

Site Assessment
and
Tank Closure Report

OCT 13 1992

Underground Storage Tank Removal at

Tecumseh Products Company
900 North Street
Grafton, Wisconsin 53024

June 15-18, 1992

Prepared for:

Mr. John Mikyska
Tecumseh Products Company

Prepared by:

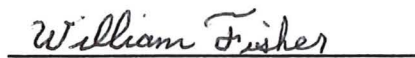
E & K Hazardous Waste Services, Inc.
2905 Paine Avenue
Sheboygan, WI 53082

October 9, 1992

E & K Project Number: 15292



Elizabeth Stueck
Project Assistant



William Fisher
Project Manager

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EXECUTIVE SUMMARY

This report presents the results of E & K Hazardous Waste Services, Inc. activities on June 15-18, 1992, associated with the removal of the following underground storage tanks (USTs):

1. 11,000 gallon UST containing oil
2. 350 gallon UST containing kerosene
3. 350 gallon UST containing stoddard solvent

All tanks were located at 900 North Street, Grafton, Wisconsin. The site lies in the SW¼ of the SE¼ of Section 13, T 10 N, R 21 E in Ozaukee County. This property is owned and occupied by Tecumseh Products Company. The underground storage tanks were removed by E&K Hazardous Waste Services, Inc. personnel at the request of Mr. John Mikyska. Mr. Mikyska can be reached at (414) 377-2700.

E&K field personnel collected soil samples from all three tank locations during the activities that commenced on June 15-18, 1992. Thirteen soil samples and one groundwater sample was collected from the 11,000 gallon oil tank excavation. Four soil samples were collected from the kerosene tank excavation. Three soil samples were collected from the stoddard solvent tank excavation.

Results of laboratory analyses indicates that contamination exists in all three tank excavations at levels above current WDNR guidelines.

SCOPE OF WORK

E&K Hazardous Waste Services, Inc. supplied personnel and equipment to perform the following services:

- Provide a Department of Industry, Labor and Human Relations Certified Remover/Cleaner and Site Assessor.
- Excavate and remove a 11,000 gallon UST and two 350 gallon USTs and associated piping.
- Pump, vent, clean and dipsose of the underground storage tanks.
- Collect soil samples that are representative of the site as per Department of Industry, Labor, and Human Relations (DILHR) guidelines.
- Submit samples for WI-Modified Gasoline Range Organics (WI GRO), Total Recoverable Petroleum Hydrocarbons (TRPH), and WI Modified Diesel Range Organics (WI DRO) analysis to Precision Analytical Lab, Inc., a WDNR certified laboratory.

- Compile the necessary data to complete the site assessment and tank closure report for Mr. John Mikyska.

TOPOGRAPHY AND SOILS

The site where the three USTs were removed is located at 900 North Street, Grafton, Wisconsin.

The soils at this site are loamy land which consists of cut and filled areas that are mainly in and around urban areas in Ozaukee County. In cut or borrow areas, the original soil material has been removed by man and raw, fairly inert soil material is exposed. The banks of cut areas have been sloped and graded. As a result, the areas blend in with adjacent, relatively undisturbed soil areas. Loamy land ranges from sandy loam to silt loam in texture. The material remaining generally is loamy glacial till that contains pockets of sand and gravel or of clayey material according to the United States Department of Agriculture Soil Conservation Service Soil Survey of Ozaukee County, issued September 1970.

FIELD ACTIVITIES FOR REMOVAL OF 11,000 GALLON OIL TANK

Field personnel were on-site June 15-16, 1992 to remove the 11,000 gallon oil tank. E & K's William Fisher was the Certified remover/cleaner and site assessor {Certification # 03914} on-site. Weather conditions at the time of the tank removal consisted of heavy overcast skies with an outside air temperature of 70° Fahrenheit and no precipitation. The location of the tank and the adjacent surroundings can be found in Appendices 1 and 2.

Photographs of all tank removal activities can be found in Appendix 3. The completed Department of Industry, Labor and Human Relations forms SBD-7437 can be found in Appendix 4. Appendix 5 has all completed Chain of Custodies and analytical results from all sampling can be found in Appendix 6.

The gravel overburden and 2 feet below grade of thick loam underlain by dark brown to black sandy clay 2½ feet below grade was removed to expose the top of the tank. See Appendix 2 for the Site Map. The backfill which consisted of mostly sand with some cobbles and gravel was removed. Reddish brown sandy clay to a depth of 4.5 feet below grade was removed within the excavation. All piping was removed to the substation where the piping was then capped with concrete. Visual inspection found the piping to be in good condition. The tank was removed and visual inspection also found the tank to be in good condition. Reddish brown sandy clay was observed to a depth of 17 feet below grade. Groundwater was encountered under the east and west ends of the tank at a depth of approximately 17 feet below grade. There was no sheen observed on the groundwater. No odor or visible staining was noticed.

The dimensions of the excavation was 21 x 31 x 17 feet. Upon removal of the tank the concrete collar was still in place on two sides. The broken sections were returned to the excavation. The tank was cleaned and vented. Sludge from the tank cleaning was properly contained into one drum. Soil sample 9576 was collected at a depth of 15 feet below grade at the west end of the

tank excavation. Sample 9577 was collected at a depth of 12 feet below grade at the east side of the tank excavation. Soil sample 9578 was collected at a depth of 16 feet below grade west end of the tank. All samples were analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH). See Table 1 for analytical results.

The piping from the tank to the building was sampled every 20 feet on the return side and suction side. All soil samples were collected at a depth of 2½ feet below grade and analyzed for TRPH. See Table 1 for analytical results.

Groundwater sample 9574 was collected at the west end of the tank excavation and analyzed for Polyaromatic Hydrocarbons (PAHs). The groundwater sample was preserved with 10 ml Hydrochloric acid. See Table 1 for analytical results.

**Table 1
Laboratory Results From 11,000 Gallon UST**

SAMPLE ID	LOCATION	ANALYSIS PERFORMED	RESULTS PPM
9574	Groundwater from west end @ 17' depth	TRPH PAHs	0.24 See Appendix
9576	West end @ 15' depth	TRPH	< 5.0
9577	Northeast corner @ 12' depth	TRPH	< 5.0
9578	West end @ 16' depth	TRPH	< 5.0
9596	Piping suction side, 20' mark @ 2½' depth	TRPH	320
9595	Piping return side, 20' mark @ 2½' depth	TRPH	15
9594	Piping suction side, 40' mark @ 2½' depth	TRPH	< 5.0
9593	Piping return side, 40' mark @ 2½' depth	TRPH	< 5.0
9592	Piping suction side, 60' mark @ 2½' depth	TRPH	< 5.0
9591	Piping return side, 60' mark @ 2½' depth	TRPH	< 5.0
9589	Piping suction side, 80' mark @ 2½' depth	TRPH	< 5.0
9590	Piping return side, 80' mark @ 2½' depth	TRPH	< 5.0
9608	Suction pipe run at the east wall of building @ 2½' depth	TRPH	190
9609	Return pipe run at the east wall of building @ 2½' depth	TRPH	290

FIELD ACTIVITIES FROM THE REMOVAL OF A 350 GALLON KEROSENE TANK

E&K field personnel were on-site June 15-16, 1992, to remove the 350 gallon kerosene tank. Weather conditions at the time of tank removal were overcast skies with an outside air temperature of 70° Fahrenheit with no precipitation. William Fisher was E&K's DILHR certified remover/cleaner and site assessor {03914}.

Photographs of all tank removal activities can be found in Appendix 3. The completed Department of Industry, Labor and Human Relations forms SBD-7437 can be found in Appendix 4. Appendix 5 has all completed Chain of Custodies and analytical results from all sampling can be found in Appendix 6.

The concrete overburden was removed to a depth of 8 inches followed by the removal of fill material mixed with cobbles and gravel to a depth of 1½ feet below grade. Approximate dimensions of the tank were 3 feet by 6 feet. Some soil staining was observed near the brick wall. Clay sand was observed at 1½ feet below grade and removed to a depth of 7 feet below grade. A slight odor of kerosene was observed in the clay sand. Brown sandy clay was observed at 7 feet below grade and removed to a depth of 7½ feet below grade with a strong odor of kerosene observed. No groundwater was encountered. All associated piping was removed and visual inspection found the piping to be in good condition. The tank was removed and visual inspection found the tank to be fair condition. Approximately 11 yards of soil was overexcavated and stockpiled on-site. The dimensions of the excavation were 5½ x 9 x 7½ feet.

The tank was cleaned, vented and transported to E&K's yard where the tank was cut for scrap. The stockpiled soil was placed on visqueen and covered with visqueen.

Soil sample 9597 was collected at the south end of the tank excavation at a depth of 6½ feet below grade. Soil sample 9598 was collected at the west side of the tank excavation at a depth of 7 feet below grade. Soil sample 9599 was collected at the east side of the tank excavation at a depth of 5½ feet below grade. Soil sample 9600 was collected at a depth of 6 feet below grade. All soil samples were analyzed for WI Modified Diesel Range Organics (WI DRO) at a WDNR certified laboratory. See results in Table 2.

The tank excavation was backfilled with 13 yards of clear stone and road gravel and brought to grade.

TABLE 2
Laboratory Results of Samples Collected at Kerosene UST

SAMPLE ID	LOCATION	ANALYSIS PERFORMED	RESULTS IN PPM
9597	South end bottom of tank excavation @ 6½' depth	WI DRO	32
9598	West side bottom of tank excavation @ 7' depth	WI DRO	450
9599	East side bottom of tank excavation @ 5½' depth	WI DRO	8400
9600	North end bottom of tank excavation @ 6' depth	WI DRO	110

FIELD ACTIVITIES FROM THE REMOVAL OF A 350 GALLON STODDARD SOLVENT TANK

E & K field personnel were on-site June 16-17, 1992, to remove the 350 gallon stoddard solvent tank. Weather conditions at the time of tank removal consisted of heavy overcast skies with rain showers and an outside air temperature of 70° Fahrenheit. William Fisher was E & K's certified remover/cleaner and site assessor on-site {Certification # 03914}.

Photographs of all tank removal activities can be found in Appendix 3. The completed Department of Industry, Labor and Human Relations forms SBD-7437 can be found in Appendix 4. Appendix 5 has all completed Chain of Custodies and analytical results from all sampling can be found in Appendix 6.

Sandy fill was removed to a depth of 1½ feet below grade to expose the top of the tank. Excavation of the fill material continued to a depth of 4½ feet below grade. Clayey sand with some gravel and cobbles was also removed. Groundwater was not encountered during tank removal. All associated piping was removed and visual inspection found the piping to be in poor condition. The tank was removed and visual inspection found the tank to be in poor condition. Two pit holes were observed in the top of the tank during cleaning. The tank was cleaned, vented and transported to E&K's yard where the tank was cut for scrap. Approximately 25 gallons of stoddard solvent was properly contained into one drum. Approximately 6 cubic yards of soil was removed and placed on visqueen.

Soil sample 9601 was collected from the north end of the tank excavation at a depth of 3½ feet below grade. Soil sample 9602 was collected from the south end of the tank excavation at a depth of 3½ feet below grade. Soil sample 9603 was collected at a depth of 2 feet below grade under the piping elbow at the west end of the tank excavation. All soil samples were sent to Precision Analytical Lab, Inc., a WDNR certified laboratory for WI Modified Gasoline Range Organics (WI GRO) analysis. See Table 3 for analytical results. The excavation was backfilled with 8 yards of gravel and brought to grade. The stockpiled soils were covered with visqueen and left on-site. The drum of stoddard solvent was left on-site.

