
MOTOR OIL TANK PIPING REMEDIAL ACTION REPORT

**TECUMSEH PRODUCTS COMPANY
GRAFTON, WISCONSIN**

NOV 20 1992

PREPARED FOR:

**TECUMSEH PRODUCTS COMPANY
GRAFTON, WISCONSIN**

SUBMITTED BY:

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

PROJECT: F-92513

OCTOBER, 1992

fox environmental services, inc.

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Foster Johnston, REP, CHCM

fox environmental services, inc.

**REMEDIAL ACTION
Motor Oil Tank Piping**

**Tecumseh Products Company
Grafton, Wisconsin**

Project No. F - 92513

INTRODUCTION

This is a report to summarize the remedial action completed by Fox Environmental Services, Inc. (FOX) at Tecumseh Products Company, 900 North Street in Grafton, Wisconsin (Figure 1). Site remediation was in response to a leak from piping for a motor oil underground storage tank (UST).

BACKGROUND

On June 15 & 16, 1992, E&K Hazardous Waste Services, Inc. (E&K) removed an 11,000 gallon motor oil tank and the associated piping, and performed a tank closure assessment. At two locations along the suction and return side piping run, soil contamination was detected in four samples (15 - 320 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.

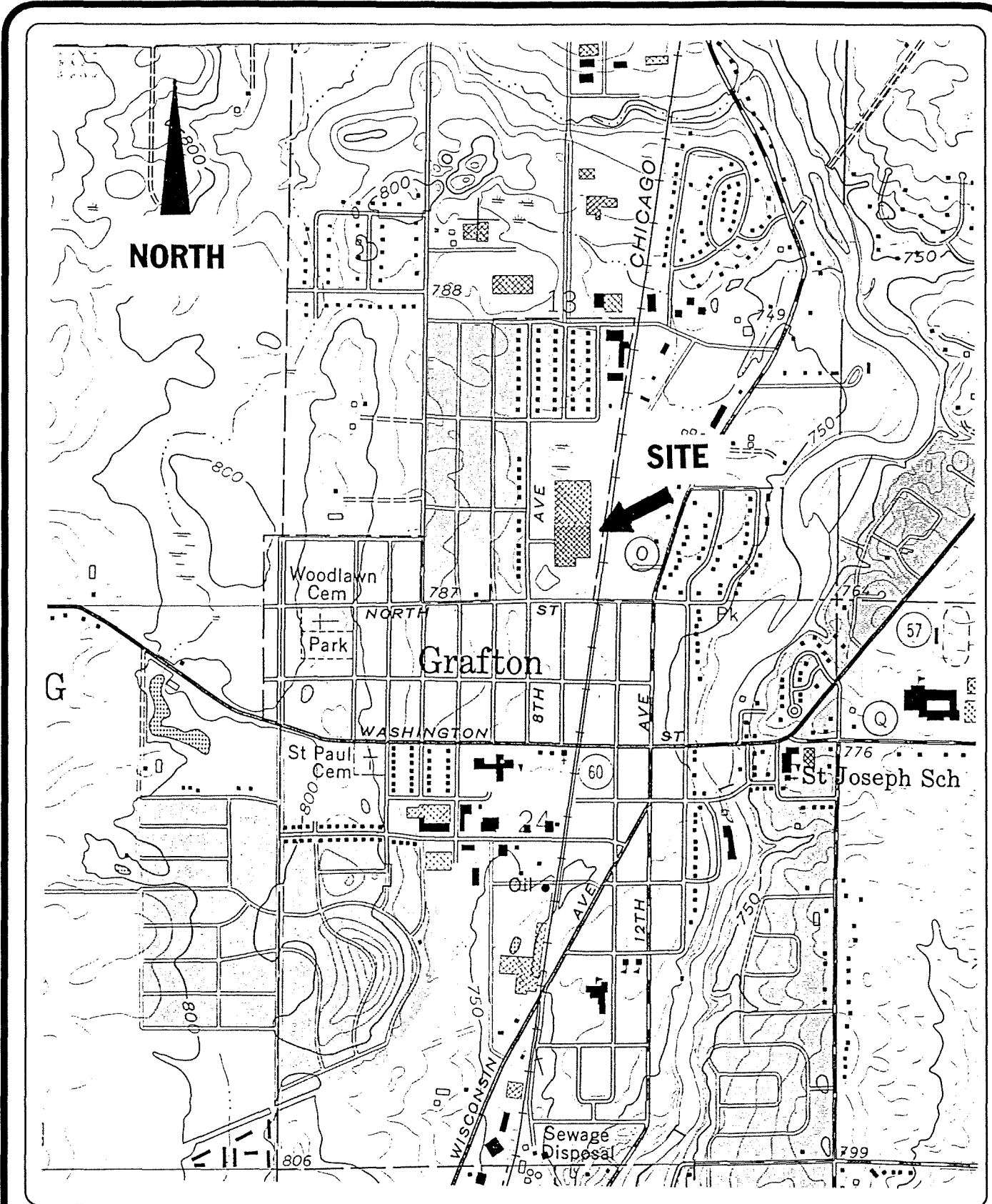
REMEDIAL ACTION

On September 15, 1992, a trench was excavated at the contamination location identified by E&K Hazardous Waste Services (E&K) as the 20 foot mark for the suction and return side piping run (also corresponding to sample I.D. 9595 and 9596). The trench was approximately 4 feet wide, 6 feet deep, and 10 feet long (Figure 2). The soil from the surface down to 3.5 feet was fill consisting of medium to coarse light brown sand. From 3.5 to 5 feet there was red brown loose clay and no water was encountered. The soil was not field screened because the photoionization detector (PID) does not respond well to the "heavy end" hydrocarbons like motor oil. One soil sample was collected from each end of the trench and a total of two soil samples were submitted to PAL for total recoverable petroleum hydrocarbons (TRPH) analysis.

