



RMT, Inc.
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December 4, 1992

Mr. John Lewis
Wisconsin Department of Transportation
Office of Environmental Analysis
4802 Sheboygan Avenue
Madison, WI 53702

DEC 15 1992

RE: WDOT Project #7030-09-71
"Y Bar," USH 10, Fairchild, Clark County, Wisconsin

OFFICE OF
ENV. ANALYSIS

Dear Mr. Lewis:

This letter documents site activities performed during excavation, hauling, and disposal of petroleum-impacted soil encountered during Wisconsin Department of Transportation (WDOT) highway construction activities adjacent to the "Y Bar," near the intersection of USH 10 and USH 12, Fairchild, Wisconsin. I have included a brief background and a discussion of findings, conclusions, and recommendations.

Background

On Monday, August 17th, 1992, strong petroleum odors and stained soils were reported by WDOT personnel during excavation activities to remove unsuitable subgrade soils as part of highway improvements to USH 10 near Fairchild, Clark County, Wisconsin (WDOT project ID #7303-09-71) (see Figure 1). The apparent petroleum release was reported to the Wisconsin Department of Natural Resources (WDNR) by WDOT personnel. RMT, Inc. (RMT), Madison, Wisconsin, and its contractors were retained by the WDOT to perform over-excavation of the petroleum-impacted soils to facilitate the continuance of the ongoing construction activities.

Findings and Conclusions

The site is located within the WDOT right-of-way, adjacent to a property known as the "Y Bar," on USH 10, near the eastern intersection with USH 12, approximately 2 miles east of Fairchild in Clark County. The site is located in the NW 1/4 of the NW 1/4, Section 6, Township 24N, Range 4W. The adjacent property is owned by Esther Luna, 424 North Washington Street, Westmont, Illinois, 60559 at (708) 969-4253. Based on conversations with the former owner of the property, Mr. Lavern Kofman, and with a former tenant, Mr. David LaPoint, RMT determined that the property was formerly a gas station.

The gas station was closed in 1982. The pump island, formerly located in front of the building, was removed at that time; however, two gasoline underground storage tanks (one leaded, one unleaded) remain near the northwest corner of the building (See Figure 2). According to Mr. Kofman, tanks have been present on the property since 1940. The existing tanks and the location of the former pump island appear to be on the property currently owned by Esther Luna, and not within the WDOT highway right-of-way.

10370.01 0000:MSB:lewis.2

Entered
1/14/93
GLD

During the removal of unsuitable subgrade materials and petroleum-impacted soils, groundwater was encountered at a depth of approximately 4 feet. Soils were not excavated below the groundwater. The native soils are clays and organic peat. Soil samples for field-screening with a portable photoionization detector (PID) were collected along the walls of the excavation, just above the interface with the groundwater. The unsuitable subgrade materials were removed as necessary for construction purposes, and the petroleum-impacted soils were removed up to the WDOT right-of-way limits to the south, and until field-screening results indicated no remaining impacted soils to the north and west. Native soils to the east had been previously removed as part of construction activities until impacted soils were encountered. Field-screening samples were collected from tests pits excavated to the west and east to confirm that the impacted soils had been removed. Table 1 presents a summary of field-screening and laboratory analysis results, and soil sample locations are indicated on Figure 2. A description of field procedures and methods is included as Attachment 1.

Soil samples for laboratory analysis were collected at approximate 20-foot intervals along the north, west, and south walls of the excavation. A sample of the groundwater in the excavation was also collected. Samples were analyzed in the laboratory for gasoline-range organics (GRO) and petroleum volatile organic compounds (PVOCs). Four of the samples were also analyzed for lead.

The analytical results of the samples from the north and west walls of the excavation showed no detectable concentrations of GRO or PVOCs. One sample, WW-1, showed an elevated lead concentration of 49 mg/kg. Four of the five samples from the south wall had GRO concentrations ranging from 53 to 7,700 mg/kg. PVOCs were also detected in these four samples. The groundwater sample, GW-1, had a GRO concentration of 7,100 μ g/L, and PVOCs were also detected. Table 2 presents a summary of the laboratory analyses results. Laboratory data sheets are included as Attachment 2.

