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**STODDARD SOLVENT UNDERGROUND STORAGE TANK  
SITE INVESTIGATION PROGRESS REPORT**

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**TECUMSEH PRODUCTS COMPANY  
GRAFTON, WISCONSIN**

**PREPARED FOR:**

**TECUMSEH PRODUCTS COMPANY  
GRAFTON, WISCONSIN**

NOV 20 1992

**SUBMITTED BY:**

**FOX ENVIRONMENTAL SERVICES, INC.  
MILWAUKEE, WISCONSIN**

**PROJECT: F-92513**

**OCTOBER, 1992**

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**fox environmental services, inc.**

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**October, 1992**

  
\_\_\_\_\_  
**Foster Johnston, REP, CHCM**

**fox environmental services, inc.**

**SITE INVESTIGATION  
Stoddard Solvent Tank**

**Tecumseh Products Company  
Grafton, Wisconsin**

**Project No. F - 92513**

**INTRODUCTION**

This is a progress report to summarize the site investigation activities completed by Fox Environmental Services, Inc. (FOX) at Tecumseh Products Company, 900 North Street in Grafton, Wisconsin (Figure 1). The site investigation was in response to a leak from a stoddard solvent underground storage tank (UST).

**BACKGROUND**

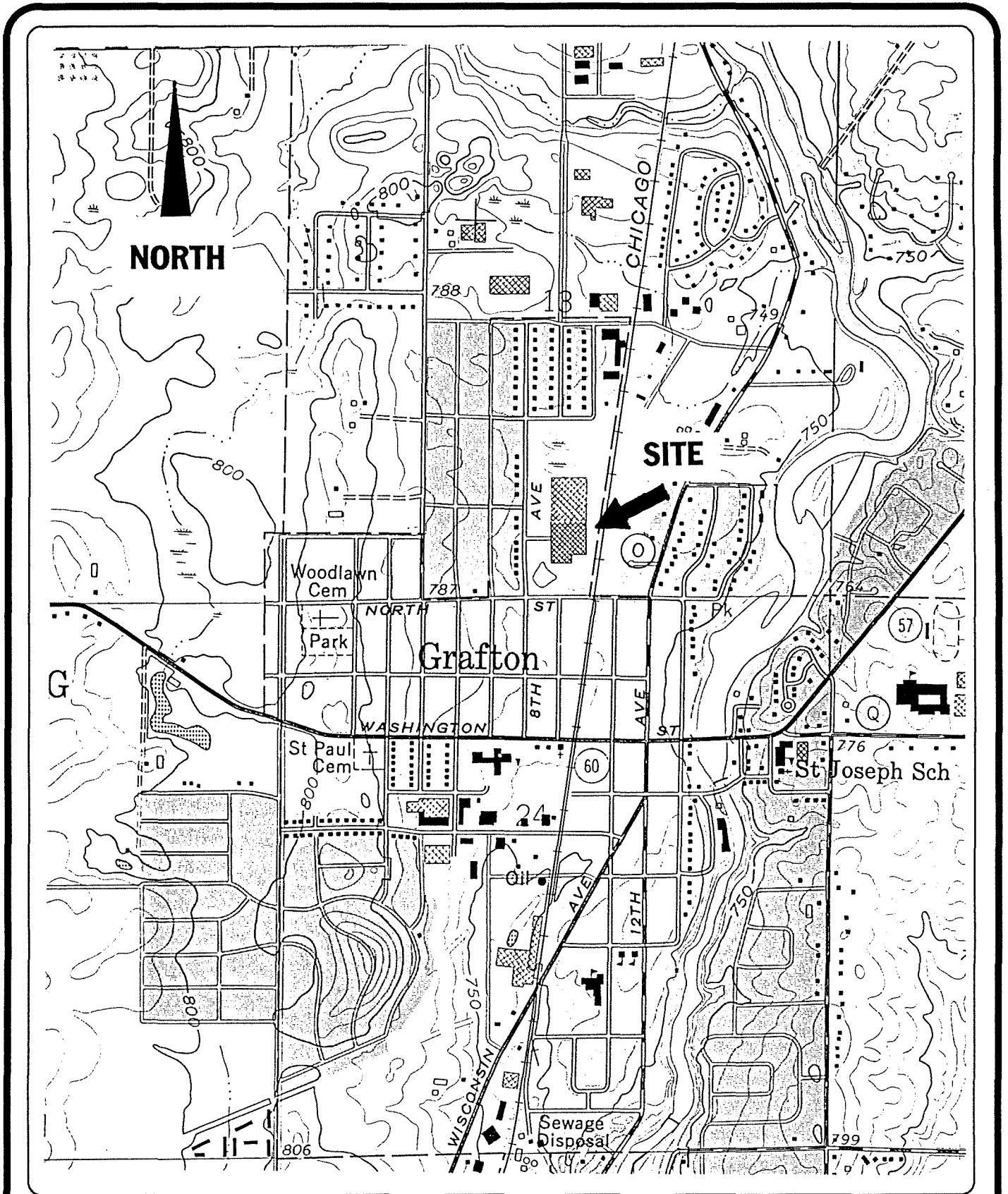
On June 16 & 17, 1992, E&K Hazardous Waste Services, Inc. (E&K) removed a 350 gallon stoddard solvent UST and the associated piping, and performed a tank closure assessment. At two locations within the tank excavation soil contamination was detected (11 & 15 parts per million) by the analytical laboratory. For details of the closure assessment, refer to the report titled "Site Assessment and Tank Closure Report"; Tecumseh Products Company; Grafton, Wisconsin; E&K No. 152922, dated August 18, 1992.