TABLE 3
Laboratory Results of Samples Collected from the 350 Gallon Stoddard Solvent UST

Sample ID	Location	Analysis Performed	Results in PPM
9601	North end bottom of tank excavation @ 3½' depth	WI GRO	< 5.0
9602	South end bottom of tank excavation @ 3½' depth	WI GRO	11
9603	Under piping elbow, west end of tank excavation @ 2' depth	WI GRO	17

ANALYTICAL RESULTS

Analytical results and locations where samples were collected are shown in Tables one, two and three and Appendix two of this report. Laboratory results can be found in Appendix 6.

SOIL SAMPLING PROCEDURES

E&K Hazardous Waste Services, Inc. technicians followed DILHR soil sampling specifications. All sampling was performed according to the WDNR LUST Analytical Guide. Soil samples collected for laboratory analysis from the Stoddard solvent tank area were collected using a thin tube sampler calibrated to collect 25 grams of soil. The soil was released into a 60 ml glass vial containing 25 ml of purge and trap grade methanol.

Soil samples from the kerosene tank area for laboratory analysis were collected using a thin tube sampler calibrated to 25 grams of soil. The soil was then placed into a 60 ml Teflon-capped glass vial.

Soil samples from the oil tank area were collected and tightly packed into 4 ounce Teflon-capped glass jars.

All samples were collected in native soils at the depths and locations noted. All samples were stored in a cooler packed with ice, then stored in E&K's refrigerator at 36° Fahrenheit prior to being shipped to Precision Analytical Lab, a WDNR certified laboratory, for analysis. Samples were handled in accordance with EPA protocol regarding chain-of-custody procedures. A copy of the chain-of-custody is included in Appendix 5. Locations where the laboratory samples were collected are noted on the site map in Appendix 2.

CONCLUSIONS

Based on laboratory analyses of the soil samples collected, we conclude that contamination exists at all three tank excavations at levels that exceed the WDNR standard of 10 ppm petroleum hydrocarbons, as per current WDNR guidelines.

RECOMMENDATIONS

E&K Hazardous Waste Services, Inc. recommends that a Remedial Investigation be undertaken at the Tecumseh Products Company property located at 900 North Street, Grafton, Wisconsin. The Remedial Investigation should be conducted with the objective of identifying the vertical and lateral extent of contamination in regards to the piping run of the 11,000 oil tank, the kerosene tank excavation and the stoddard solvent tank excavation. Following the investigative work, a Remedial Action Plan should be drafted and implemented.

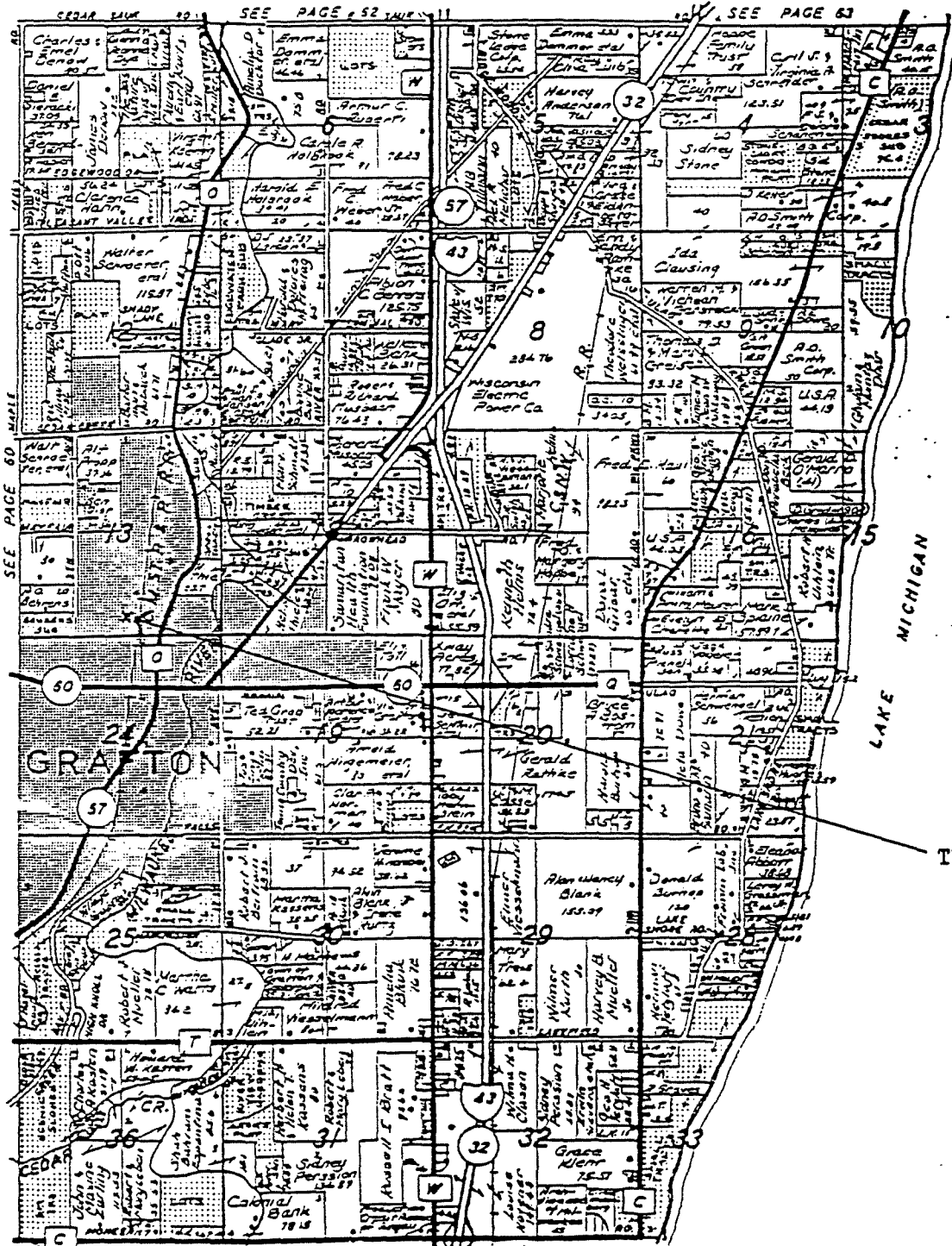
Appendix 1

Area Community Map

Plat Map

GRAFTON

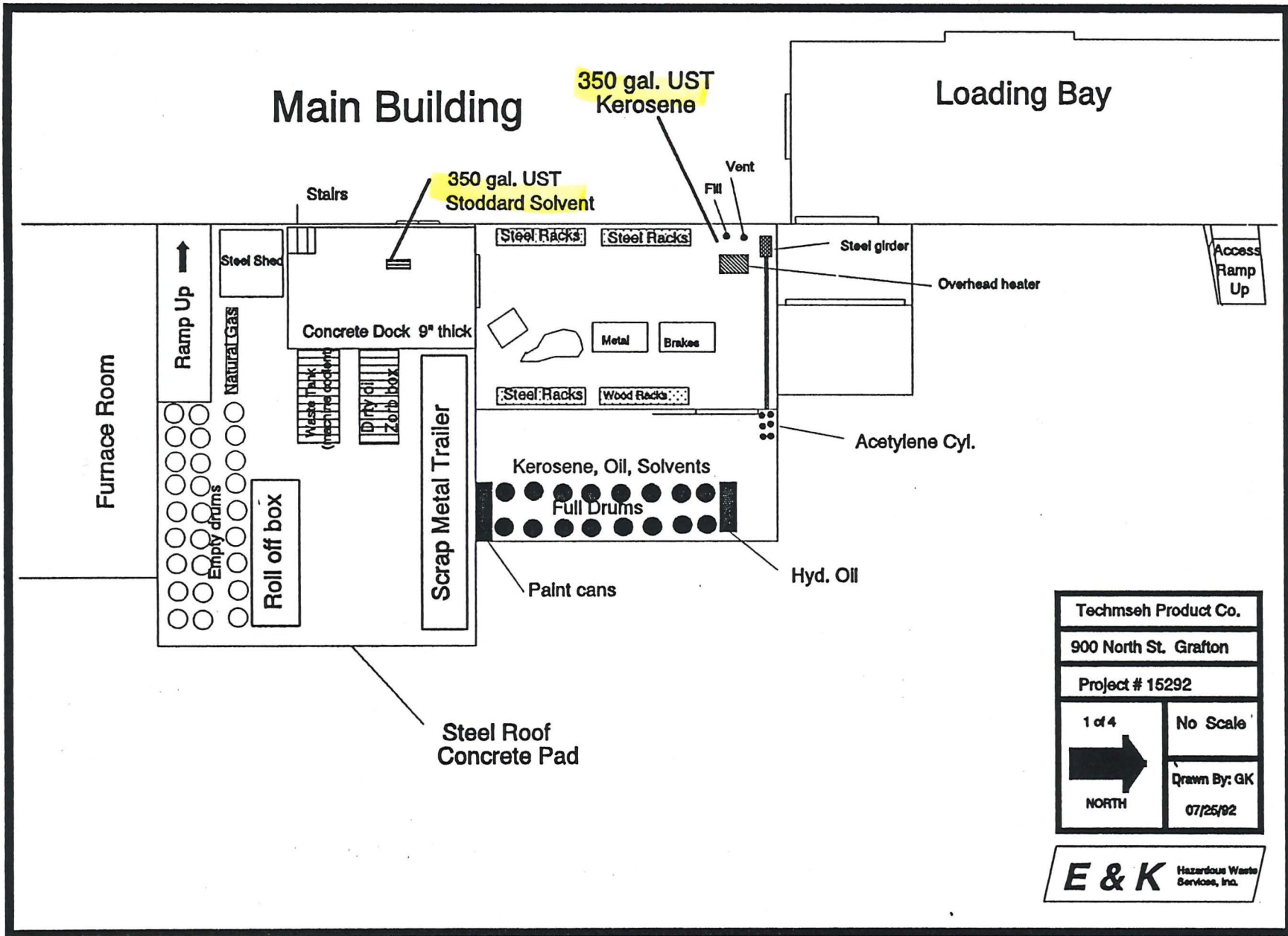
T.10 N.-R.21-22E.