Approximately 450 cubic yards of petroleum-impacted soils were excavated and immediately hauled to the Allied Blacktop Corporation asphalt plant, Eau Claire, Wisconsin, for temporary stockpiling and eventual thermal treatment. One field-screening sample was collected for each truck load of soil removed from the site. The soil samples were collected from the backhoe buckets as they were placed in the trucks. Three soil samples were collected for laboratory analysis, as required by the WDNR for thermal treatment of the soils at an asphalt batch plant. Table 3 presents a summary of laboratory analyses for the excavated soil.

Petroleum-impacted soils have been removed as much as practicable from within the WDOT highway right-of-way limits. Laboratory analysis results and field observations indicate that impacted soils remain to the south of the right-of-way on the "Y Bar" property. Also, the area appears to have a high water table, and the groundwater appears to have been impacted by this petroleum release. The source of the petroleum release is likely the former pump island and associated piping located on the "Y Bar" property.

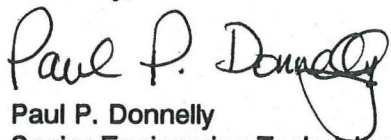
Mr. John Lewis
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Recommendations

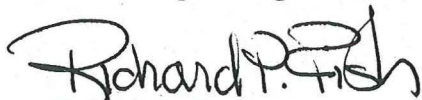
Based on the information obtained by RMT during the site activities, it is our opinion that the WDOT is not responsible for the petroleum release. The source of the release appears to be from the former gasoline dispensers on the property known as the "Y Bar," currently owned by Esther Luna. The WDNR will likely contact the owner of the property regarding taking steps to further investigate the impacts of the release.

If you have any questions or comments regarding this site, please call me or Dick Fish.