**SITE INVESTIGATION**

On September 14 and 15, 1992, four soil borings were placed in and around the excavation backfill for the stoddard solvent tank which was beneath the trash dock on the east side of the building. The location of the borings are identified in Figure 2. Using a General 550 drill rig soil samples were collected with a six (6) inch shelby tube every two (2) feet and screened in the field with a Thermo Electron, Model 580, photoionization detector (PID). The soil was classified and entered on boring logs along with the results of the screened samples (Appendix A). The soils were a light to medium brown clay down to about 12 feet with medium brown to gray sand to about 18 feet. The depth of the borings ranged from twelve (12) to eighteen (18) feet and water was encountered from eight (8) to eighteen (18) feet. A total of nine soil samples were submitted to Precision Analytical Laboratory (PAL) for gasoline range organics (GRO) and petroleum volatile organic compounds (PVOC) analysis. The boreholes were properly abandoned and later abandonment forms were completed and sent to the Wisconsin Department of Natural Resources (WDNR). Copies of the forms are in Appendix B.

**RESULTS**

The results of the laboratory analysis are summarized in Table 1 and a copy of the lab report is in Appendix C. Concentrations of GRO were detected in all nine samples ranging from 34 to 1,100 parts per million (ppm). Five of the samples (SB1ST 16' - 16.5', SB2ST 18' - 18.5', SB3ST 12' - 12.5', SB3ST 16' - 16.5', and SB4ST 12' - 12.5') were collected at depths where water was encountered.



fox environmental services, inc.

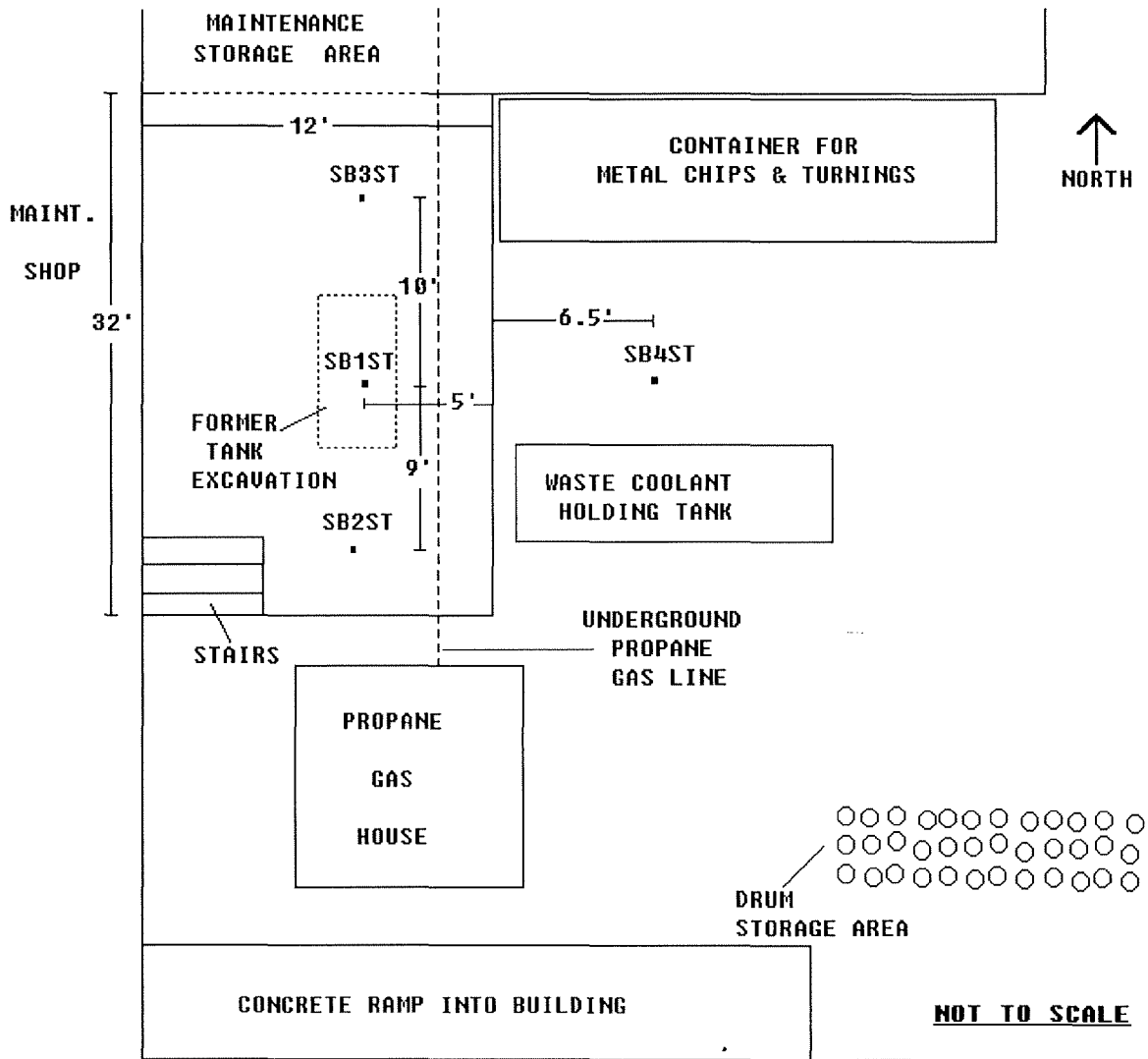
5150 North Port Washington Rd.  
 Suite 101  
 Milwaukee, Wisconsin 53217  
 (414) 332 - 5857

**FIGURE 1**

**LOCATION PLAN**

**PROJECT NO. 92513**

**OCTOBER, 1992**



fox environmental services, inc.

5150 North Port Washington Rd.  
 Suite 101  
 Milwaukee, Wisconsin 53217  
 (414) 332 - 5857

**FIGURE 2**  
**SITE PLAN**

**PROJECT NO. 92513**

**OCTOBER, 1992**

Concentrations of PVOC were detected in all nine samples ranging from 970 to 37,000 parts per billion (ppb). Field screening of the samples detected volatile contamination in all of the samples.