TECUMSEH PRODUCTS COMPANY

Appendix 2

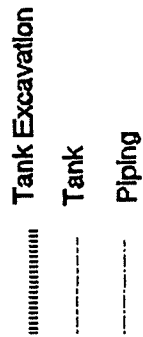
Site Map



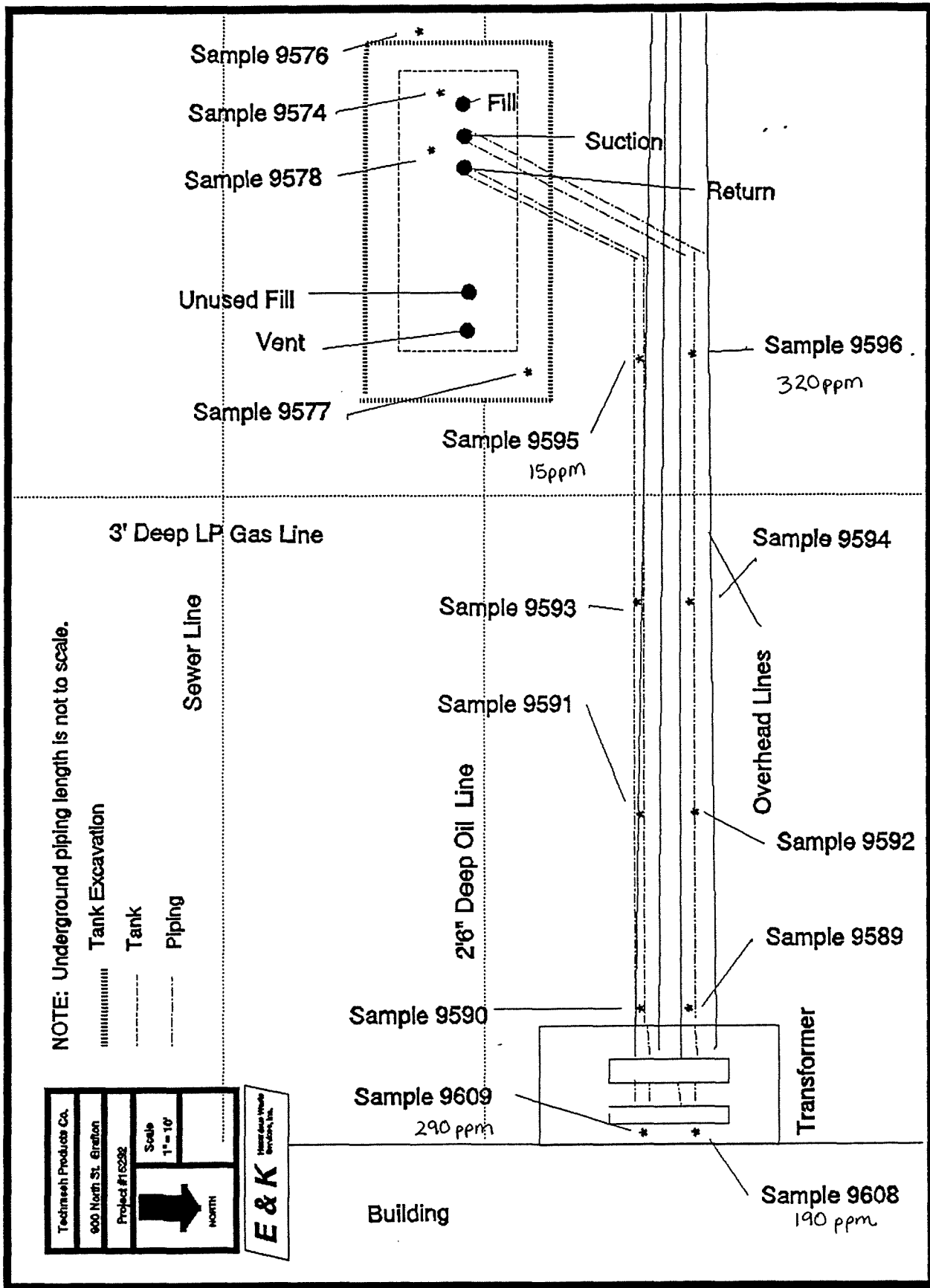
Techmseh Product Co.	
900 North St. Grafton	
Project # 15292	
1 of 4	No Scale
 NORTH	Drawn By: GK
	07/25/92

E & K	Hazardous Waste Services, Inc.
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NOTE: Underground piping length is not to scale.



Techmash Products Co.
600 North St. Station
Project #162382
Scale 1" = 10'
 NORTH



Appendix 3

Photographs of Tank Removal Activities



Description Prior to excavation of 11K tank
Date 06/15/92 **Customer** Tecumseh Products
Photo # 1 **Camera Setting** auto **Project #** 15292
Project Manager William Fisher



Description Uncovering 11K tank
Date 06/15/92 Customer Tecumseh Products
Photo # 2-3 Camera Setting auto Project #15292
Project Manager William Fisher



Description Tank and concrete collar prior to removal
Date 06/15/92 Customer Tecumseh Products
Photo # 4-5 Camera Setting auto Project #15292
Project Manager William Fisher



Description 11K tank
Date 06/15/92 Customer Tecumseh Products
Photo # 6-7 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Excavation after tank removal
Date 06/15/92 Customer Tecumseh Products
Photo # 9-10 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Excavation of 11K tank
Date 06/15/92 Customer Tecumseh Products
Photo # 11 Camera Setting auto Project # 15292
Project Manager William Fisher

Appendix 4

DILHR Underground Petroleum Product
Tank Inventory Form

SBD-7437

**UNDERGROUND
PETROLEUM PRODUCT
TANK INVENTORY**

Send Completed Form To:
Safety & Buildings Division
P.O. Box 7969
Madison, WI 53707
Telephone (608) 267-5280

Information Required By Sec. 102.142, Wis. Stats.

For Office Use Only:

Tank ID #

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner. Have you previously registered this tank by submitting a form? YES NO If yes, are you correcting/updating information only? Yes No

This registration applies to a tank that is (check one):

- 1A. In Use or 1B. Newly Installed
- 2. Abandoned With Product
- 3. Abandoned No Product (empty) or With Water
- 4. Closed - Tank Removed
- 6. Closed - Filled With Inert Material
- 7. Out of Service - Provide Date: _____
- 8. Changed Ownership (Indicate new owner below)

Fire Department Providing Fire Coverage
Where Tank Located:

Grafton Fire Department

A. IDENTIFICATION: (Please Print)

1. Tank Site Name Tecumseh Products Company		Site Address 900 North Street		Site Telephone No. (414) 377-2700	
<input type="checkbox"/> City Grafton	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> Town of:	State WI	Zip Code 53024	County Ozaukee
2. Owner Name (mail sent here unless indicated otherwise in #3 below) Tecumseh Products Company			Owner Mailing Address (mail sent here unless indicated otherwise in #3) 900 North Street		
<input type="checkbox"/> City Grafton	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> Town of:	State WI	Zip Code 53024	County Ozaukee
3. Alternate Mailing Name If Different Than #2			Alternate Mailing Street Address If Different From #2		
<input type="checkbox"/> City	<input type="checkbox"/> Village	<input type="checkbox"/> Town of:	State	Zip Code	County
4. Tank Age (date installed, if known: or years old) Installed 1970		5. Tank Capacity (gallons) 11,000		6. Tank Manufacturer's Name (if known) Unknown	

B. TYPE OF USER (check one):

- 1. Gas Station
- 2. Bulk Storage
- 3. Utility
- 4. Mercantile
- 5. Industrial
- 6. Government
- 7. School
- 8. Residential
- 9. Agricultural
- 10. Other (specify): _____

C. TANK CONSTRUCTION:

1. <input type="checkbox"/> Bare Steel	2. <input type="checkbox"/> Cathodically Protected and Coated Steel (A. <input type="checkbox"/> Sacrificial Anodes or B. <input type="checkbox"/> Impressed Current)
3. <input checked="" type="checkbox"/> Coated Steel	4. <input type="checkbox"/> Fiberglass
5. <input type="checkbox"/> Other (specify): _____	6. <input type="checkbox"/> Relined - Date _____
7. <input type="checkbox"/> Steel - Fiberglass Reinforced Plastic Composite	8. <input type="checkbox"/> Unknown
Approval: 1. <input type="checkbox"/> Nat'l Std. 2. <input checked="" type="checkbox"/> UL 3. <input type="checkbox"/> Other: _____	
Is Tank Double Walled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Overfill Protection Provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, identify type: _____	
Spill Containment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Tank leak detection method: 1. <input type="checkbox"/> Automatic tank gauging 2. <input type="checkbox"/> Vapor monitoring 3. <input type="checkbox"/> Groundwater monitoring 4. <input type="checkbox"/> Inventory control and tightness testing 5. <input type="checkbox"/> Interstitial monitoring 6. <input type="checkbox"/> Not required at present 7. <input checked="" type="checkbox"/> Manual Tank Gauging (only for tanks of 1,000 gallons or less)	

D. PIPING CONSTRUCTION

1. <input checked="" type="checkbox"/> Bare Steel	2. <input type="checkbox"/> Cathodically Protected and Coated or Wrapped Steel (A. <input type="checkbox"/> Sacrificial Anodes or B. <input type="checkbox"/> Impressed Current)	3. <input type="checkbox"/> Coated Steel
4. <input type="checkbox"/> Fiberglass	5. <input type="checkbox"/> Other (specify): _____	9. <input type="checkbox"/> Unknown
Piping System Type: 1. <input checked="" type="checkbox"/> Pressurized piping with: A. <input type="checkbox"/> auto shutoff; B. <input type="checkbox"/> alarm; or C. <input type="checkbox"/> flow restrictor 2. <input type="checkbox"/> Suction piping with check valve at tank 3. <input type="checkbox"/> Suction piping with check valve at pump and inspectable		
Piping leak detection method: used if pressurized or check valve at tank: 1. <input type="checkbox"/> Vapor monitoring 2. <input type="checkbox"/> Interstitial monitoring 3. <input type="checkbox"/> Groundwater monitoring 4. <input type="checkbox"/> Tightness testing 5. <input type="checkbox"/> Line Leak Detector 6. <input checked="" type="checkbox"/> Not Required		
Approval: 1. <input type="checkbox"/> Nat'l Std. 2. <input checked="" type="checkbox"/> UL 3. <input type="checkbox"/> Other: _____		Double Walled: <input type="checkbox"/> Yes <input type="checkbox"/> No

E. TANK CONTENTS

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

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

If Tank Closed, Give Date (mo/day/yr): 06/15/92	Has a site assessment been completed? (see reverse side for details) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------

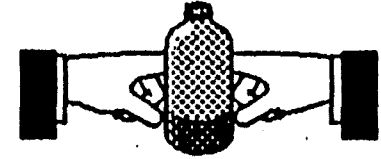
If installation of a new tank is being reported, indicate who performed the installation inspection:		
1. <input type="checkbox"/> Fire Department	2. <input type="checkbox"/> DILHR	3. <input type="checkbox"/> Other (identify) _____

Name of Owner or Operator (please print): Tecumseh Products	Indicate Whether: <input checked="" type="checkbox"/> Owner or <input type="checkbox"/> Operator
Signature of Owner or Operator: <i>John Mikyska</i>	Date Signed: 6-17-92 REMOVED 6/92

Appendix 5

Chain of Custody

CHAIN OF CUSTODY RECORD



Client: Tecumseh Power Products Analytical Requested X
 Project No: 15292 (BF)
 Sampling Site: Grafton WI 53024
 Sampler: William Fisher

Date	Time	Sample I.D.	Description	Analytical Requested				Bottle Type & Size	Sample Source	Sample Procedure	Composite of Grab	Preservation Method
				TRPH	PAH	Metals	Other					
6/15	11:30	9574	Ground water from west end of 11K #0 Exaporation tank	X	X			4oz bottles Amber	Ground water	Grab with one quart on end of pole	Grab	11:35 Put on ice Added 10 ml HCl
6/15	12:41 12:44	9576	Soil Samples, West End of Tank, #1 & #2	✓				4oz 2 ea.	Native Clay soil	Grab from back hoe bucket	Grab	Put on Ice 12:46
6/15	1:20 1:22	9577	Soil Samples, N.E. Corner of Tank Samples #3 & #4	✓				4oz 2 ea.	Clay Soil	Grab from back hoe bucket	Grab	Put on Ice 1:25
6/15	2:30 2:30	9578	Soil Samples West End of Tank sample #5 & #6	✓				4oz 2 ea	Sand backfill	Grab from back hoe bucket	Grab	Put on Ice 2:35
6/15	4:40	9575	Oil from 11K tank which was drummed up			X		1x4 Amber bottles	Oil inside tank	Collapsed from drum	Collapsed	Put on Ice 4:55

Emergency Contact #1-800-688-4005

Custody Transfers

Relinquished by:	Date:	Time:	Received by:
1. <u>William Fisher</u>	<u>6/16/92</u>	<u>8:50 AM</u>	<u>Brice Hirtz</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Additional Comments:

DAL
Soil Samples 11-409 Submitted
Transferred to PAL chain #2044

Note: This form is required by the Department of Natural Resources for leaking underground storage tank sites in compliance with ch. NR 500-540, NR 158 and NR 419, Wis. Adm. Code.