Sincerely,


Paul P. Donnelly

Senior Engineering Technician

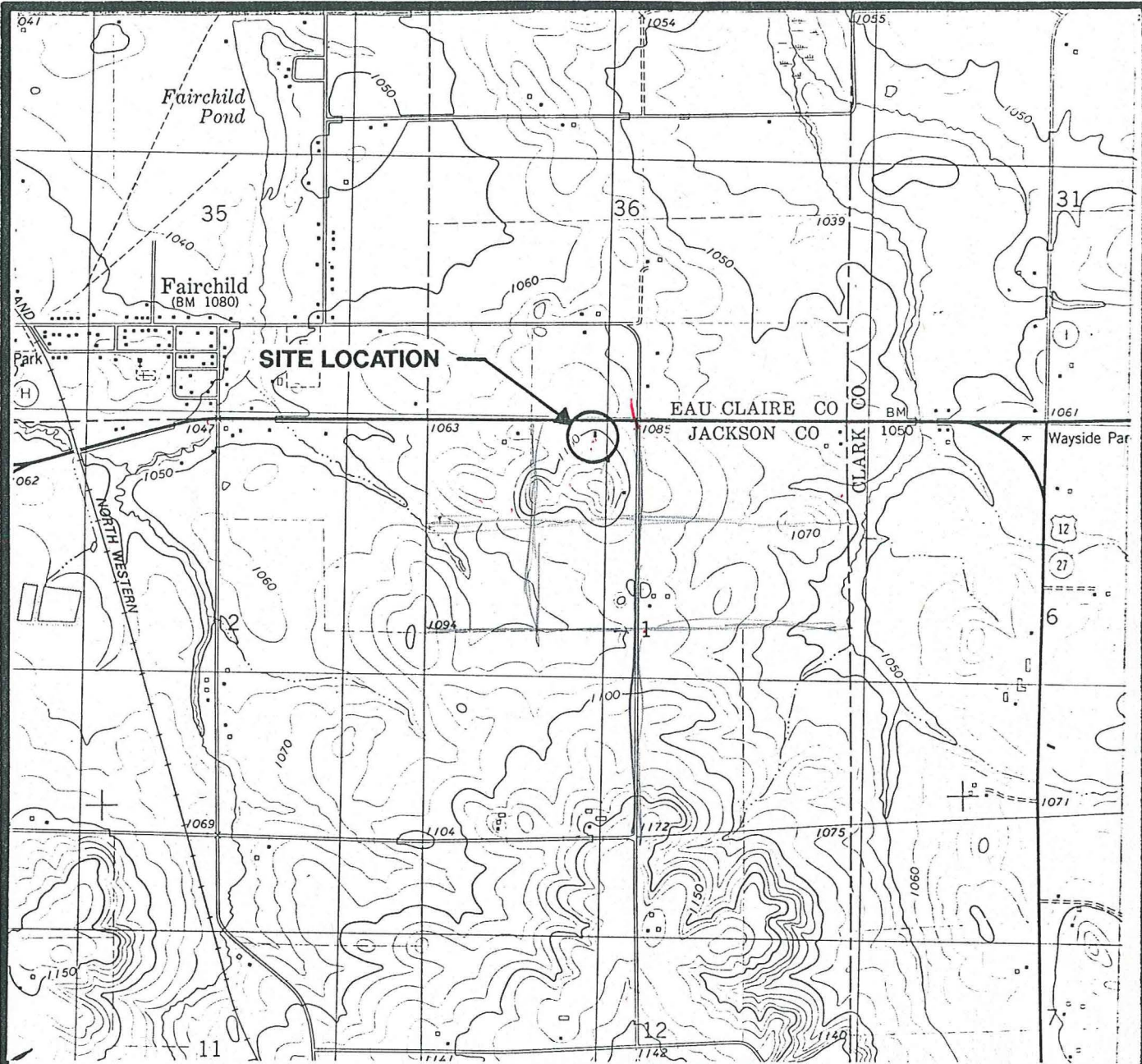


Richard P. Fish

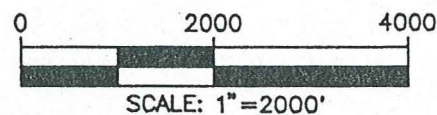
Program Manager, Construction Management

amg

Attachment



STATE LOCATION



**WDOT - FAIRCHILD
SITE LOCATION MAP**

SOURCE: BASE MAP FROM FAIRCHILD,
WISCONSIN, 7.5 MINUTE USGS
QUADRANGLE



DWN. BY: SAS
DATE: SEPTEMBER, 1992
PROJ.# 10370.01
FILE # 0102

FIGURE 1

Beneath Surface
4"

