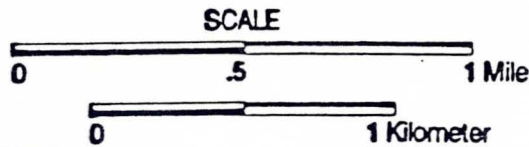


Figure 1



SITE LOCATION MAP

Paragon Electric Company, Inc.
 606 Parkway Boulevard
 Two Rivers, Wisconsin



Adapted from USGS 7.5 min. Topographic Quadrangle, Manitowoc 1971

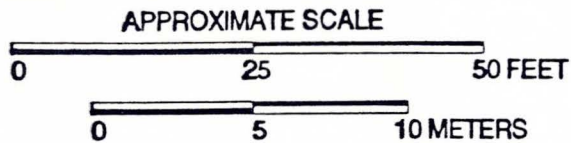
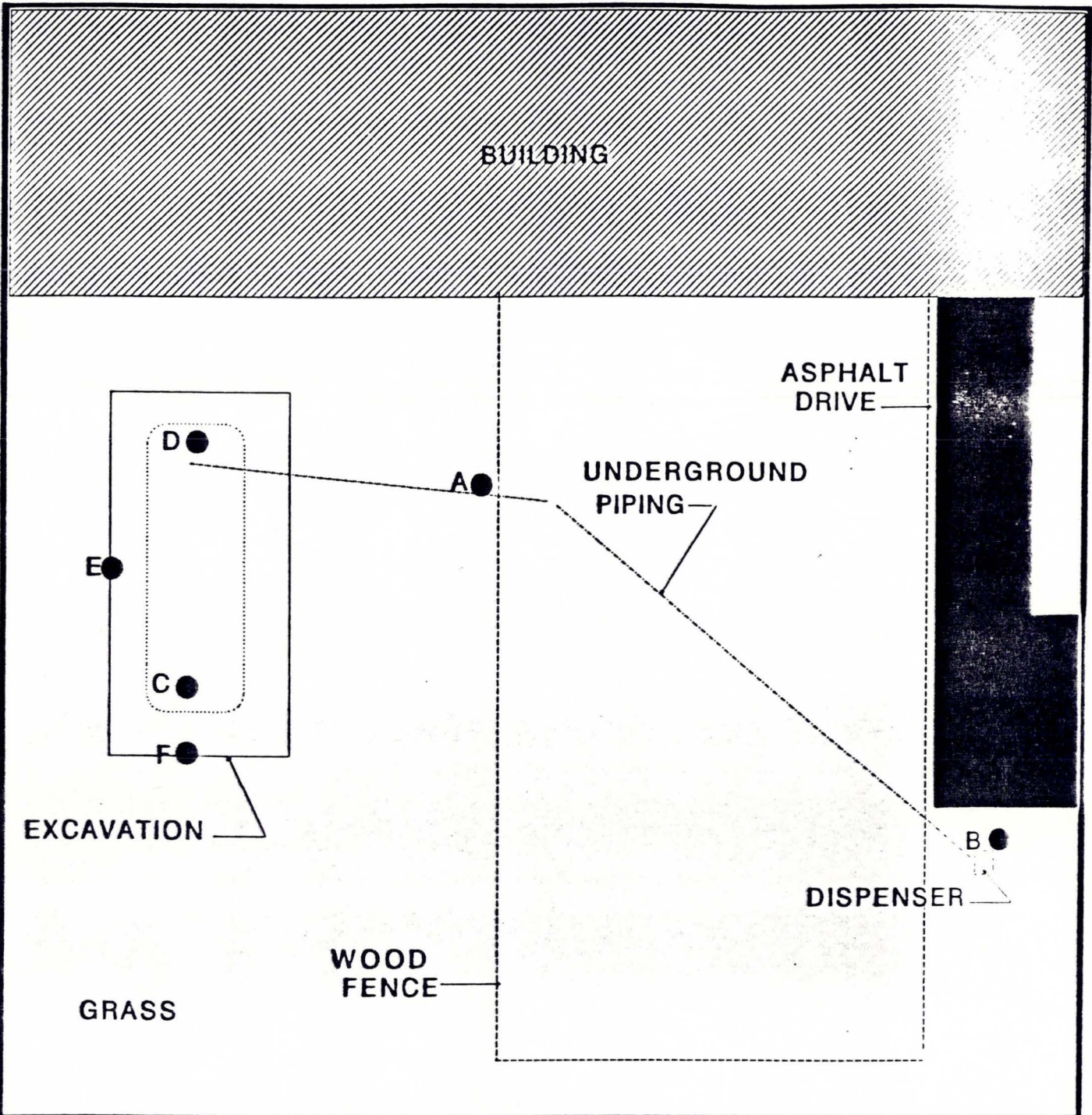