Sample Collector(s) <i>William Fisher</i>	Title/Work Station/Company <i>Project Manager / E&K Hazardous Waste Services</i>	Telephone Number (include area code) <i>(414) 458-6030</i>
Property Owner <i>Tecumseh Products Company</i>	Property Address <i>900 North St., Grafton, WI 53024</i>	Telephone Number (include area code) <i>(414) 377-2700</i>

I hereby certify that I received, properly handled, and disposed of these samples as noted below:

Relinquished By (Signature) <i>William Fisher</i>	Date/Time <i>6/16/92 8:50 AM</i>	Received By (Signature) <i>Janet Hirtz</i>
Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received for Laboratory By (Signature)

Temperature of temperature blank: _____

If samples were received on ice and there was ice remaining, you may report the temperature as "received on ice". If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number	Date Collected	Time Collected	Sample		Preserv. Type	Location/Description (see footnote 2)	Analysis Type	Lab ID Number	No./Type of Containers	Sample Condition			
			Type	Device						Cracked /Broken	Improperly Sealed	Good Condition	Other Comments
<i>9574</i>	<i>6/15/92</i>	<i>11:30 AM</i>	<i>Ground Water</i>	<i>Grab jar, on pole</i>	<i>HCL ON ICE 11:35</i>	<i>West end bottom of excavation at 17ft. / Ground water</i>	<i>TRPH PAH*</i>		<i>4 Quarts</i>				
<i>9576</i>	<i>6/15/92</i>	<i>12:41 PM</i>	<i>Soil</i>	<i>back-hoe</i>	<i>ON ICE 12:46</i>	<i>West end wall excavation at 15ft. depth / Soil sample</i>	<i>TRPH</i>		<i>1-4oz</i>				
<i>9577</i>	<i>6/15/92</i>	<i>1:20 PM</i>	<i>Soil</i>	<i>back-hoe</i>	<i>ON ICE 1:25</i>	<i>North east corner of excavation at 12ft. / Soil sample</i>	<i>TRPH</i>		<i>1-4oz</i>				
<i>9578</i>	<i>6/15/92</i>	<i>2:30 PM</i>	<i>Soil</i>	<i>back-hoe</i>	<i>ON ICE 2:35</i>	<i>West end below tank fill depth 16' / Soil sample</i>	<i>TRPH</i>		<i>1-4oz</i>				

¹ Specify groundwater, surface water, soil, leachate, sludge, etc. *Note: Preserved with HCL

² Sample description must clearly correlate the sample ID to the sampling location. Note: This form sent subsequent to sample transport on 6-18-92. Reference to E&K Chain of Custody and PAL Chain of Custody #2044.

DEPARTMENT USE/OPTIONAL FOR SOIL SAMPLERS

Disposition of unused portion of sample Laboratory should:

Dispose Retain for ___ days

Return Other

DEPARTMENT USE ONLY

Split samples: Offered? Yes No (Check one)

Accepted? Yes No (Check one)

Accepted By: _____ Signature

CLIENT INFORMATION

Name: Janice Hinz
 Company: WIS Hazardous Waste Services, Inc.
 Address: 2005 Paine Ave., P.O. Box 1249
Sheboygan, WI 53082-1249
 Phone: 414/450-6020
 P.O.# / Project#: 15202 / Lakeshore Power Products
 Quote/Reference#: _____



Turnaround Time
 Normal
 Rush
Date Needed _____
 (Preapproval by Lab)

Note: Terms and conditions printed on back apply.

- | Sample Type | | Sample Handling | |
|-------------------------------------------------|------------------------------------------------|-------------------------------------------------|--|
| <i>(Check all that apply)</i> | | | |
| <input checked="" type="checkbox"/> Groundwater | <input type="checkbox"/> Nonhazardous | <input checked="" type="checkbox"/> Refrigerate | |
| <input type="checkbox"/> Wastewater | <input type="checkbox"/> Flammable | <input type="checkbox"/> Work in Hood | |
| <input checked="" type="checkbox"/> Soil | <input type="checkbox"/> Skin Irritant | <input type="checkbox"/> Wear Gloves | |
| <input type="checkbox"/> Solid Waste | <input type="checkbox"/> Highly Toxic | | |
| <input type="checkbox"/> Oil | <input type="checkbox"/> Other (specify) _____ | | |
| <input type="checkbox"/> Other _____ | | | |

Precision Analytical Laboratory, Inc.
 205 W. Galena
 Milwaukee, WI 53212
 Phone: (414) 272-5222
 Fax: (414) 272-6949

ANALYTICAL REQUESTS
 (use separate sheet if necessary)

TRPH PAH (Assigned with HCL) SWAB PREMICATION										
LAB USE ONLY	DATE	TIME	No. of Containers		SAMPLE ID	REMARKS				
			COMP	GRAB						
9206195-1	6/15/02	11:30AM		1	130574/Groundwater	X	X			
-2	6/15/02	12:41PM		1	130576/Soil - West End	X				
-3	6/15/02	1:20PM		1	130577/Soil - N.E. Corner	X				
-4	6/15/02	2:30PM		1	130578/Soil - West End	X				

Del'y: Hand Comm. N N/A
 Ship. Cont. OK? N N/A
 Rec'd Refrig.? N N/A
 Seats OK? N N/A
 Samples leaking? Y N N/A
 Comments: _____

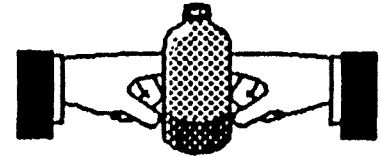
CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)	DATE/TIME

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
<i>Janice Hinz</i>	6/16/02 1:52PM	<i>Richard Leary</i>
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature)
		<i>D. Subjunctive</i>
		DATE/TIME
		6/17/02

CHAIN OF CUSTODY RECORD



Client: Tecumseh Analytical Requested _____
 Project No: 15292 (BF)
 Sampling Site: Grafton
 Sampler: Boyd Stueck Bill Fischer

Date	Time	Sample I.D.	Description	TPPH	Boyle Total & Type	Sample Source	Sample Procedure	Composite of Grab	Preservation Method
6/16	8:45	9596	Piping run suction side 20ft mark	X	2 402	Pipeline	Grab	6	Ice 9206210-1
6/16	10:14	9595	Piping run return side 20ft mark	X	2 402	Pipeline	Grab	6	Ice -2
6/16	10:30	9594	Piping run suction side 40ft mark	X	2 402	Pipeline	Grab	6	Ice -3
6/16	10:35	9593	Piping run return side 40ft mark	X	2 402	Pipeline	Grab	6	Ice -4
6/16	10:30	9592	Piping run suction side 60ft mark	X	1 402	Pipeline	Grab	6	Ice -5
6/16	11:30	9591	Piping run return side 60ft mark	X	1 402	Pipeline	Grab	6	Ice -6

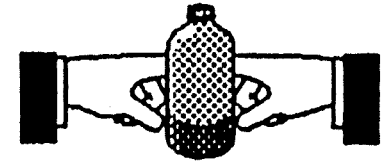
Emergency Contact #1-800-688-4005

Custody Transfers

Relinquished by: _____ Date: 6-17-92 Time: 8:00 AM Received by: _____
 1. Boyd Stueck [Signature] [Signature] Eric Hirtz
 2. Eric Hirtz 6-17-92 1:25 PM Richard Leeb
 3. _____
 4. _____

Additional Comments:

CHAIN OF CUSTODY RECORD



Client: Tecumseh
 Project No: 15292 (Bt)
 Sampling Site: Grafton
 Sampler: Boyd Stueck

Analytical Requested

Date	Time	Sample I.D.	Description	TAPPH				Base Total & Type	Sample Source	Sample Procedure	Composite of Grab	Preservation Method
6/16	11:45	9589	Pipeline Suction side 80ft MK	X				1 402	Sub Pipeline	Grab	G	Ice 9206211-1
6/16	11:45	9590	Pipeline Return side 80ft MK.	X				1 402	Pipeline	Grab	G	Ice -2

Custody Transfers

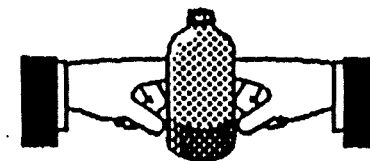
Emergency Contact #1-800-688-4005

Relinquished by: _____ Date: 6-17-92 Time: 8:28 Am Received by: _____
 1. Boyd Stueck _____ Jane Hirtz
 2. Michael Hirtz 6-17-92 1:25Pm Richard Lueck
 3. _____
 4. _____

Additional Comments:

CHAIN OF CUSTODY RECORD

Client: Tecumseh Analytical Requested _____
 Project No: 15292 (BF)
 Sampling Site: Grafton
 Sampler: Bob Stueck



9206223

Date	Time	Sample I.D.	Description	IRPH	HAUL	Other Total & Type	Sample Source	Sample Procedure	Composite of Grab	Preservation Method
6/17	8:45 AM	9607	300 gal Stoddard Tank	X		1 Qt	300g Tank	Col.	6	ON Ice 9:00 AM
6/17	9:50 AM	9608	Soil under suction pipe run (against wall) 26 ft depth	X		1 4oz	Pipe line	Grab	6	Ice 10:05 AM -1
6/17	9:50 AM	9609	Soil under return pipe run (against wall) 26 ft depth	X		1 4oz	Pipe line	Grab	6	Ice 10:05 Am -2

Emergency Contact #1-800-688-4005

Custody Transfers

Relinquished by: _____ Date: _____ Time: _____ Received by: _____

1. Bob Stueck 6-18-92 8:45 AM Kevin Hirtz

2. Kevin Hirtz 6-18-92 2:45 PM George P. [Signature]

3. _____

4. _____

Additional Comments:

PAL

Note: This form is required by the Department of Natural Resources for leaking underground storage tank sites in compliance with ch. NR 500.540, NR 158 and NR 419, Wis. Adm. Code.

Sample Collector(s) Boyd Stueck	Title/Work Station/Company Field Supervisor/E&K Hazardous Waste Services,	Telephone Number (include area code) (414) 458-6030
Property Owner Tecumseh Products Company	Property Address 900 North St., Grafton, WI 53024	Telephone Number (include area code) (414) 377-2700

I hereby certify that I received, properly handled, and disposed of these samples as noted below:

Relinquished By (Signature) <i>Barth H. Wood</i>	Date/Time 6-18-92 8:45 AM	Received By (Signature) <i>Lance Hirtz</i>
Relinquished By (Signature) <i>Lance Hirtz</i>	Date/Time 6-18-92 2:45 PM	Received By (Signature) <i>Sam B. Pletty</i>
Relinquished By (Signature)	Date/Time	Received by Laboratory By (Signature)

Temperature of temperature blank: _____
 If samples were received on ice and there was ice remaining, you may report the temperature as "received on ice". If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number	Date Collected	Time Collected	Sample		Preserv. Type	Location/Description (see footnote 2)	Analysis Type	Lab ID Number	No./Type of Containers	Sample Condition			
			Type ¹	Device						Cracked /Broken	Improperly Sealed	Good Condition	Other Comments
9608	6/17/92	9:50 AM	Soil		ON Ice 10:05	Soil under suction pipe 2 1/2 ft. depth against wall of bldg.	TRPH		1 - 4oz				
9609	6/17/92	9:50 AM	Soil		ON Ice 10:05	Soil under return pipe 2 1/2 ft. deep against wall of bldg.	TRPH		1 - 4 oz				

¹ Specify groundwater, surface water, soil, leachate, sludge, etc.
² Sample description must clearly correlate the sample ID to the sampling location.