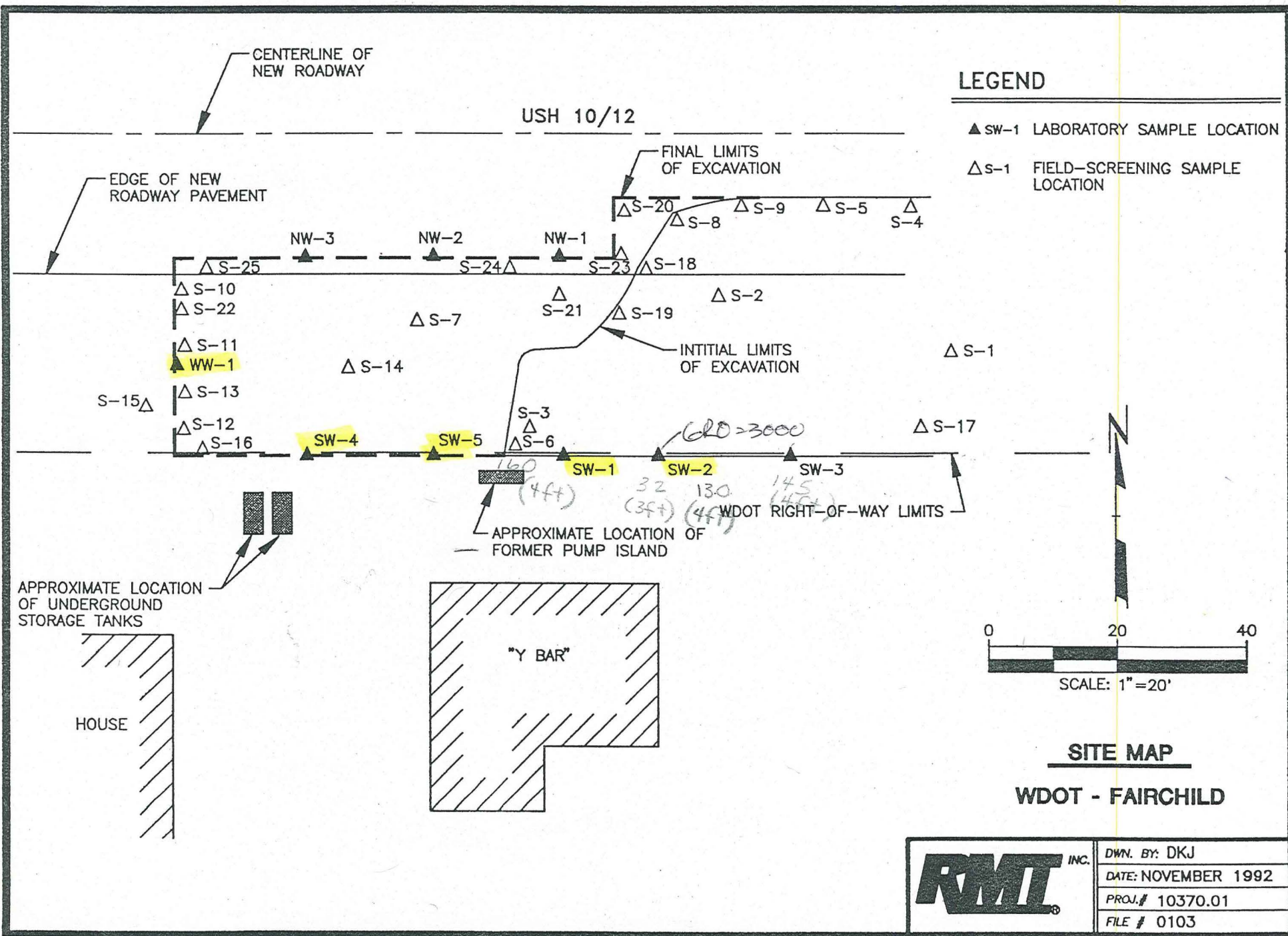


FIGURE 2

TABLE 1

SUMMARY OF FIELD-SCREENING AND LABORATORY ANALYSES RESULTS

Sample Number ¹	Sample Description	Approximate Depth ² (feet)	PID Results ³ (instrument units as isobutylene)	GRO (mg/kg)
S-1	Boring (hand-augered)	2	6	*
S-2	Boring (hand-augered)	3	32	*
S-3	Boring (hand-augered)	4	145	*
S-4	North wall of excavation	4	2	*
S-5	North wall of excavation	4	3	*
S-6	South wall of excavation	4	160	*
S-7	Test pit	4	16	*
S-8	North wall of excavation	4	11	*
S-9	North wall of excavation	4	0	*
S-10	West wall of excavation	2	0	*
S-11	West wall of excavation	2	0	*
S-12	West wall of excavation	3	7	*
S-13	West wall of excavation	4	1	*
S-14	Test pit	4	30	*
S-15	Test pit	4	0	*
S-16	Test pit	4	0	*
S-17	Test pit	4	0	*
S-18	North wall of excavation	4	15	*
S-19	North wall of excavation	4	16	*
S-20	North wall of excavation	4	3	*
S-21	North wall of excavation	4	10	*
S-22	West wall of excavation	4	3	*
S-23	North wall of excavation	4	7	*
S-24	North wall of excavation	4	0	*
S-25	North wall of excavation	4	0	*
SW-2	South wall of excavation	4	130	3,000
SW-3	South wall of excavation	4	15	<6.1
NW-1	North wall of excavation	4	0	<6.1
NW-2	North wall of excavation	4	0	<5.6
DT-1	Dump truck load	1.5	90	*
DT-2	Dump truck load	1.5	140	*
DT-3	Dump truck load	1.5	90	6,000
DT-4	Dump truck load	1.5	150	*

TABLE 1 (CONTINUED)