Figure 2

SAMPLE LOCATION MAP

Paragon Electric Company, Inc.
 606 Parkway Boulevard
 Two Rivers, Wisconsin

KEY

- soil sample location
- previous UST location

Permits - A permit for the removal of the underground storage tank system was obtained from the City of Two Rivers. Permit No. 30618 was issued April 19, 1990, for the tank removal. A copy of this permit has been presented as Appendix A.

Excavation - Autoquip, Incorporated, of Milwaukee, Wisconsin, was contracted by CBC to remove and dispose of the underground storage tank. Fill material that had encapsulated the tank was removed and stockpiled adjacent to the excavation. The tank was removed intact and visually inspected for exterior corrosion, pitting, or holes. The tank pit was backfilled with the stockpiled backfill and additional pea gravel.

Soils Assessment - During the tank removal, soils were field screened with a Microtip Photoionization Detector (PID) meter utilizing a 10.6 electron volt (eV) lamp. The samples were collected and field screened for the presence of volatile compounds to determine the impact each material stored in the tank may have had on the surrounding soils.

Soil samples from the tank pit base and side walls, piping and dispenser area were containerized in glass jars, sealed with a teflon-lined cap and placed into a cooler. Samples were accompanied with a Chain-of-Custody document and transported to the CBC Environmental Services laboratory for chemical analysis. The purpose of the analysis is to determine general soil quality for the general tank system area.

Ground Water Assessment - A sample of the ground water from the excavation was containerized into four (4) 40 milliliter vials, sealed with a screw-on teflon septa cap, and placed into a cooler. The sample was accompanied with a Chain-of-Custody document and transported to the CBC Environmental Services laboratory for chemical analysis. The purpose of the

analysis is to determine general ground water quality for the tank pit.

Soil Analysis - A total of three (3) soil samples from the tank pit were submitted to the CBC laboratory and analyzed for petroleum hydrocarbons. The laboratory results are found in Table 1. The laboratory reports are presented as Appendix B.

As shown in Table 1, petroleum hydrocarbons were detected in one (1) sample: Soil/B/Pit East End 12.5' (28 ppm).

Ground Water Analysis - One ground water sample from the tank pit was submitted to the CBC laboratory and analyzed for benzene, xylene, toluene and ethylbenzene. The laboratory results are found in Table 2. The laboratory reports are presented as Appendix C.

IV. SITE GEOLOGY

Regional Geology - In general, the Paragon Electric Company facilities lie in an area of lake deposits that overlie bedrock. The lake deposits are comprised of organic materials and stratified clay, silt and sands. These deposits primarily occur along the shores of Lake Michigan and Green Bay.

Site Geology - Soils encountered during the tank removal consisted of brown silty sands. Ground water was encountered approximately ten (10) feet below ground surface (bgs).

VI. CONCLUSIONS

The area of the investigation contained one (1) 12,000 gallon underground diesel fuel storage tank. Analysis of a soil sample collected from the east base of the excavation revealed the presence of petroleum hydrocarbons. Analysis of a ground water sample collected from water that accumulated in the

TABLE 1
PID SCREENING RESULTS
12,000 GALLON DIESEL UNDERGROUND STORAGE TANK
PARAGON ELECTRIC COMPANY

<u>SAMPLE ID</u>	<u>DEPTH (FEET)</u>	<u>PID RESULTS (PARTS PER MILLION)</u>
A	2	15.6
B	2	20.4
C	12.5	36.3
D	12	25.3
E	10	14.8
F	12	12.8

TABLE 2
TOTAL PETROLEUM HYDROCARBON RESULTS
12,000 GALLON DIESEL UNDERGROUND STORAGE TANK
PARAGON ELECTRIC COMPANY

<u>SAMPLE ID</u>	<u>DEPTH (FEET)</u>	<u>TOTAL PETROLEUM HYDROCARBONS (PARTS PER MILLION)</u>
B (Dispenser)	2	<4.0
C (East End)	12.5	28
D (West End)	12	<4.0

excavation revealed concentrations of benzene that exceed the NR 140 ground water enforcement standard for that compound.