DEPARTMENT USE/OPTIONAL FOR SOIL SAMPLERS	DEPARTMENT USE ONLY
Disposition of unused portion of sample Laboratory should:	Split samples: Offered? <input type="checkbox"/> Yes <input type="checkbox"/> No (Check one)
<input type="checkbox"/> Dispose	Accepted? <input type="checkbox"/> Yes <input type="checkbox"/> No (Check one)
<input type="checkbox"/> Retain for _____ days	Accepted By: _____
<input type="checkbox"/> Return	Signature
<input type="checkbox"/> Other	

Appendix 6

Laboratory Results

15292 (BF) 7-2-92

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

E & K Hazardous Waste Service
2905 Paine Ave.
Sheboygan, WI 53082

Attn: Janice Hintz
Invoice Number:

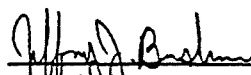
Order #: 92-06-195
Date: 06/30/92 17:21
Work ID: 15292
Date Received: 06/16/92
Date Completed: 06/30/92
Client Code: E_K_HAZARD

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	EK 9574
02	EK 9576

<u>Sample Number</u>	<u>Sample Description</u>
03	EK 9577
04	EK 9578

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Sample: 01A EK 9574

Collected: 06/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PAH Water, Method 8270					
Acenaphthene	< 10		ug/l	06/22/92	QAL
Acenaphthylene	< 10		ug/l	06/22/92	QAL
Anthracene	< 6.6		ug/l	06/22/92	QAL
Benzo(a)anthracene	< .10		ug/l	06/22/92	QAL
Benzo(b)fluoranthene	< .18		ug/l	06/22/92	QAL
Benzo(k)fluoranthene	< .17		ug/l	06/22/92	QAL
Benzo(g,h,i)perylene	< .76		ug/l	06/22/92	QAL
Benzo(a)pyrene	< .20		ug/l	06/22/92	QAL
Chrysene	< 1.5		ug/l	06/22/92	QAL
Dibenz(a,h)anthracene	< .30		ug/l	06/22/92	QAL
Fluoranthene	< 2.0		ug/l	06/22/92	QAL
Fluorene	< 2.0		ug/l	06/22/92	QAL
Indeno(1,2,3-cd)pyrene	< .4		ug/l	06/22/92	QAL
Naphthalene	< 10		ug/l	06/22/92	QAL
Phenanthrene	< 6.0		ug/l	06/22/92	QAL
Pyrene	< 2.7		ug/l	06/22/92	QAL
TRPH, Water	0.24		ppm	06/23/92	CEP

Sample: 02A EK 9576

Collected: 06/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

Sample: 03A EK 9577

Collected: 06/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

Sample: 04A EK 9578

Collected: 06/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

All analysis as per approved methods found in one or more of the following:

Standard Methods for the Evaluation of Water and Wastewater, 16th Edition.

Methods for Chemical Analysis for Water and Wastes, Revised March 1983, EPA 600/4-79-020

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition 1986 EPA SW846

Analysis performed or certified by Precision Analytical Labs

The samples ordered for PAH were analyzed according to Method 8310 (SW 846 Test Methods for Evaluating Solid Waste - Physical/Chemical Methods)

15292(BF) 6-26-92

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

E & K Hazardous Waste Service
2905 Paine Ave.
Sheboygan, WI 53082

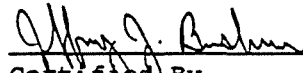
Attn: Janice Hintz
Invoice Number:

Order #: 92-06-210
Date: 06/23/92 14:50
Work ID: 15292
Date Received: 06/17/92
Date Completed: 06/23/92
Client Code: E_K_HAZARD

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
01	EK 9596	04	EK 9593
02	EK 9595	05	EK 9592
03	EK 9594	06	EK 9591

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Order # 92-06-210
06/23/92 14:50

Precision Analytical Lab, Inc
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A EK 9596

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	320		ppm	06/22/92	CEP

Sample: 02A EK 9595

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	15		ppm	06/22/92	CEP

Sample: 03A EK 9594

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

Sample: 04A EK 9593

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

Sample: 05A EK 9592

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

Sample: 06A EK 9591

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

15292 (BF) 6-26-92

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

E & K Hazardous Waste Service
2905 Paine Ave.
Sheboygan, WI 53082

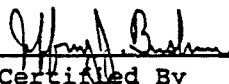
Attn: Janice Hintz
Invoice Number: 4349

Order #: 92-06-211
Date: 06/24/92 16:42
Work ID: 15292
Date Received: 06/17/92
Date Completed: 06/23/92
Client Code: E_K_HAZARD

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
01	EK 9589	02	EK 9590

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Order # 92-06-211
06/24/92 16:42

Precision Analytical Lab, Inc
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A EK 9589

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

Sample: 02A EK 9590

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	06/22/92	CEP

5
Order # 92-06-211
06/24/92 16:42

Precision Analytical Lab, Inc
REPORT COMMENTS

Page 3

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

15242 (BF) 6-24-92

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

E & K Hazardous Waste Service
2905 Paine Ave.
Sheboygan, WI 53082

Attn: Janice Hintz
Invoice Number:

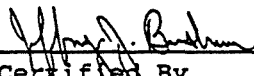
Order #: 92-06-223
Date: 06/23/92 14:54
Work ID: 15292 Tecumseh
Date Received: 06/18/92
Date Completed: 06/23/92
Client Code: E_K_HAZARD

SAMPLE IDENTIFICATION

<u>Sample</u> <u>Number</u>	<u>Sample</u> <u>Description</u>
01	9608

<u>Sample</u> <u>Number</u>	<u>Sample</u> <u>Description</u>
02	9609

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Order # 92-06-223
06/23/92 14:54

Precision Analytical Lab, Inc
TEST RESULTS BY SAMPLE

Sample: 01A 9608

Collected: 06/17/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	190		ppm	06/22/92	CEP

Sample: 02A 9609

Collected: 06/17/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	290		ppm	06/22/92	CEP

The organic data is reported out on a dry-weight basis. . .

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for TRPH were analyzed by Modified EPA Method 9073.