SUMMARY OF FIELD-SCREENING AND LABORATORY ANALYSES RESULTS

Sample Number ¹	Sample Description	Approximate Depth ² (feet)	PID Results ³ (instrument units as isobutylene)	GRO (mg/kg)
DT-5	Dump truck load	1.5	100	*
DT-6	Dump truck load	1.5	110	*
DT-7	Dump truck load	1.5	80	7,700
DT-8	Dump truck load	1.5	130	*
DT-9	Dump truck load	1.5	60	*
DT-10	Dump truck load	1.5	210	*
DT-11	Dump truck load	1.5	0	<6.0
DT-12	Dump truck load	1.5	1	*
DT-13	Dump truck load	1.5	0	*
DT-14	Dump truck load	1.5	120	*
DT-15	Dump truck load	1.5	12	*
DT-16	Dump truck load	1.5	4	*
DT-17	Dump truck load	1.5	65	*
DT-18	Dump truck load	1.5	13	*
DT-19	Dump truck load	1.5	0	*
DT-20	Dump truck load	1.5	30	*
DT-21	Dump truck load	1.5	15	*
DT-22	Dump truck load	1.5	3	*
DT-23	Dump truck load	1.5	10	*
DT-24	Dump truck load	1.5	2	*
DT-25	Dump truck load	1.5	16	*
DT-26	Dump truck load	1.5	4	*
DT-27	Dump truck load	1.5	16	*
DT-28	Dump truck load	1.5	4	*
DT-29	Dump truck load	1.5	7	*
DT-30	Dump truck load	1.5	0	*

NOTES:

¹ Sample number is referenced on Figure 2.² Approximate depth is measured from surface of excavation.³ PID was equipped with a 10.6-eV lamp and calibrated to a isobutylene standard in the field.

* Not Analyzed

TABLE 2

SUMMARY OF LABORATORY ANALYSES RESULTS

Compound (mg/kg)	Sample Number and Description ¹									
	NW-1	NW-2	NW-3	SW-1	SW-2	SW-3	SW-4	SW-5	WW-1	GW-1 ³ (µg/L)
GRO	<6.1	<5.6	<5.6	1,700	3,000	<6.1	53	7,700	<6.1	7,100
Methyl-tert-butyl-ether	<0.0012	<0.0011	<0.0011	<2.9	<5.6	<0.061	<0.056	<24	<0.0011	10
Benzene	<0.0012	<0.0011	<0.0011	<2.9	<5.6	<0.061	0.70	<24	<0.0011	10
Toluene	0.002	<0.0011	<0.0015	<2.9	<5.6	<0.061	1.20	670	0.0017	61
Ethylbenzene	<0.0012	<0.0011	<0.0011	11	19	<0.061	0.810	240	<0.0011	33
Xylenes	<0.0036	<0.0034	<0.0034	25	52	<0.180	3.50	1,000	<0.0033	91
1,3,5-Trimethylbenzene	<0.0012	<0.0011	<0.0011	26	33	<0.061	0.450	220	<0.0011	100
1,2,4-Trimethylbenzene	<0.0012	<0.0011	<0.0011	18	49	<0.061	0.980	360	<0.0011	64
Lead	*	*	1.2	*	2.6	*	*	13	49	*
PAH	*	*	*	*	*	*	U	*	*	*
PID Reading (instrument units as isobutylene) ²	0	0	*	*	130	15	*	*	*	*

NOTES:

¹ Sample Number is referenced on Figure 2.

² PID was equipped with a 10.6-eV lamp and calibrated to an isobutylene standard in the field.

³ GW-1 is a groundwater sample; concentrations are reported in µg/L.

* Not Analyzed

U Undetected

SW4: Tested 6 days after holding limit
 SW5: Tested 6 days after holding limit
 GW1: Tested 8 days after holding limit

RCL Exceeds NRM Industrial

RCL GW

TABLE 3

SUMMARY OF LABORATORY ANALYSES RESULTS FOR EXCAVATED SOIL

Compound (mg/kg)	Sample Number and Description		
	DT-3	DT-7	DT-11
GRO	6,000	7,700	<6.0
Methyl-tert-butyl-ether	<5.3	<11	<0.0012
Benzene	<5.3	<11	<0.0012
Toluene	<5.3	40	0.0013
Ethylbenzene	35	59	<0.0012
Xylenes	100	260	<0.0036
1,3,5-Trimethylbenzene	94	100	<0.0012
1,2,4-Trimethylbenzene	170	210	<0.0012
Lead	13	4.2	2.3
PID Reading (instrument units as ¹ isobutylene)	90	80	0

NOTES:

DT-7: Tested 1 day after holding time

¹ PID was equipped with a 10.6-eV lamp and calibrated to an isobutylene standard in the field.