## SUMMARY AND RECOMMENDATIONS

The results of the field screening and the laboratory analysis detected concentrations of GRO in all four soil borings. Groundwater or perched groundwater was encountered at various depths and contamination was also detected in these zones. FOX recommends the following actions:

- ◆ Notify the WDNR on the new status of the release involving the groundwater.
- ◆ Evaluate the data and the site with a hydrogeologist from FOX, and develop and implement a work plan for the placement of groundwater monitoring wells.
- ◆ Continue to determine the extent of the contamination with soil borings radially outward, primarily from SB4ST. If a more powerful drill rig can be mobilized into the maintenance storage area, soil borings should be placed north of SB3ST

**TABLE 1  
STODDARD SOLVENT TANK**

	SB1ST 10' - 10.5'	SB1ST 14' - 14.5'	SB1ST 16' - 16.5'	SB2ST 8' - 8.5'	SB2ST 18' - 18.5'	SB3ST 12' - 12.5'	SB3ST 16' - 16.5'	SB4ST 8' - 8.5'	SB4ST 12' - 12.5'
<b>GRO (in parts per million)</b>	580	970	660	1,100	14	410	34	160	520
<b>PVOC (in parts per billion)</b>									
BENZENE	<500	<500	<210	<510	<100	<540	<100	<500	<500
ETHYLBENZENE	<500	4,500	2,700	6,100	<100	<540	<100	<500	<500
METHYL-T-BUTYLETHER	<500	<500	<210	<510	<100	<540	<100	<500	<500
TOLUENE	1,300	1,400	<210	970	<100	<540	<100	2,600	2,900
1,2,4-TRIMETHYLBENZENE	15,000	35,000	22,000	37,000	150	11,000	590	3,400	16,000
1,2,5-TRIMETHYLBENZENE	11,000	19,000	13,000	20,000	<100	6,300	330	1,400	8,100
TOTAL XYLENES	9,400	20,000	11,000	21,000	<100	4,700	160	2,800	11,000

# **APPENDIX A**

## **Soil Boring Logs**

# SAMPLE/CORE LOG

BORING/WELL SB1ST PROJECT/NO. Tecumseh Products Co. - #92513 PAGE 1 OF 1

SITE LOCATION 900 North Street DRILLING STARTED 9:45 AM DRILLING COMPLETED 11:40 AM DATE 9/14/92

TOTAL DEPTH DRILLED 16 feet HOLE DIAMETER 4 inches TYPE OF SAMPLE/CORING DEVICE Shelby Tube

LENGTH AND DIAMETER OF CORING DEVICE 6" x 1.5" SAMPLING INTERVAL 2.0 feet

LAND SURFACE ELEVATION \_\_\_\_\_ feet SURVEYED \_\_\_\_\_ ESTIMATED DATUM \_\_\_\_\_

DRILLING FLUID USED None DRILLING METHOD Solid Stem Auger

DRILLING CONTRACTOR Giles Engineering DRILLER Roley HELPER Chris

PREPARED BY Julie Erato HAMMER WEIGHT NA HAMMER DROP NA inches

Sample Core Depth  
(feet below land surface)

Core Recovery  
(feet)

OVA Meter  
Reading  
(Units)

Sample/Core Description

FROM	TO	Core Recovery (feet)	OVA Meter Reading (Units)	Sample/Core Description
2	2.5	0.5	138	Medium to coarse sand & gravel backfill; some medium to dark brown clay
4	4.5	0.5	322	Medium to dark brown clay with some pebbles
6	6.5	0.5	221	Medium to dark brown clay with some sand
8	8.5	0.5	521	Medium to dark brown clay
10	10.5	0.5	263	Medium to dark brown clay
12	12.5	0.5	540	Medium to dark brown clay top 3 "; medium to fine sand 3"
14	14.5	0.5	487	Medium brown very sandy clay with seams of medium to fine sand; moist
16	16.5	0.5	374	Medium brown - gray medium-course sand; very wet

NOTES



# SAMPLE/CORE LOG

BORING/WELL SB2ST PROJECT/NO. Tecumseh Products Co. / #92513 PAGE 1 OF 1

SITE LOCATION 900 North Street DRILLING STARTED 1:05 PM DRILLING COMPLETED 3:50 PM DATE 9/14/92

TOTAL DEPTH DRILLED 18 feet HOLE DIAMETER 4 inches TYPE OF SAMPLE/CORING DEVICE Shelby Tube

LENGTH AND DIAMETER OF CORING DEVICE 6" x 1.5" SAMPLING INTERVAL 2.0 or 4.0 feet

LAND SURFACE ELEVATION \_\_\_\_\_ feet SURVEYED \_\_\_\_\_ ESTIMATED DATUM \_\_\_\_\_

DRILLING FLUID USED None DRILLING METHOD Solid Stem Auger

DRILLING CONTRACTOR Giles Engineering DRILLER Roley HELPER Chris

PREPARED BY Julie Erato HAMMER WEIGHT NA HAMMER DROP NA inches

Sample Core Depth  
(feet below land surface)

Core Recovery  
(feet)

OVA Meter  
Reading  
(Units)

Sample/Core Description

FROM	TO	Core Recovery (feet)	OVA Meter Reading (Units)	Sample/Core Description
2	2.5	0.5	75	Medium brown clay
4	4.5	0.5	202	Light to medium brown clay
6	6.5	0.5	297	Light brown clay;
8	8.5	0.5	404	Light brown clay;
10	10.5	0.5	348	Light brown clay;
14	14.5	0.5	278	Fine to medium sand with trace clay; moist to wet
18	16.5	0.5	14	Light brown fine to medium sand; very wet;