Because of the high voltage electrical equipment and buried grounding rods, no attempt was made to excavate soil or collect samples for the contamination against the east wall of the building (corresponding to E&K sample I.D. 9608 and 9609).

RESULTS

The results of the laboratory analysis are summarized in Table 1 and a copy of the lab report is in Appendix A. A concentration of TRPH was detected at the west end of the trench (OT2W) at 21 ppm. No TRPH were detected at the east end of the trench (OT1E).



fox environmental services, inc.

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

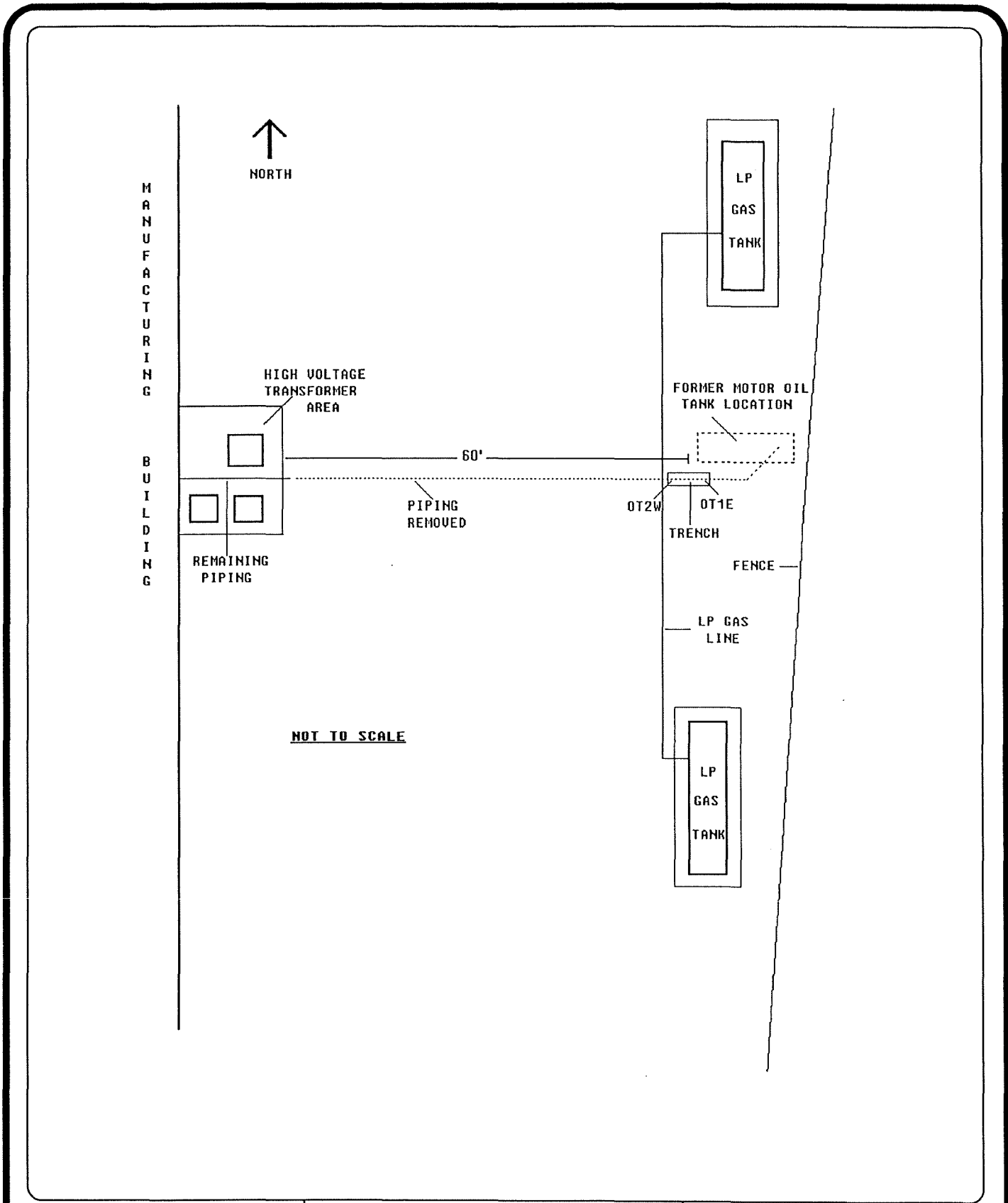
FIGURE 1
LOCATION PLAN

PROJECT NO. 92513

OCTOBER, 1992

APPENDIX A

Laboratory Report



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

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

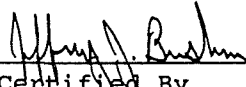
Attn: Lawrence L. Fox
Invoice Number:

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

Order # 92-09-180
10/07/92 09:06

Precision Analytical Lab, Inc
TEST RESULTS BY SAMPLE

Page 3

Sample: 05A OTIE

Collected: 09/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	< 5.0		ppm	09/26/92	CEP

Sample: 06A OT2W

Collected: 09/15/92

<u>Test Description</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
TRPH, Soil	21		ppm	09/26/92	CEP

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) _____

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

ANALYSIS	FILTERED (YES/NO)			
	PRESERVED (CODE)			
	REFRIGERATED (YES/NO)			
	Preservation Code			
GRO	M	M		A-None B-HNO ₃
PVOC	Y	Y		C-H ₂ SO ₄ D-NAOH
Dry Weight	Y			E-HCL F- _____
TRPH				M-MEOH
Trip Blank				

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

Relinquished By (Signature) <i>Foster Johnston</i>	Date / Time 9/15/92 3:35	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)