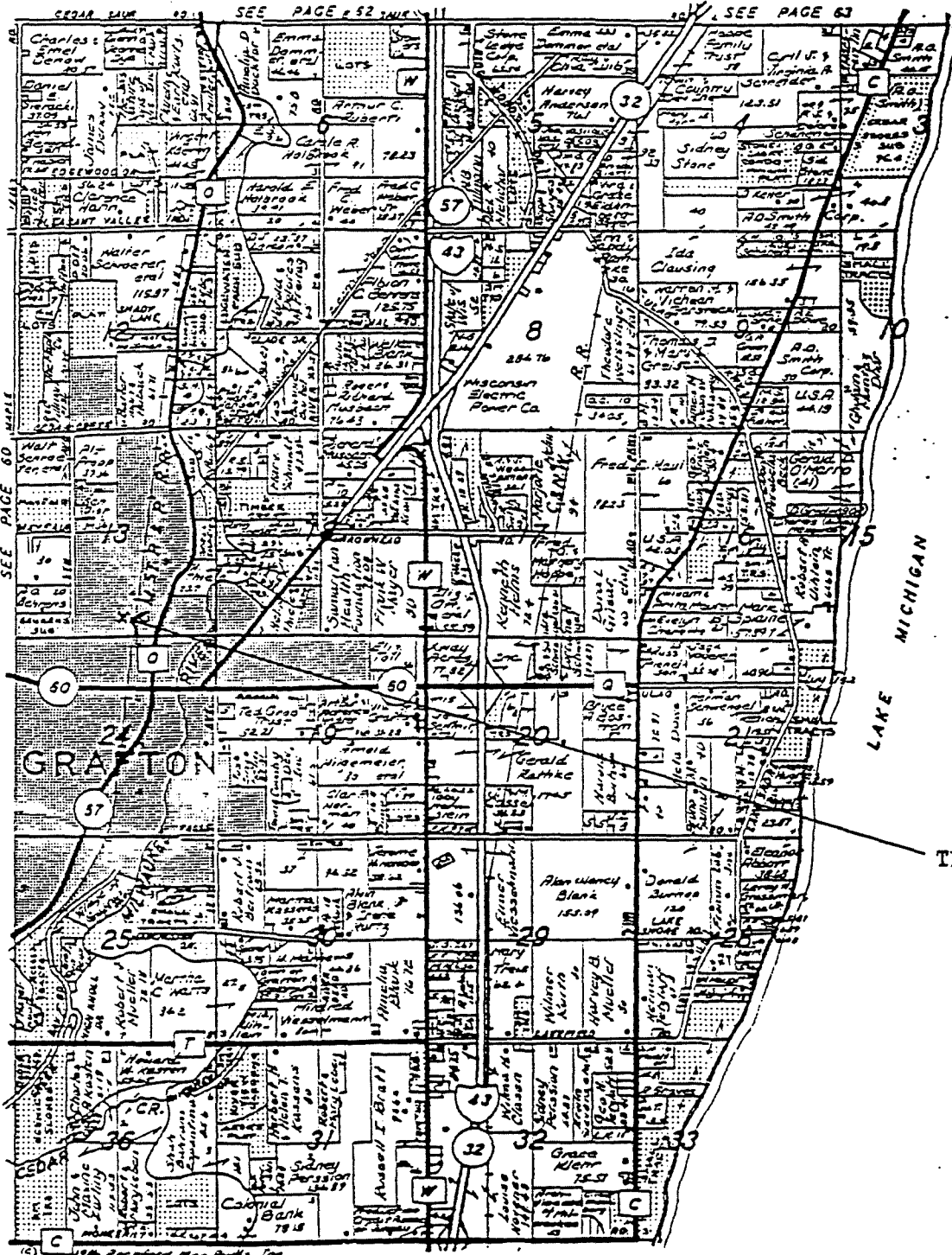
Appendix 1

Area Community Map

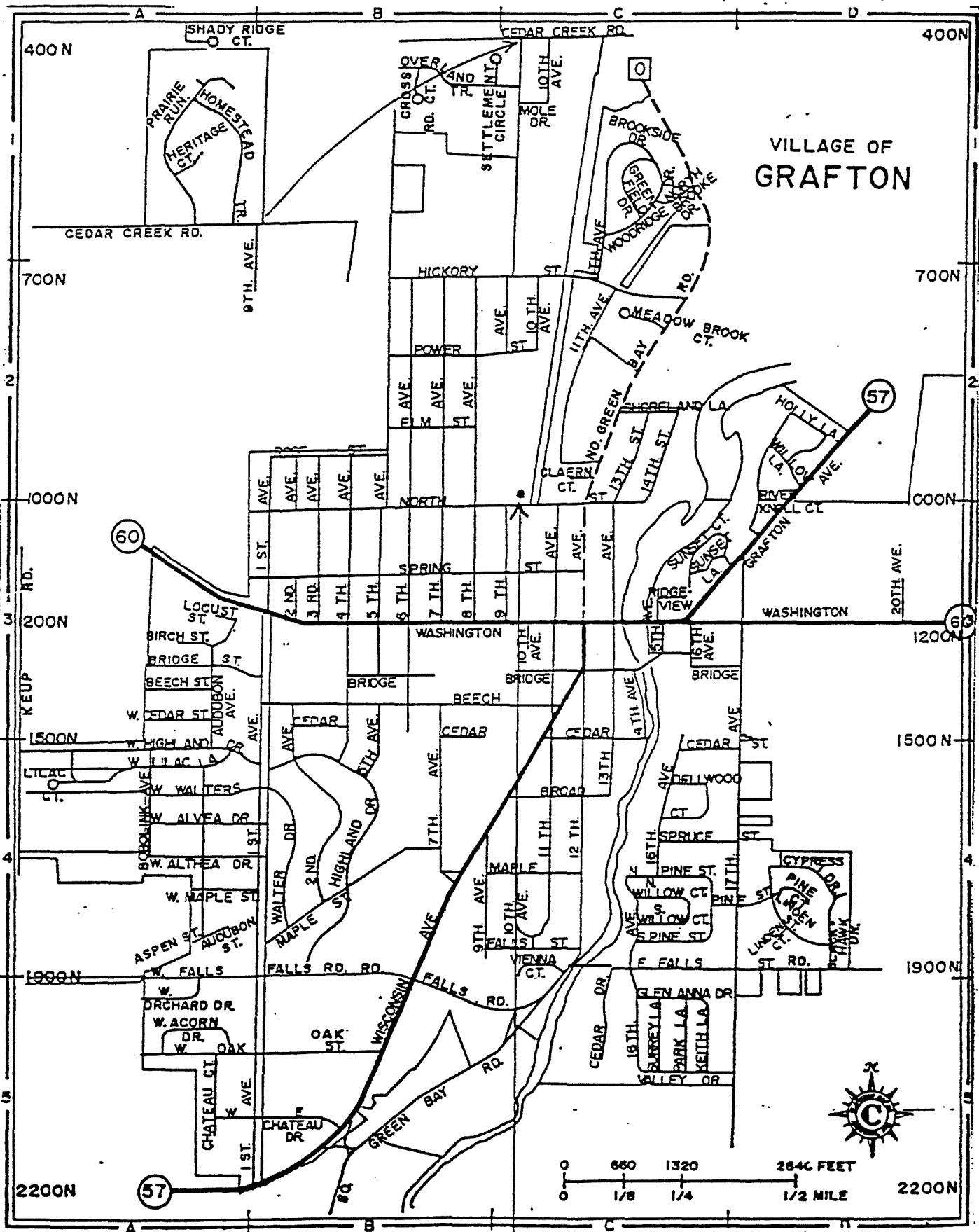
Plat Map

GRAFTON

T. 10 N.-R. 21-22E.



TECUMSEH PRODUCTS COMPANY



TECUMSEH PRODUCTS COMPANY

Appendix 2

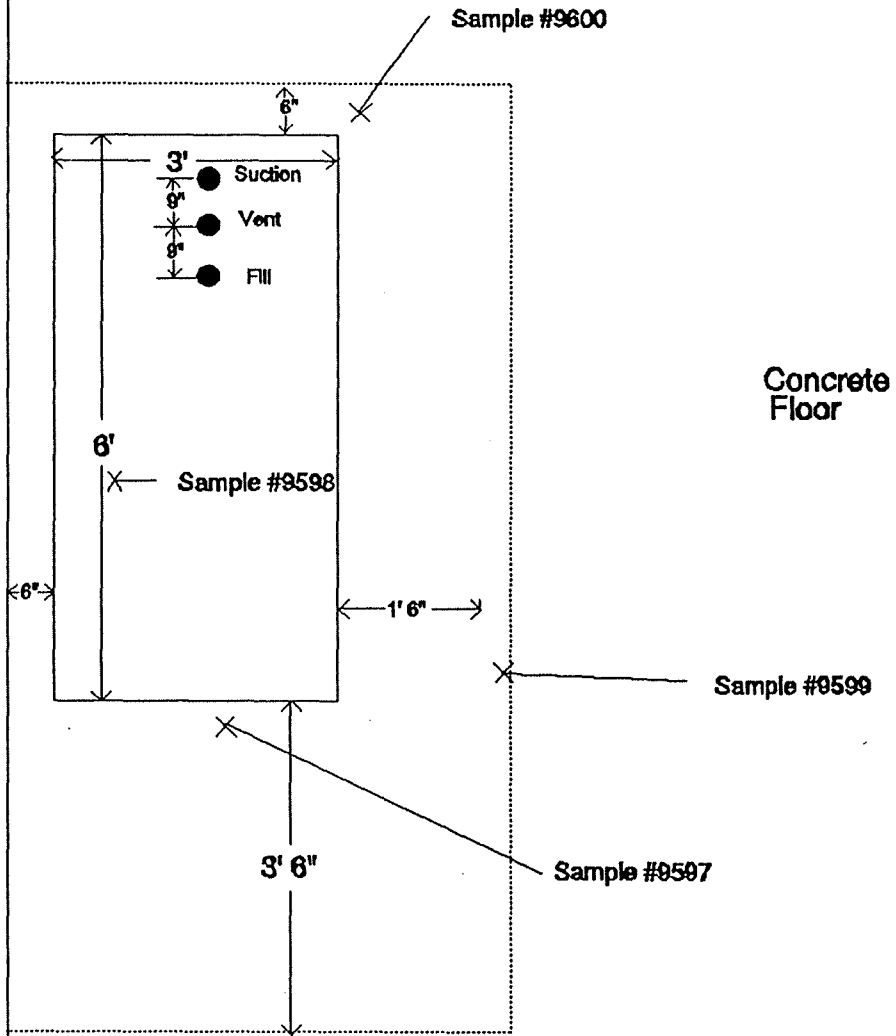
Site Map

— Tank
 Tank Excavation

Techmseh Products	
800 North St. Grafton	
Project # 15292	
3 of 4 ↑ NORTH	Scale 1" = 2' Drawn By: GK 07/25/82

E & K Hazardous Waste Services, Inc.

Brick Wall



350 gallons Kerosene UST

Appendix 3

Photographs of Tank Removal Activities



Description Prior to excavation
Date 06/15/92 Customer Tecumseh Products
Photo # 1-2 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Tank prior to removal
Date 06/15/92 Customer Tecumseh Products
Photo # 3-4 Camera Setting auto Project #15292
Project Manager William Fisher



Description Tank prior to removal
Date 06/15/92 Customer Tecumseh Products
Photo # 5-6 Camera Setting auto Project #15292
Project Manager William Fisher



Description Removed tank and excavation
Date 06/15/92 Customer Tecumseh Products
Photo # 7-8 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Removed soil and excavation
Date 06/15/92 Customer Tecumseh Products
Photo # 9-10 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Compacting backfilled excavation
Date 06/15/92 Customer Tecumseh Products
Photo # 11 Camera Setting auto Project # 15292
Project Manager William Fisher

Appendix 4

DILHR Underground Petroleum Product
Tank Inventory Form

SBD-7437

**UNDERGROUND
PETROLEUM PRODUCT
TANK INVENTORY**

Send Completed Form To:
Safety & Buildings Division
P.O. Box 7969
Madison, WI 53707
Telephone (608) 267-5280

Information Required By Sec. 102.142, Wis. Stats.

For Office Use Only:

Tank ID #

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner. Have you previously registered this tank by submitting a form? YES NO If yes, are you correcting/updating information only? Yes No

This registration applies to a tank that is (check one):

- 1A. In Use or 1B. Newly Installed
 2. Abandoned With Product
 3. Abandoned No Product (empty) or With Water
 4. Closed - Tank Removed
 6. Closed - Filled With Inert Material
 7. Out of Service - Provide Date: _____
 8. Changed Ownership (Indicate new owner below)

Fire Department Providing Fire Coverage
Where Tank Located:

Grafton Fire Department

A. IDENTIFICATION: (Please Print)

1. Tank Site Name Tecumseh Products Company		Site Address 900 North Street		Site Telephone No. (414) 377-2700	
<input type="checkbox"/> City Grafton	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> Town of:	State WI	Zip Code 53024	County Ozaukee
2. Owner Name (mail sent here unless indicated otherwise in #3 below) Tecumseh Products Company			Owner Mailing Address (mail sent here unless indicated otherwise in #3) 900 North Street		
<input type="checkbox"/> City Grafton	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> Town of:	State WI	Zip Code 53024	County Ozaukee
3. Alternate Mailing Name If Different Than #2			Alternate Mailing Street Address If Different From #2		
<input type="checkbox"/> City	<input type="checkbox"/> Village	<input type="checkbox"/> Town of:	State	Zip Code	County
4. Tank Age (date installed, if known: or years old) Installed 1970		5. Tank Capacity (gallons) 350		6. Tank Manufacturer's Name (if known)	

B. TYPE OF USER (check one):

1. Gas Station
 2. Bulk Storage
 3. Utility
 4. Mercantile
 5. Industrial
 6. Government
 7. School
 8. Residential
 9. Agricultural
 10. Other (specify): _____

C. TANK CONSTRUCTION:

1. <input checked="" type="checkbox"/> Bare Steel	2. <input type="checkbox"/> Cathodically Protected and Coated Steel (A. <input type="checkbox"/> Sacrificial Anodes or B. <input type="checkbox"/> Impressed Current)	3. <input type="checkbox"/> Coated Steel	4. <input type="checkbox"/> Fiberglass	5. <input type="checkbox"/> Other (specify): _____
6. <input type="checkbox"/> Relined - Date _____	7. <input type="checkbox"/> Steel - Fiberglass Reinforced Plastic Composite	8. <input type="checkbox"/> Unknown		
Approval: 1. <input type="checkbox"/> Nat'l Std. 2. <input type="checkbox"/> UL 3. <input type="checkbox"/> Other: Unknown			Is Tank Double Walled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Overfill Protection Provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, identify type: _____			Spill Containment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Tank leak detection method: 1. <input type="checkbox"/> Automatic tank gauging 2. <input type="checkbox"/> Vapor monitoring 3. <input type="checkbox"/> Groundwater monitoring 4. <input type="checkbox"/> Inventory control and tightness testing 5. <input type="checkbox"/> Interstitial monitoring 6. <input type="checkbox"/> Not required at present 7. <input checked="" type="checkbox"/> Manual Tank Gauging (only for tanks of 1,000 gallons or less)				

D. PIPING CONSTRUCTION

1. <input checked="" type="checkbox"/> Bare Steel	2. <input type="checkbox"/> Cathodically Protected and Coated or Wrapped Steel (A. <input type="checkbox"/> Sacrificial Anodes or B. <input type="checkbox"/> Impressed Current)	3. <input type="checkbox"/> Coated Steel	4. <input type="checkbox"/> Fiberglass	5. <input type="checkbox"/> Other (specify): _____	9. <input type="checkbox"/> Unknown
Piping System Type: 1. <input type="checkbox"/> Pressurized piping with: A. <input type="checkbox"/> auto shutoff; B. <input type="checkbox"/> alarm; or C. <input type="checkbox"/> flow restrictor 2. <input type="checkbox"/> Suction piping with check valve at tank 3. <input checked="" type="checkbox"/> Suction piping with check valve at pump and inspectable					
Piping leak detection method: used if pressurized or check valve at tank: 1. <input type="checkbox"/> Vapor monitoring 2. <input type="checkbox"/> Interstitial monitoring			3. <input type="checkbox"/> Groundwater monitoring 4. <input type="checkbox"/> Tightness testing 5. <input type="checkbox"/> Line Leak Detector 6. <input checked="" type="checkbox"/> Not Required		
Approval: 1. <input type="checkbox"/> Nat'l Std. 2. <input type="checkbox"/> UL 3. <input checked="" type="checkbox"/> Other: Unknown				Double Walled: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

E. TANK CONTENTS

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

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

If Tank Closed, Give Date (mo/day/yr): 06/15/92	Has a site assessment been completed? (see reverse side for details) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------

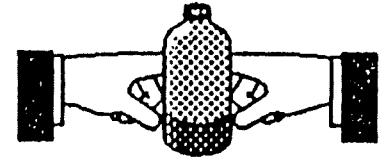
If installation of a new tank is being reported, indicate who performed the installation inspection:
 1. Fire Department 2. DILHR 3. Other (identify) _____

Name of Owner or Operator (please print): Tecumseh Products	Indicate Whether: <input checked="" type="checkbox"/> Owner or <input type="checkbox"/> Operator
Signature of Owner or Operator: John Mikyska	Date Signed: 6-17-92

Appendix 5

Chain of Custody

CHAIN OF CUSTODY RECORD



Client: Tecumseh Power Products Analytical Requested _____
 Project No: 15297 (BF)
 Sampling Site: 900 N. St., Grafton, WI
 Sampler: William Fisher