NOTES

# SAMPLE/CORE LOG

BORING/WELL SB3ST PROJECT/NO. Tecumseh Products Co. - #92513 PAGE 1 OF 1

SITE LOCATION 900 North Street DRILLING STARTED 9:35 AM DRILLING COMPLETED 11:10 AM DATE 9/15/92

TOTAL DEPTH DRILLED 16 feet HOLE DIAMETER 4 inches TYPE OF SAMPLE/CORING DEVICE Shelby Tube

LENGTH AND DIAMETER OF CORING DEVICE 6" x 1.5" SAMPLING INTERVAL 4.0 feet

LAND SURFACE ELEVATION \_\_\_\_\_ feet SURVEYED \_\_\_\_\_ ESTIMATED DATUM \_\_\_\_\_

DRILLING FLUID USED None DRILLING METHOD Solid Stem Auger

DRILLING CONTRACTOR Giles Engineering DRILLER Roley HELPER Chris

PREPARED BY Julie Erato HAMMER WEIGHT NA HAMMER DROP NA inches

**Sample Core Depth**

(feet below land surface)

Core Recovery

OVA Meter

Reading  
(Units)

Sample/Core Description

FROM	TO	(feet)	(Units)	Sample/Core Description
4	4.5	0.5	158	Medium brown clay; very strong organic decay odor;
8	8.5	0.5	238	Gray clay; very wet; very strong organic decay odor;
12	12.5	0.5	180	Small amount of brown clay - mostly gray sand; very wet; very strong organic decay odor;
16	16.5	0.5	54	Gray sand; very wet; very strong organic decay odor;

NOTES

# SAMPLE/CORE LOG

BORING/WELL SB4ST PROJECT/NO. Tecumseh Products Co. - #92513 PAGE 1 OF 1

SITE LOCATION 900 North Street DRILLING STARTED 12:40 PM DRILLING COMPLETED 1:30 PM DATE 9/15/92

TOTAL DEPTH DRILLED 12 feet HOLE DIAMETER 4 inches TYPE OF SAMPLE/CORING DEVICE Shelby Tube

LENGTH AND DIAMETER OF CORING DEVICE 6" x 1.5" SAMPLING INTERVAL 4.0 feet

LAND SURFACE ELEVATION \_\_\_\_\_ feet SURVEYED \_\_\_\_\_ ESTIMATED DATUM \_\_\_\_\_

DRILLING FLUID USED None DRILLING METHOD Solid Stem Auger

DRILLING CONTRACTOR Giles Engineering DRILLER Roley HELPER Chris

PREPARED BY Julie Erato HAMMER WEIGHT NA HAMMER DROP NA inches

**Sample Core Depth**

(feet below land surface)      Core Recovery      OVA Meter Reading (units)

FROM	TO	(feet)	(units)	Sample/Core Description
4	4.5	0.5	278	Dark brown clay with small pockets of oily-looking brown/black viscous material; very strong organic decay odor;
8	8.5	0.5	130	Medium brown clay; very strong organic decay odor;
12	12.5	0.5	321	Medium brown fine to medium sand; wet; very strong organic decay odor;

**NOTES**

**APPENDIX B**

**Borehole Abandonment Forms**

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

<b>(1) GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location <u>SW 1/4 of SW 1/4 of Sec. 13 ; T. 10 N.; R. 21</u>	County <u>Ozaukee</u>	Original Well Owner (If Known) <u>Tecumseh Products Company</u>	
(If applicable) Gov't Lot _____ Grid Number _____		Present Well Owner <u>Tecumseh Products Company</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Street or Route <u>700 North Street</u>	
Civil Town Name <u>Grafton</u>		City, State, Zip Code <u>Grafton WI</u>	
Street Address of Well <u>900 North Street</u>		Facility Well No. and/or Name (If Applicable) <u>SB-1-ST</u>	WI Unique Well No. _____
City, Village <u>Grafton</u>		Reason For Abandonment <u>Borehole - No longer needed</u>	
		Date of Abandonment <u>9-14-92</u>	

<b>WELL/DRILLHOLE/BOREHOLE INFORMATION</b>	
<p><b>(3) Original Well/Drillhole/Borehole Construction Completed On</b> (Date) _____</p> <p> <input type="checkbox"/> Monitoring Well  <input type="checkbox"/> Water Well  <input type="checkbox"/> Drillhole  <input checked="" type="checkbox"/> Borehole         </p> <p>Construction Report Available?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No         </p> <p>Construction Type:  <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug  <input type="checkbox"/> Other (Specify) _____         </p> <p>Formation Type:  <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock         </p> <p>Total Well Depth (ft.) <u>N/A</u> Casing Diameter (ins.) <u>N/A</u> (From ground surface)</p> <p>Casing Depth (ft.) <u>N/A</u></p> <p>Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? <u>N/A</u> Feet</p>	<p><b>(4) Depth to Water (Feet)</b> <u>15</u></p> <p>           Pump &amp; Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable            Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable            Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable            Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            If No, Explain <u>Borehole - no casing</u> </p> <p>           Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No            Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No            Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No            If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No         </p> <p><b>(5) Required Method of Placing Sealing Material</b></p> <p> <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped  <input type="checkbox"/> Dump Bailer <input checked="" type="checkbox"/> Other (Explain) <u>Poured Dry</u> </p> <p><b>(6) Sealing Materials</b> For monitoring wells and monitoring well boreholes only</p> <p> <input type="checkbox"/> Neat Cement Grout  <input type="checkbox"/> Sand-Cement (Concrete) Grout  <input type="checkbox"/> Concrete  <input type="checkbox"/> Clay-Sand Slurry  <input type="checkbox"/> Bentonite-Sand Slurry  <input checked="" type="checkbox"/> Chipped Bentonite         </p> <p> <input type="checkbox"/> Bentonite Pellets  <input type="checkbox"/> Granular Bentonite  <input type="checkbox"/> Bentonite - Cement Grout         </p>