VI. RECOMMENDATIONS

Low level petroleum hydrocarbons have been detected in the soil and ground water of the previous tank location. Based on the information provided in this report, CBC presents the following recommendations:

- 1) The Wisconsin Department of Natural Resources should be notified that petroleum impacted soil and ground water were detected in the tank excavation.
- 2) A subsurface/hydrogeologic investigation should be implemented in the general vicinity of the underground storage tank area to determine general soil and ground water quality.

VII. DISCLAIMER

The site closure assessment conducted at the aforementioned site was intended to provide a general environmental assessment for surficial contamination via a review of available background information and a site inspection. The statements and conclusions in the report are based on our interpretations of data presented. Findings in this report may be invalidated wholly or partially upon the discovery of new information or data pertaining to the site. Chem-Bio Corporation offers no warranty or legal responsibility for the environmental status of the site assessed.

APPENDIX A

UNDERGROUND STORAGE TANK REMOVAL PERMIT

Parcel No. _____
Photo Sheet _____
Plat Sheet _____
Sewer Sheet _____

RESIDENCE
Bldg. No. _____
30618

CITY OF TWO RIVERS

BUILDING

CONSTRUCTION — ALTERATION — MOVING

TO THE INSPECTOR OF BUILDINGS: Two Rivers, Wis., April 19, 19__

The undersigned hereby applies for a permit to build, construct, remodel or install according to the following statement:

Owner of Land Paragon Electric Company Address 600 Parkway Boulevard

Lot _____ Block _____ Subdivision _____ Ward _____

Zoning District I-2

Permit for Remove one fuel tank

Cost \$15,000 Permit Fees \$15.00 Paid by Receipt No. _____

General Contractor Chen-Bio Corp.

Address 100 E. Ryan Road, Oak Creek, WI. 53154

Size of Building — No. of feet wide _____ No. of feet length _____ Cubical Contents _____

No. of Stories in Height _____ Class of Construction _____

Foundation Materials _____ Footings _____

Will the roof be flat, peaked or mansard? _____ Roof Material _____

WORK CONSISTS OF

New Building _____ Wrecking _____ Addition _____

Alteration _____ Heating _____ Moving _____ Garage _____

Rear Yard _____ Total Side Yard _____ Min. S. Yd. _____ Set Back _____

REMARKS: _____

Remove underground diesel fuel storage tank--12,000 gal.
located on the south side of building in the vicinity
of the Injection Holding Dept.

See site plan, tank #4

Fill excavation with clean fill.

The applicant submits herewith a plot plan drawn to scale showing the actual dimensions of the lot to be built upon, size of the Building to be erected, and such further information as may be necessary in accordance with the Ordinances of said City of Two Rivers, Wisconsin.

It is Hereby Agreed between the undersigned as owner, his agent or servant, and the City of Two Rivers, that for and in consideration of the premises and of the permit to construct, erect, alter or install as above described, to be issued and granted by the Inspector of Buildings, that the work thereon will be done in accordance with the description herein set forth in this statement and as more fully described in the specifications and plans herewith filed, and it is further agreed to construct, erect, alter or install in strict compliance with the ordinances of the City of Two Rivers, the laws of the State of Wisconsin, the State Building Code and to obey any and all lawful orders of the Inspector of Buildings and the Fire Chief of the City of Two Rivers.

The undersigned hereby accepts full responsibility for ascertaining the existence and location of any easements, covenants, utility equipment or service lines, etc., that may be present on or affect the above described premises.

SPECIAL NOTES: _____ SIGNATURE [Signature]

ADDRESS 100 E. Ryan Road, Oak Creek, WI.