Date	Time	Sample I.D.	Description	DRO Dry Weight				Bottle Total & Type	Sample Source	Sample Procedure	Composite of Grab	Preservation Method	
6/16/92	12:03	9597	Kerosene tank DRO #1 South and bottom, dry wt #1 DRO-42109, DRO-42110	X	X				2x60ml Exc back-hoe	1x4oz	Corer Stainless	Grab	ON Ice 12:09 92D6218-1
6/16/92	12:13	9598	Kerosene tank DRO #2 West side bottom, dry wt #2 DRO-42113, DRO-42114	X	X				2x60ml Exc. back-hoe	1x4oz	Corer	Grab	ON Ice 12:16 -2
6/16/92	12:22	9599	Kerosene tank DRO #3 East side bottom, dry wt #3 DRO-42111, DRO-42112	X	X				2x60ml Exc. back-hoe	1x4oz	Corer	Grab	ON Ice 12:25 -3
6/16/92	12:36	9600	Kerosene tank, DRO #4 North End bottom, dry wt #4 DRO-42115, DRO 42116	X	X				2x60ml Exc. back-hoe	1x4oz	Corer	Grab	ON Ice 12:40 -4

Emergency Contact #1-800-688-4005

Custody Transfers

Relinquished by:	Date:	Time:	Received by:
1. <u>William Fisher</u>	<u>6-17-92</u>	<u>8:00 AM</u>	<u>Janice Hutz</u>
2. <u>Janice Hutz</u>	<u>6-17-92</u>	<u>1:15 PM</u>	<u>Richard Lesley</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Additional Comments:

Appendix 6

Laboratory Results

Rec'd 7-13-92

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

E & K Hazardous Waste Service
2905 Paine Ave.
Sheboygan, WI 53082

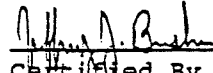
Order #: 92-06-218
Date: 07/09/92 16:09
Work ID: 15292
Date Received: 06/17/92
Date Completed: 07/09/92
Client Code: E_K_HAZARD

Attn: Janice Hintz
Invoice Number:

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
01	EK 9597	05	EK 9601
02	EK 9598	06	EK 9602
03	EK 9599	07	EK 9603
04	EK 9600	08	EK 9604

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Sample: 01A EK 9597

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	32		mg/kg	06/28/92	SEL

Sample: 02A EK 9598

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	450		mg/kg	06/28/92	SEL

Sample: 03A EK 9599

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	8400		mg/kg	07/01/92	SEL

Sample: 04A EK 9600

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	110		mg/kg	06/28/92	SEL

Sample: 05A EK 9601

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	< 5.0		mg/kg	06/25/92	SEL

Sample: 06A EK 9602

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	11		mg/kg	06/25/92	SEL

Sample: 07A EK 9603

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	17		mg/kg	06/25/92	SEL

Sample: 08A EK 9604

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	< 5.0		mg/kg	06/24/92	SEL

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.