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
<u>Enviroplug</u>	<u>Surface</u>	<u>16</u>	<u>6 sacks</u>	<u>Dry</u>	

(8) Comments: \_\_\_\_\_

**(9) Name of Person or Firm Doing Sealing Work**  
Fox Environmental Services Inc

Signature of Person Doing Work <u>[Signature]</u>	Date Signed <u>9-28-92</u>
Street or Route <u>5150 N. Pl. Washington Rd</u>	Telephone Number <u>(414) 332-5857</u>
City, State, Zip Code <u>Milwaukee WI 53217</u>	

**(10) FOR DNR OR COUNTY USE ONLY**

Date Received/Inspected	District/County
Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

<b>(1) GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location <u>SW 1/4 of SW 1/4 of Sec. 13 ; T. 10 N. R. 21</u>	County <u>Ozaukee</u>	Original Well Owner (If Known) <u>Tecumseh Products Company</u>	
(If applicable) Gov't Lot _____ Grid Number _____		Present Well Owner <u>Tecumseh Products Company</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Street or Route <u>900 North Street</u>	
Civil Town Name <u>GRAFTON</u>		City, State, Zip Code <u>Grafton WI</u>	
Street Address of Well <u>900 North Street</u>		Facility Well No. and/or Name (If Applicable) <u>SB-2-ST</u>	WI Unique Well No. _____
City, Village <u>GRAFTON</u>		Reason For Abandonment <u>Borehole - No longer needed</u>	
		Date of Abandonment <u>9-14-92</u>	

<b>WELL/DRILLHOLE/BOREHOLE INFORMATION</b>		<b>(4) Depth to Water (Feet)</b> <u>15</u>	
<b>(3) Original Well/Drillhole/Borehole Construction Completed On</b> (Date) _____  <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Construction Report Available? <input type="checkbox"/> Water Well <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole  Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Borehole - no casing</u>	
		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock  Total Well Depth (ft.) <u>NA</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)  Casing Depth (ft.) <u>NA</u>  Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? <u>NA</u> Feet		<b>(5) Required Method of Placing Sealing Material</b> <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input checked="" type="checkbox"/> Other (Explain) <u>Poured dry</u>	
		<b>(6) Sealing Materials</b> For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Bentonite - Cement Grout <input checked="" type="checkbox"/> Chipped Bentonite	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
<u>Enviroplug</u>	<u>Surface</u>	<u>18</u>	<u>7 SACKS</u>		<u>Dry</u>

(8) Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work  
Fox Environmental Services Inc.

Signature of Person Doing Work <u>[Signature]</u>	Date Signed <u>9-28-92</u>
Street or Route <u>5150 N. Port Washington Rd.</u>	Telephone Number <u>(414) 332-5857</u>
City, State, Zip Code <u>Milwaukee WI 53217</u>	

**(10) FOR DNR OR COUNTY USE ONLY**

Date Received/Inspected	District/County
Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

<b>(1) GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location	County <u>Ozaukee</u>	Original Well Owner (If Known)	
SW 1/4 of SW 1/4 of Sec. 13 ; T. 10 N.; R. 21 (If applicable)		Present Well Owner <u>Tecumseh Products Company</u>	
Gov't Lot _____ Grid Number _____		Street or Route <u>900 North Street</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>Crafton WI</u>	
Civil Town Name <u>Crafton</u>		Facility Well No. and/or Name (If Applicable)	WI Unique Well No.
Street Address of Well <u>900 North Street</u>		<u>SB-3-ST</u>	
City, Village <u>Crafton</u>		Reason For Abandonment <u>Borehole - No longer needed</u>	
		Date of Abandonment <u>9-15-92</u>	

**WELL/DRILLHOLE/BOREHOLE INFORMATION**

<p><b>(3) Original Well/Drillhole/Borehole Construction Completed On</b> (Date) <u>9-15-92</u></p> <p> <input type="checkbox"/> Monitoring Well  <input type="checkbox"/> Water Well  <input type="checkbox"/> Drillhole  <input checked="" type="checkbox"/> Borehole         </p> <p>Construction Report Available?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No         </p> <p>Construction Type:  <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug  <input type="checkbox"/> Other (Specify) _____         </p> <p>Formation Type:  <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock         </p> <p>Total Well Depth (ft.) <u>NA</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)</p> <p>Casing Depth (ft.) <u>NA</u></p> <p>Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? <u>NA</u> Feet</p>	<p><b>(4) Depth to Water (Feet)</b> <u>15</u></p> <p>Pump &amp; Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable          Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable          Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable          Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No          If No, Explain <u>Borehole - no casing</u></p> <p>Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No          Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No          Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No          If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><b>(5) Required Method of Placing Sealing Material</b>  <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped  <input type="checkbox"/> Dump Bailer <input checked="" type="checkbox"/> Other (Explain) <u>Poured dry</u></p> <p><b>(6) Sealing Materials</b> For monitoring wells and monitoring well boreholes only</p> <p> <input type="checkbox"/> Neat Cement Grout  <input type="checkbox"/> Sand-Cement (Concrete) Grout  <input type="checkbox"/> Concrete  <input type="checkbox"/> Clay-Sand Slurry  <input type="checkbox"/> Bentonite-Sand Slurry  <input checked="" type="checkbox"/> Chipped Bentonite         </p> <p> <input type="checkbox"/> Bentonite Pellets  <input type="checkbox"/> Granular Bentonite  <input type="checkbox"/> Bentonite - Cement Grout         </p>
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(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
<u>ENVIROPLUG</u>	Surface	<u>16</u>	<u>6 sacks</u>		<u>Dry</u>