PHONE NUMBER (414) 22-7143

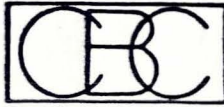
Permission is Hereby granted for the above described work on condition that same be done in accordance with the application plan and specifications on file, and in compliance with the building code ordinance, the zoning ordinance and fire prevention code ordinance of the City of Two Rivers, and the State Building Code of Wisconsin, that the same be reported when ready for inspection as required.

Date _____, 19__ Signed _____, Building Inspector

Date _____, 19__ Signed _____, Fire Chief

Date _____, 19__ Signed _____, Police Chief

APPENDIX B
LABORATORY REPORTS - SOILS



ENVIRONMENTAL SERVICES

CHEM-BIO CORPORATION

140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/21/90

LABORATORY REPORT

PAGE 1

PARAGON ELECTRIC
606 PARKWAY BLVD
TWO RIVERS ,WI 54241
ATTN: SKIP LUBENOW

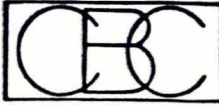
P380 8449395 W61
JG/* / / /
TEWOCR0024

SAMPLE 90117-P07791 SOIL/B/PUMP BASE 2'/PID=20.4/TWO RIVERS,WI.
DATE COLLECTED 04/25/90 DATE RECEIVED 04/27/90

TEST NAME	RESULT	UNITS
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM

PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.

! = REPRINT N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL *[Signature]*



ENVIRONMENTAL SERVICES

CHEM-BIO CORPORATION

140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/17/90

LABORATORY REPORT

PAGE 1

PARAGON ELECTRIC
606 PARKWAY BLVD
TWO RIVERS ,WI 54241
ATTN: SKIP LUBENOW

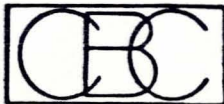
P380 8449395 W61
JG/* / / /
TEWOCR0024

SAMPLE 90117-P07792 SOIL/C/PIT EAST END 12.5'/PID=36.3/TWO RIVERS,WI.
DATE COLLECTED 04/25/90 DATE RECEIVED 04/27/90

TEST NAME	RESULT	UNITS
TOTAL PETROLEUM HYDROCARBONS	28	PPM
	BASED ON SIMILARITIES TO KEROSENE STANDARD KEROSENE	

PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.

N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL _____



ENVIRONMENTAL SERVICES

CHEM-BIO CORPORATION

140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/17/90

LABORATORY REPORT

PAGE 1

PARAGON ELECTRIC
606 PARKWAY BLVD
TWO RIVERS ,WI 54241
ATTN: SKIP LUBENOW

P380 8449395 W61
JG/* / / /
TEWOCR0024

SAMPLE 90117-P07793 SOIL/D/PIT WEST END 12.'/PID=25.3/TWO RIVERS,WI.
DATE COLLECTED 04/25/90 DATE RECEIVED 04/27/90

TEST NAME	RESULT	UNITS
TOTAL PETROLEUM HYDROCARBONS	<4.0	PPM

PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.

N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL _____

APPENDIX C

LABORATORY REPORT - GROUND WATER



ENVIRONMENTAL SERVICES

CHEM-BIO CORPORATION
140 EAST RYAN ROAD OAK CREEK, WI 53154-4599 (414) 764-7005

05/11/90

LABORATORY REPORT

PAGE 1

P380 8449396 W61
JG/* / / /
TEWOCR0024

PARAGON ELECTRIC
606 PARKWAY BLVD
TWO RIVERS ,WI 54241
ATTN: SKIP LUBENOW

SAMPLE 90117-P07794 WATER FROM TANK EXCAVATION/TWO RIVERS,WI
DATE COLLECTED 04/25/90 DATE RECEIVED 04/27/90

TEST NAME	RESULT	UNITS
BENZENE	6.5	PPB
TOLUENE	6.4	PPB
ETHYL BENZENE	<2.0	PPB
XYLENE	16	PPB

PLEASE CONTACT OUR CLIENT SERVICE DEPARTMENT WITH QUESTIONS. REMAINING WASTE SAMPLES WILL BE RETURNED 6 WEEKS FROM THE RECEIVING DATE OF SAMPLE. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT. WI DNR LAB CERTIFICATION #241283020/A.I.H.A. ACCREDITED.

N/T = NOT TESTED N/A = NOT APPLICABLE APPROVAL WLS