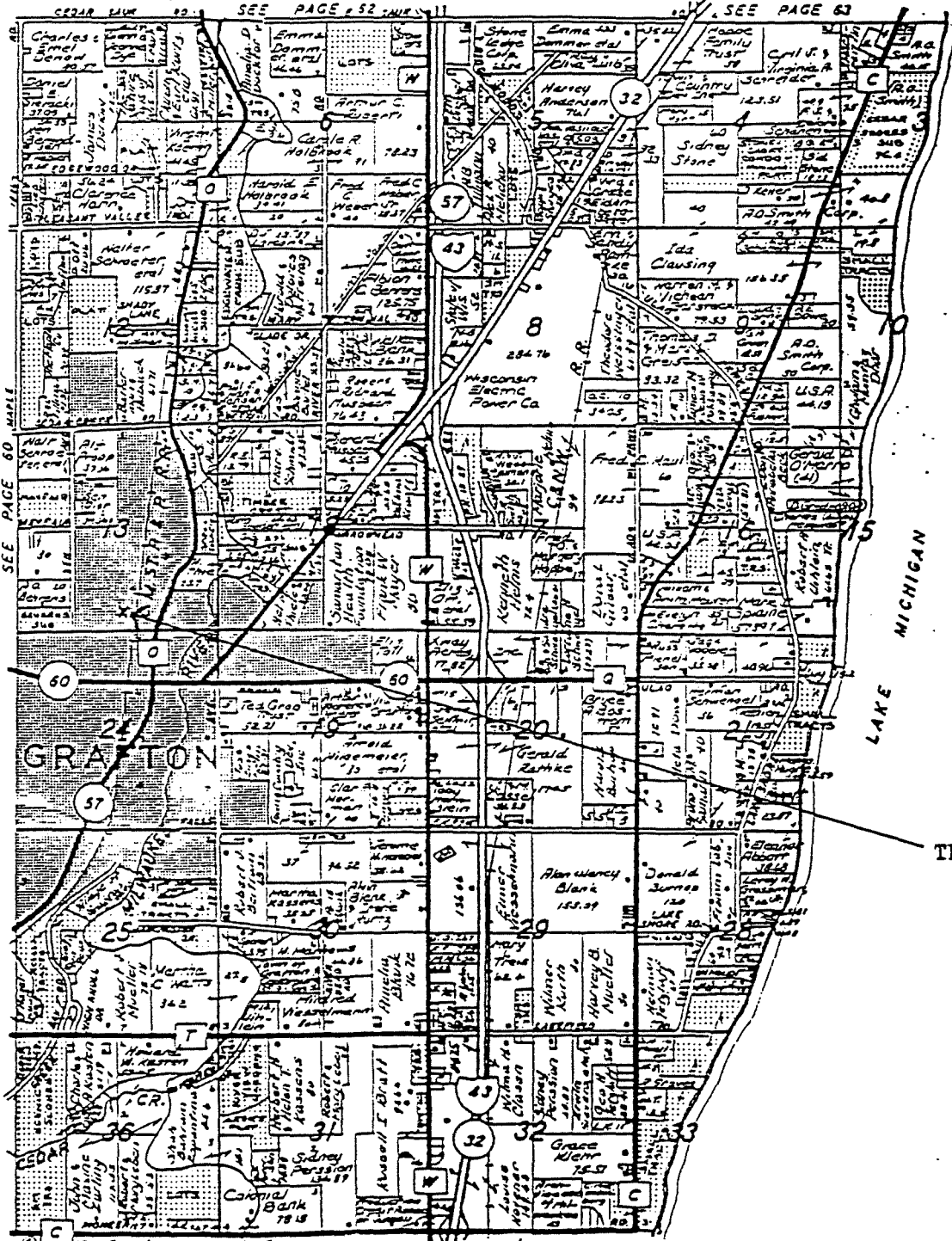
Appendix 1

Area Community Map

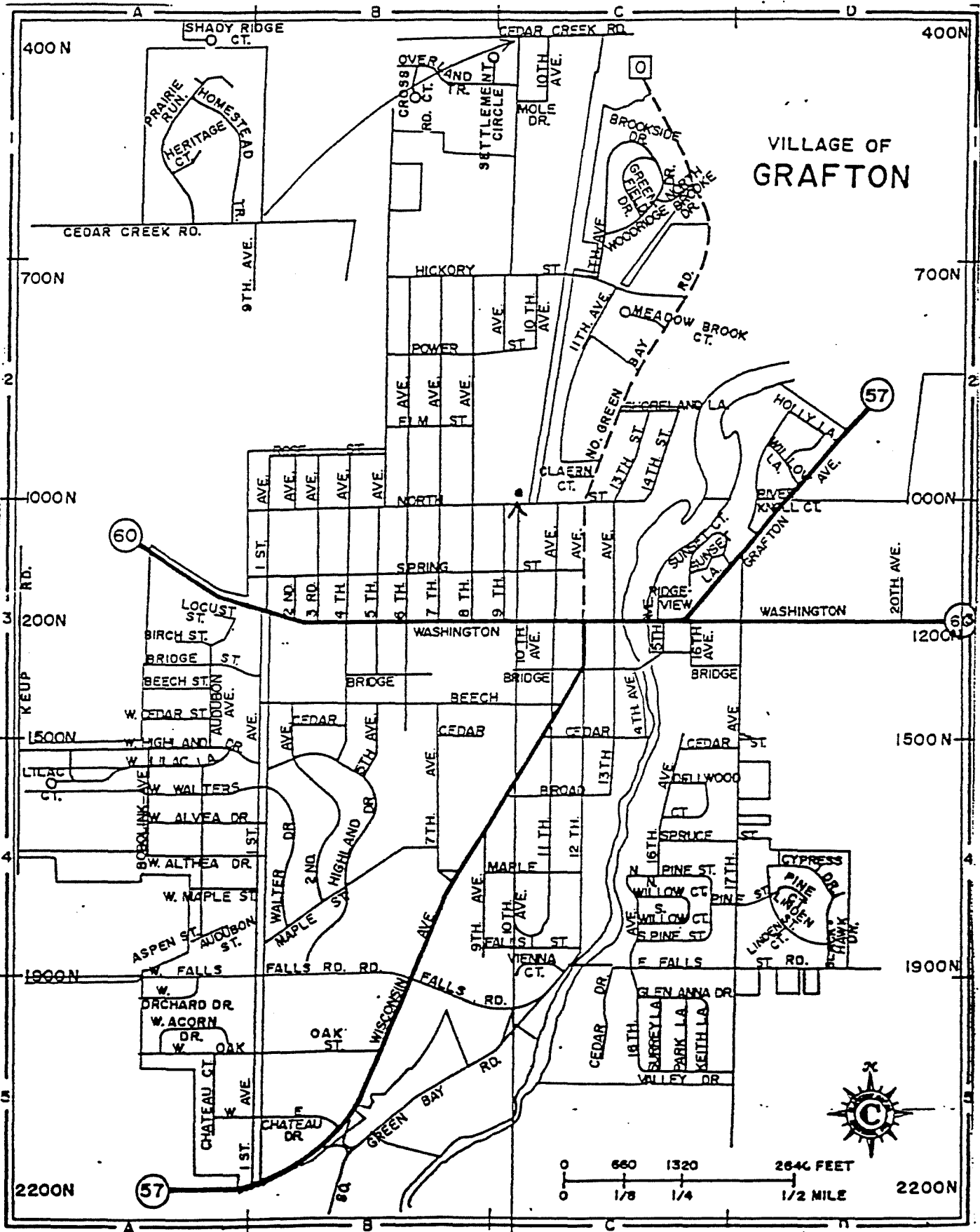
Plat Map

GRAFTON

T. 10 N-R. 21-22E.



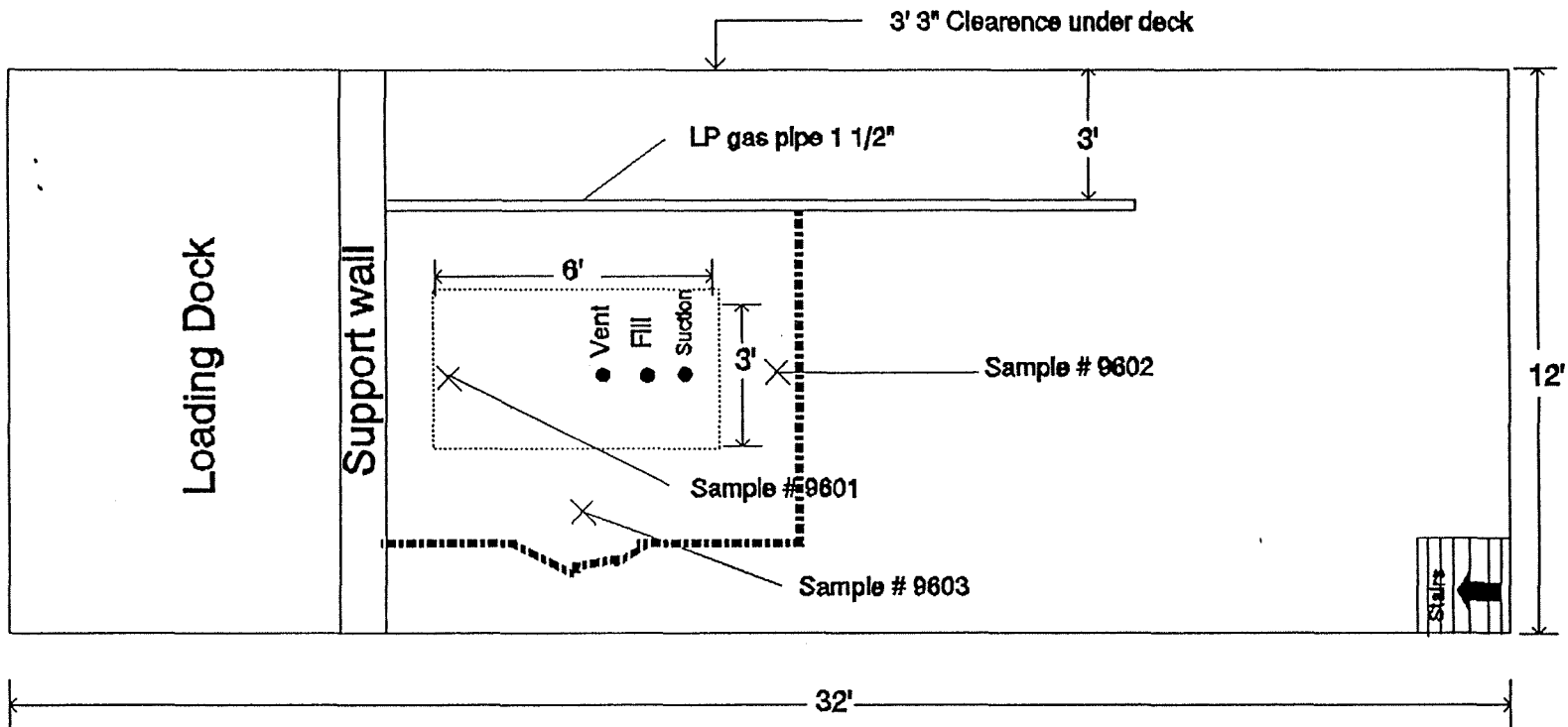
TECUMSEH PRODUCTS COMPANY



TECUMSEH PRODUCTS COMPANY

Appendix 2

Site Map



Techniseh Products Company	
900 North St. Grafton	
Project # 15202	
2 of 4	Scale 1" = 4'
← NORTH	Drawn By: GK
	07/25/92

- Excavation Area
- 350 Galon Stoddard Solvent Tank

Building

350 gallon Stoddard Solvent UST (under dock)

E & K	Hazardous Waste
	Services, Inc.

Appendix 3

Photographs of Tank Removal Activities



Description Prior to excavation of Stoddard Solvent tank
Date 06/17/92 Customer Tecumseh Products
Photo # 1-2 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Removing Stoddard Solvent tank
Date 06/17/92 Customer Tecumseh Products
Photo # 3-4 Camera Setting auto Project #15292
Project Manager William Fisher



Description Excavation
Date 06/17/92 Customer Tecumseh Products
Photo # 5-6 Camera Setting auto Project #15292
Project Manager William Fisher



Description Removed tank and pit holes
Date 06/17/92 Customer Tecumseh Products
Photo # 7-8 Camera Setting auto Project # 15292
Project Manager William Fisher



Description Backfilled excavation
Date 06/17/92 Customer Tecumseh Products
Photo # 9-10 Camera Setting auto Project # 15292
Project Manager William Fisher

Appendix 4

**DILHR Underground Petroleum Product
Tank Inventory Form**

SBD-7437

**UNDERGROUND
PETROLEUM PRODUCT
TANK INVENTORY**

Send Completed Form To:
Safety & Buildings Division
P.O. Box 7969
Madison, WI 53707
Telephone (608) 267-5280

For Office Use Only:

Tank ID #

Information Required By Sec. 102.142, Wis. Stats.

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner. Have you previously registered this tank by submitting a form? YES NO If yes, are you correcting/updating information only? Yes No

This registration applies to a tank that is (check one):

- 1A. In Use or 1B. Newly Installed
 2. Abandoned With Product
 3. Abandoned No Product (empty) or With Water
 4. Closed - Tank Removed
 5. Closed - Filled With Inert Material
 6. Changed Ownership (Indicate new owner below)
 7. Out of Service - Provide Date: _____

Fire Department Providing Fire Coverage
Where Tank Located:
Grafton Fire Department

A. IDENTIFICATION: (Please Print)

1. Tank Site Name Tecumseh Products Company		Site Address 900 North Street		Site Telephone No. (414) 377-2700	
<input type="checkbox"/> City Grafton	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> Town of:	State WI	Zip Code 53024	County Ozaukee
2. Owner Name (mail sent here unless indicated otherwise in #3 below) Tecumseh Products Company			Owner Mailing Address (mail sent here unless indicated otherwise in #3) 900 North Street		
<input type="checkbox"/> City Grafton	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> Town of:	State WI	Zip Code 53024	County Ozaukee
3. Alternate Mailing Name If Different Than #2			Alternate Mailing Street Address If Different From #2		
<input type="checkbox"/> City	<input type="checkbox"/> Village	<input type="checkbox"/> Town of:	State	Zip Code	County
4. Tank Age (date installed, if known: or years old) Installed 1965		5. Tank Capacity (gallons) 350		6. Tank Manufacturer's Name (if known) Unknown	

B. TYPE OF USER (check one):

1. Gas Station
 2. Industrial
 3. Agricultural
 4. Bulk Storage
 5. Government
 6. Other (specify): _____
 7. Utility
 8. School
 9. Mercantile
 10. Residential

C. TANK CONSTRUCTION:

1. Bare Steel
 2. Cathodically Protected and Coated Steel (A. Sacrificial Anodes or B. Impressed Current)
 3. Coated Steel
 4. Fiberglass
 5. Other (specify): _____
 6. Relined - Date _____
 7. Steel - Fiberglass Reinforced Plastic Composite
 8. Unknown

Approval: 1. Nat'l Std. 2. UL 3. Other: Unknown
 Is Tank Double Walled? Yes No

Overfill Protection Provided? Yes No If yes, identify type: _____
 Spill Containment? Yes No

Tank leak detection method: 1. Automatic tank gauging 2. Vapor monitoring 3. Groundwater monitoring 4. Inventory control and tightness testing 5. Interstitial monitoring 6. Not required at present 7. Manual Tank Gauging (only for tanks of 1,000 gallons or less)

D. PIPING CONSTRUCTION

1. Bare Steel
 2. Cathodically Protected and Coated or Wrapped Steel (A. Sacrificial Anodes or B. Impressed Current)
 3. Coated Steel
 4. Fiberglass
 5. Other (specify): _____
 6. Unknown

Piping System Type: 1. Pressurized piping with: A. auto shutoff; B. alarm; or C. flow restrictor 2. Suction piping with check valve at tank
 3. Suction piping with check valve at pump and inspectable

Piping leak detection method: used if pressurized or check valve at tank: 1. Vapor monitoring 2. Interstitial monitoring
 3. Groundwater monitoring 4. Tightness testing 5. Line Leak Detector 6. Not Required

Approval: 1. Nat'l Std. 2. UL 3. Other: Unknown
 Double Walled: Yes No

E. TANK CONTENTS

1. Diesel
 2. Gasohol
 3. Unknown
 4. Chemical * Standard Solvent
 5. Diesel
 6. Gasohol
 7. Unknown
 8. Chemical *
 9. Diesel
 10. Gasohol
 11. Unknown
 12. Chemical *
 13. Diesel
 14. Gasohol
 15. Unknown
 16. Chemical *

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

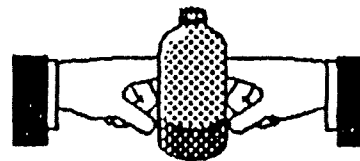
If Tank Closed, Give Date (mo/day/yr): 06/17/92	Has a site assessment been completed? (see reverse side for details) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------

If installation of a new tank is being reported, indicate who performed the installation inspection:
 1. Fire Department 2. DILHR 3. Other (identify) _____

Name of Owner or Operator (please print): Tecumseh Products	Indicate Whether: <input checked="" type="checkbox"/> Owner or <input type="checkbox"/> Operator
Signature of Owner or Operator: <i>John Mikeska</i>	Date Signed: 6-17-92

Appendix 5
Chain of Custody

CHAIN OF CUSTODY RECORD



Client: Tecumseh Power Products Analytical Requested
Project No: 15292 (BF)
Sampling Site: Grafton, WI. 900 North St
Sampler: Boyd Stueck / Bill Fisher

Date	Time	Sample I.D.	Description	GRO				Dry weight	Bottle Total & Type	Sample Source	Sample Procedure	Composite of Grab	Preservation Method
6/16/92	3:13 PM	9601	Stoddard Solvent tank North End Bottom GRO #1 GRO-0603, -0604, dry wt #1	X	X				2x60 ml 1x4oz	Exc. Shovel	Stainless Steel tube sampler (Corer)	Grab	25 ml methanol ON Ice 3:17 PM 9206213-5
6/16/92	3:21 PM	9602	Stoddard Solvent tank South End Bottom GRO #2 GRO-0601, -0602, dry wt #2	X	X				2x60 ml 1x4oz	Exc. Shovel	Corer	Grab	25 ml methanol ON Ice 3:30 PM
6/16/92	3:26 PM	9603	Stoddard Solvent tank Under GRO #3 Elbow W. side GRO-0605, -0606, dry wt #3	X	X				2x60 ml 1x4oz	Exc shovel	Corer	Grab	25 ml methanol ON Ice 3:34 PM
6/16/92		9604	Trip Blank	X					1.60 ml				-8

Custody Transfers

Emergency Contact #1-800-688-4005

Relinquished by: _____ Date: _____ Time: _____ Received by: _____

1. William Fisher 6/17/92 8:00 AM Janice Hutz

2. Janice Hutz 6/17/92 1:25 PM Richard Lesley

3. _____

4. _____

Additional Comments:

Appendix 6

Laboratory Results

File: 1504d (OT) reumson
Rec'd 7-13-92

Precision Analytical Lab, Inc
205 West Galena
Milwaukee, WI 53212

Phone: (414) 272-5222

E & K Hazardous Waste Service
2905 Paine Ave.
Sheboygan, WI 53082

Attn: Janice Hintz
Invoice Number:

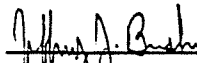
Order #: 92-06-218
Date: 07/09/92 16:09
Work ID: 15292
Date Received: 06/17/92
Date Completed: 07/09/92
Client Code: E_K_HAZARD

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	EK 9597
02	EK 9598
03	EK 9599
04	EK 9600

<u>Sample Number</u>	<u>Sample Description</u>
05	EK 9601
06	EK 9602
07	EK 9603
08	EK 9604

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By
Jeff Bushner

Sample: 01A EK 9597

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	32		mg/kg	06/28/92	SEL

Sample: 02A EK 9598

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	450		mg/kg	06/28/92	SEL

Sample: 03A EK 9599

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	8400		mg/kg	07/01/92	SEL

Sample: 04A EK 9600

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. DRO (WDNR)	110		mg/kg	06/28/92	SEL

Sample: 05A EK 9601

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	< 5.0		mg/kg	06/25/92	SEL

Sample: 06A EK 9602

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	11		mg/kg	06/25/92	SEL

Sample: 07A EK 9603

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	17		mg/kg	06/25/92	SEL

Sample: 08A EK 9604

Collected: 06/16/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	< 5.0		mg/kg	06/24/92	SEL

The organic data is reported out on a dry-weight basis.

Sample was covered air tight in approved container, shipped in cooler from the source to our lab, temperature upon arrival was 4 degrees C.

The samples ordered for DRO were analyzed by the Wisconsin DNR Modified DRO method.

The samples ordered for GRO were analyzed by the Wisconsin DNR Modified GRO method.