(8) Comments: \_\_\_\_\_

**(9) Name of Person or Firm Doing Sealing Work**  
Fox Environmental Services Inc

Signature of Person Doing Work <u>[Signature]</u>	Date Signed <u>9-28-92</u>
Street or Route <u>5150 N. Port. Washington Rd</u>	Telephone Number <u>(414) 332-5857</u>
City, State, Zip Code <u>Milwaukee WI 53217</u>	

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Date Received/Inspected	District/County
Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

<b>(1) GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location	County <u>Ozaukee</u>	Original Well Owner (If Known)	
SW 1/4 of SW 1/4 of Sec. <u>13</u> ; T. <u>10</u> N. R. <u>21</u>		Present Well Owner <u>Tecumseh Products Company</u>	
(If applicable) Gov't Lot _____ Grid Number _____		Street or Route <u>900 North Street</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>Grafton WI</u>	
Civil Town Name		Facility Well No. and/or Name (If Applicable)	WI Unique Well No.
Street Address of Well <u>900 North Street</u>		Reason For Abandonment <u>Borehole - no longer needed</u>	
City, Village <u>Grafton</u>		Date of Abandonment <u>9-15-92</u>	

**WELL/DRILLHOLE/BOREHOLE INFORMATION**

<p><b>(3) Original Well/Drillhole/Borehole Construction Completed On</b> (Date) <u>9-15-92</u></p> <p> <input type="checkbox"/> Monitoring Well  <input type="checkbox"/> Water Well  <input type="checkbox"/> Drillhole  <input checked="" type="checkbox"/> Borehole         </p> <p>Construction Report Available?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No         </p> <p>Construction Type:  <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug  <input type="checkbox"/> Other (Specify) _____         </p> <p>Formation Type:  <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock         </p> <p>Total Well Depth (ft.) _____ Casing Diameter (ins.) <u>NA</u></p> <p>Casing Depth (ft.) <u>NA</u></p> <p>Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet</p>	<p><b>(4) Depth to Water (Feet)</b></p> <p>Pump &amp; Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable          Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable          Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable          Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No          If No, Explain <u>Borehole - no casing</u></p> <p>Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No          Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No          Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No          If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><b>(5) Required Method of Placing Sealing Material</b></p> <p> <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped  <input type="checkbox"/> Dump Bailer <input checked="" type="checkbox"/> Other (Explain) <u>Poured dry</u> </p> <p><b>(6) Sealing Materials</b> For monitoring wells and monitoring well boreholes only</p> <p> <input type="checkbox"/> Neat Cement Grout  <input type="checkbox"/> Sand-Cement (Concrete) Grout  <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Pellets  <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Granular Bentonite  <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Bentonite - Cement Grout  <input checked="" type="checkbox"/> Chipped Bentonite         </p>
---	--

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
<u>ENVIROPLUG</u>	<u>Surface</u>	<u>12</u>	<u>4 sacks</u>	<u>One</u>	<u>Dry</u>

(8) Comments: \_\_\_\_\_

**(9) Name of Person or Firm Doing Sealing Work**  
Fox Environmental Services Inc.

Signature of Person Doing Work: [Signature] Date Signed: 9-28-92

Street or Route: 5150 N. Port Washington Rd Telephone Number: (414) 332-5857

City, State, Zip Code: Milwaukee WI 53217

**(10) FOR DNR OR COUNTY USE ONLY**

Date Received/Inspected	District/County
Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Follow-up Necessary	



**APPENDIX C**

**Laboratory Report**

Phone: (414) 272-5222

Fax: (414) 272-6949

Project Manager: Foster Johnston  
Company: Fox Environmental Services  
Address: 5150 N Port Washington Rd  
Milwaukee WI 53217  
Phone: (414) 332-5857 Fax: ( )  
Project: Tecumseh 92513  
Quote/Reference: \_\_\_\_\_  
Reports to be sent to: FOSTER JOHNSTON

Chain of Custody

Page 1 of 1 No 5396

SPECIAL INSTRUCTIONS:

Property Owner: \_\_\_\_\_  
Property Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_

Del'v: Hand Comm. \_\_\_\_\_  
Ship Cont. OK?  Y  N  N/A  
Rec'd Refrig. ?  Y  N  N/A  
Seals OK?  Y  N  N/A  
Samples leaking?  Y  N  N/A  
Comments: \_\_\_\_\_  
Temperature Blank: \_\_\_\_\_ C  
*Rec'd on 9/15/92*

**SAMPLE HANDLING**

\_\_\_ Nonhazardous \_\_\_ Reactive  
\_\_\_ Flammable \_\_\_ Work in Hood  
\_\_\_ Skin Irritant \_\_\_ Wear Gloves  
 Highly Toxic \_\_\_ Infectious  
\_\_\_ Other (specify) \_\_\_\_\_

Turnaround Time  
 Normal  
\_\_\_ Rush \*\* (Please refer to Quote/Reference Number)  
Date Needed: \_\_\_\_\_

\*\* WAS LAB NOTIFIED (Y/N) \_\_\_\_\_

ANALYSIS

*GRO* *PVOC* *Dry weight*

FILTERED (YES/NO) \_\_\_\_\_  
PRESERVED (CODE) \_\_\_\_\_  
REFRIGERATED (YES/NO) \_\_\_\_\_

Preservation Code  
A-None B-HNO<sub>3</sub>  
C-H<sub>2</sub>SO<sub>4</sub> D-NAOH  
E-HCL F- \_\_\_\_\_  
M-MEOH

REMARKS:

LAB USE ONLY	DATE	TIME	COMP	GRAB	TOTAL NUMBER OF CONTAINERS	MATRIX: Surface Water(1), Ground Water(2) Soil(3), Solid/Liquid Waste(4/5), Other(6)	FIELD ID	LOCATION / DESCRIPTION	Fill in spaces with bottles per test		
201169-1	9/14/92	10:40		X	5	3	SBI ST 10-10.5	Solvent tank/Boring #1	X	X	*
-2	9/14/92	11:30		X	5	3	SBI ST 14-14.5	Solvent tank/Boring #1	X	X	*
-3	9/14/92	12:15		X	5	3	SBI ST 16-16.5	Solvent tank/Boring #1	X	X	*
-4	9/14/92	2:20		X	5	3	SB2ST 8-8.5	Solvent tank/Boring #2	X	X	*
-5	9/14/92	3:50		X	5	3	SB2ST 18-18.5	Solvent tank/Boring #2	X	X	*

Disposition of unused portion of sample  
Laboratory Should:

\_\_\_ Dispose \*      \_\_\_ Retain for \_\_\_ days  
\_\_\_ Return          \_\_\_ Other

\* Disposal charges listed in fee schedule

Relinquished By (Signature) <i>Daniel J. Frank</i>	Date / Time 9/15/92 10:45 A.M.	Received By (Signature) <i>Richard Leary</i>
Relinquished By (Signature)	Date / Time	Received By (Signature)
Relinquished By (Signature)	Date / Time	Received For Laboratory By: (Signature)

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

RECEIVED  
10-16-92

Phone: (414) 272-5222

Fox Environmental Services  
5150 N. Port Washington Rd.  
Milwaukee, WI 53217

Attn: Lawrence L. Fox  
Invoice Number: 5505

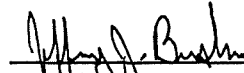
Order #: 92-09-169  
Date: 10/12/92 16:12  
Work ID: Tecumseh 92513  
Date Received: 09/15/92  
Date Completed: 09/30/92  
Client Code: FOX\_ENVIRO

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	SB1 ST 10-10.5
02	SB1ST 14-14.5
03	SB1ST 16-16.5

<u>Sample Number</u>	<u>Sample Description</u>
04	SB2ST 8-8.5
05	SB2ST 18-18.5

Laboratory ID Number (Wisconsin DNR): 241369260



Certified By  
Jeff Bushner

Sample: 01A SB1 ST 10-10.5

Collected: 09/14/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	580		mg/kg	09/23/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	## < 500		ug/kg	09/23/92	EMC
Ethylbenzene	< 500		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 500		ug/kg	09/23/92	EMC
Toluene	1300		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	15000		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	11000		ug/kg	09/23/92	EMC
Total Xylenes	9400		ug/kg	09/23/92	EMC

Sample: 02A SB1ST 14-14.5

Collected: 09/14/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	970		mg/kg	09/23/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	## < 500		ug/kg	09/23/92	EMC
Ethylbenzene	4500		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 500		ug/kg	09/23/92	EMC
Toluene	1400		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	35000		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	19000		ug/kg	09/23/92	EMC
Total Xylenes	20000		ug/kg	09/23/92	EMC

Sample: 03A SB1ST 16-16.5

Collected: 09/14/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	660		mg/kg	09/23/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	## < 210		ug/kg	09/23/92	EMC
Ethylbenzene	2700		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 210		ug/kg	09/23/92	EMC
Toluene	< 210		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	22000		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	13000		ug/kg	09/23/92	EMC
Total Xylenes	11000		ug/kg	09/23/92	EMC

Sample: 04A SB2ST 8-8.5

Collected: 09/14/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	1100		mg/kg	09/23/92	EMC

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PVOC Soil, (WDNR) 8020					
Benzene	## < 510		ug/kg	09/23/92	EMC
Ethylbenzene	6100		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 510		ug/kg	09/23/92	EMC
Toluene	970		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	37000		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	20000		ug/kg	09/23/92	EMC
Total Xylenes	21000		ug/kg	09/23/92	EMC

Sample: 05A SB2ST 18-18.5

Collected: 09/14/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	@ 14		mg/kg	10/01/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	##@ < 100		ug/kg	10/01/92	EMC
Ethylbenzene	< 100		ug/kg	10/01/92	EMC
Methyl-t-butylether	< 100		ug/kg	10/01/92	EMC
Toluene	< 100		ug/kg	10/01/92	EMC
1,2,4-Trimethylbenzene	150		ug/kg	10/01/92	EMC
1,3,5-Trimethylbenzene	< 100		ug/kg	10/01/92	EMC
Total Xylenes	< 100		ug/kg	10/01/92	EMC

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 GRO were analyzed by the Wisconsin DNR Modified GRO method.

## Elevated detection limit due to sample concentration.

The samples ordered for PVOC were analyzed according to Method 8020 ( SW 846 Test Methods for Evaluating Solid Waste - Physical/Chemical Methods )

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

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Analysis performed or certified by Precision Analytical Labs

@ Amended result due to autosampler error. Initial analysis was performed on 9/25/92.

Phone: (414) 272-5222  
Fax: (414) 272-6949

Project Manager: FOSTER JOHNSTON  
Company: Fox Environmental Services  
Address: 5150 N Port Washington Rd  
Milwaukee WI 53217  
Phone: (414) 332-5857 Fax: ( )  
Project: Tecumseh 92513  
Quote/Reference: \_\_\_\_\_  
Reports to be sent to: Foster JOHNSTON

SPECIAL INSTRUCTIONS:

Property Owner: \_\_\_\_\_  
Property Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_

**SAMPLE HANDLING**

Nonhazardous       Reactive  
 Flammable       Work in Hood  
 Skin Irritant       Wear Gloves  
 Highly Toxic       Infectious  
 Other (specify) \_\_\_\_\_

Turnaround Time  
 Normal  
 Rush \*\* (Please refer to Quote/Reference Number)  
 Date Needed: \_\_\_\_\_  
 \*\* WAS LAB NOTIFIED (Y/N) \_\_\_\_\_

ANALYSIS	M	M	Y	Y	Y	X	X
	GRO	P.VOC	Dry Weight	T.R.P.H	Trip Blank		
							FILTERED (YES/NO) PRESERVED (CODE) REFRIGERATED (YES/NO) Preservation Code A-None B-HNO3 C-H2SO4 D-NAOH E-HCL F-_____ M-MEOH

Del'v: Hand Comm. \_\_\_\_\_  
 Ship Cont. OK?  N N/A  
 Rec'd Refrig. ?  N N/A  
 Seats OK ?  N N/A  
 Samples leaking?  N N/A  
 Comments: \_\_\_\_\_  
 Temperature Blank: \_\_\_\_\_ C  
ON ICE

LAB USE ONLY	DATE	TIME	COMP	GRAB	TOTAL NUMBER OF CONTAINERS	MATRIX: Surface Water(1), Ground Water(2) Soil(3), Solid/Liquid Waste(4/5), Other(6)	FIELD ID	LOCATION / DESCRIPTION	Fill in spaces with bottles per test				REMARKS:
9209180-1	9/15/92	10:20		X	5	3	SB3ST 12-12.5	Solvent tank / Boring # 3	2	2	1		
-2	9/15/92	11:00		X	5	3	SB3ST 16-16.5	Solvent tank / Boring # 3	2	2	1		
-3	9/15/92	1:05		X	5	3	SB4ST 8-8.5	Solvent tank / Boring # 4	2	2	1		
-4	9/15/92	1:50		X	5	3	SB4ST 12-12.5	Solvent tank / Boring # 4	2	2	1		
-5	9/15/92	10:30		X	2	3	OT1E	Piping trench / East side				2	
-6	9/15/92	10:30		X	2	3	OT2W	Piping trench / West side				2	
-7	9/15/92				1		Trip Blank						

Recalled per client 9/17/92  
SAM

Disposition of unused portion of sample  
Laboratory Should:

Dispose \*       Retain for \_\_\_\_\_ days  
 Return       Other

\* Disposal charges listed in fee schedule

Relinquished By (Signature) <u>[Signature]</u>	Date / Time 9/15/92 3:35	Received By (Signature) <u>[Signature]</u>
Relinquished By (Signature)	Date / Time	Received By (Signature)
Relinquished By (Signature)	Date / Time	Received For Laboratory By: (Signature)

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

Phone: (414) 272-5222

Fox Environmental Services  
5150 N. Port Washington Rd.  
Milwaukee, WI 53217

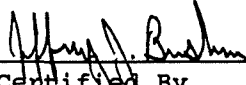
Attn: Lawrence L. Fox  
Invoice Number:

Order #: 92-09-180  
Date: 10/07/92 09:06  
Work ID: Techumseh 92513  
Date Received: 09/15/92  
Date Completed: 10/06/92  
Client Code: FOX\_ENVIRO

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
01	SB3ST 12-12.5	04	SB4ST 12-12.5
02	SB3ST 16-16.5	05	OTIE
03	SB4ST 8-8.5	06	OT2W

Laboratory ID Number (Wisconsin DNR): 241369260

  
\_\_\_\_\_  
Certified By  
Jeff Bushner



Sample: 01A SB3ST 12-12.5

Collected: 09/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	410		mg/kg	09/23/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	## < 540		ug/kg	09/23/92	EMC
Ethylbenzene	< 540		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 540		ug/kg	09/23/92	EMC
Toluene	< 540		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	11000		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	6300		ug/kg	09/23/92	EMC
Total Xylenes	4700		ug/kg	09/23/92	EMC

Sample: 02A SB3ST 16-16.5

Collected: 09/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	34		mg/kg	10/01/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	## < 100		ug/kg	10/01/92	EMC
Ethylbenzene	< 100		ug/kg	10/01/92	EMC
Methyl-t-butylether	< 100		ug/kg	10/01/92	EMC
Toluene	< 100		ug/kg	10/01/92	EMC
1,2,4-Trimethylbenzene	590		ug/kg	10/01/92	EMC
1,3,5-Trimethylbenzene	330		ug/kg	10/01/92	EMC
Total Xylenes	160		ug/kg	10/01/92	EMC

Sample: 03A SB4ST 8-8.5

Collected: 09/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	160		mg/kg	09/23/92	EMC
PVOC Soil, (WDNR) 8020					
Benzene	## < 500		ug/kg	09/23/92	EMC
Ethylbenzene	< 500		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 500		ug/kg	09/23/92	EMC
Toluene	2600		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	3400		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	1400		ug/kg	09/23/92	EMC
Total Xylenes	2800		ug/kg	09/23/92	EMC

Sample: 04A SB4ST 12-12.5

Collected: 09/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Mod. GRO (WDNR)	520		mg/kg	09/23/92	EMC

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PVOC Soil, (WDNR) 8020					
Benzene	## < 500		ug/kg	09/23/92	EMC
Ethylbenzene	< 500		ug/kg	09/23/92	EMC
Methyl-t-butylether	< 500		ug/kg	09/23/92	EMC
Toluene	2900		ug/kg	09/23/92	EMC
1,2,4-Trimethylbenzene	16000		ug/kg	09/23/92	EMC
1,3,5-Trimethylbenzene	8100		ug/kg	09/23/92	EMC
Total Xylenes	11000		ug/kg	09/23/92	EMC

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.

## Elevated detection limit due to sample concentration.

The samples ordered for PVOC were analyzed according to Method 8020 ( SW 846 Test Methods for Evaluating Solid Waste - Physical/Chemical Methods )

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

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