PHOTOGRAPH #1 - EXCAVATION SITE ADJACENT TO "Y-BAR," LOOKING WEST



PHOTOGRAPH #2 - EXCAVATION SITE ADJACENT TO "Y-BAR," LOOKING SOUTH



PHOTOGRAPH #3 - VIEW OF EXCAVATION SHOWING STAINED SOIL



PHOTOGRAPH #4 - VIEW OF EXCAVATION LOOKING WEST

ATTACHMENT 1
FIELD PROCEDURES AND METHODS

ATTACHMENT 1

FIELD PROCEDURES AND METHODS

Field-Screening of Soil Samples

Soil samples were collected and screened in the field for the presence of VOCs in conformance with the field instrument techniques as described in the Wisconsin Closure Assessments for Underground Storage Tanks (Tank Owner's Guide for Underground Storage Tanks, Wisconsin, DILHR, October 1990). The sample locations are indicated on Figure 2. The samples were field-screened using a ThermoEnvironmental Model 580-B portable PID, equipped with a 10.6-eV lamp. The instrument was last factory-serviced and calibrated in July 1991. The instrument was calibrated to an isobutylene standard before use in the field, and no calibration adjustment was necessary. The ambient outside air temperature during sampling was approximately 60°F.

The field-screening samples were collected by exposing a fresh face of soil approximately 18 inches into the native soil and scooping the soil into 8-ounce jars. Clean protective gloves and scoops were used to collect each of the samples. The jars were sealed with aluminum foil and caps, the soil was agitated by shaking to release vapors, and the samples were allowed to equilibrate to a temperature of approximately 60°F. Equilibration was achieved by allowing the sample jars to stand for approximately 15 minutes. Immediately following equilibration, the air in the headspace of each jar was sampled by inserting the probe of the PID through the foil seal, allowing the sample air to be drawn through the instrument. The maximum reading indicated by the instrument was recorded in the field notebook.

Soil Sampling for Laboratory Analysis

Selected soil samples for laboratory analysis were collected from representative locations in the excavation. The samples were collected by exposing a fresh face of soil approximately 18 inches into the native soil and scooping the soil into appropriate wide-mouth laboratory containers. Clean protective gloves and scoops were used to collect each sample. Methanol preservative was added to the sample jars to be used for gasoline-range organic (GRO) analysis, in accordance with the WDNR guidance. The sample containers were immediately sealed and labeled with the sample number, description, date, time, and sample collector's name and immediately placed in an iced cooler. Appropriate sample containers, preservatives, labels, and forms had previously been supplied by RMT Laboratories. The samples were transported to RMT Laboratories in Madison, Wisconsin, within the required time frame under chain-of-custody documentation.

Laboratory Analysis

The laboratory analyses for GRO were performed using the modified EPA methods as specified in the Leaking Underground Storage Tank (LUST) Analytical Guidance, WDNR, April 1992. The analysis for PVOCs was performed by gas chromatography (GC) in accordance with EPA Method 8020.

Compositional lead analysis was performed by inductively coupled plasma in accordance with SW846, method 6010.

ATTACHMENT 2
LABORATORY DATA SHEETS



CASE NARRATIVE
VOLATILE ORGANIC GC ANALYSIS

PROJECT NAME: WDOT - FAIRCHILD
PROJECT NUMBER: 10370.01
SAMPLE NUMBER(S): 97720 - 97725, 97819 - 97825
METHOD: GRO
DATE: 10/02/92

These samples were analyzed at least once within the 14-day holding time. Reanalysis occurred after the expiration of the holding time in order to confirm high levels and to meet RMT quality control measures.



LUST Data Qualifier Sheet

A	Sample odor present.
B(n)	Analyte present in the method blank. If the processes that were applied to the sample were applied to the method blank, the value of the analyte in the method blank would likely be "n."
C	Elevated detection limit (see Case Narrative).
DP	Unidentified but detected peaks.
E	Analyte concentration exceeds calibration range (see Case Narrative).
F	Repeated surrogate failure (see Case Narrative).
H(n)	Analysis performed "n" days past holding time.
L	Detects in trip blank.
M	Methanol leakage.
R	Relative percent difference high (see Case Narrative).
T	Retention time variance; analyte identification not confirmed.
V	Heavy hydrocarbon present.
W	Sample received with headspace.
X	Significant peaks outside the chromatographic window not included in quantitation scheme.
Y	Significant peaks within the chromatographic window.
Z	Elevation in chromatographic baseline not included in quantitation scheme.

Effective 6/19/92



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CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97822
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: NW-1
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/10/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	<6.1 H(6)	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark D. Misch
Supervisor's signature

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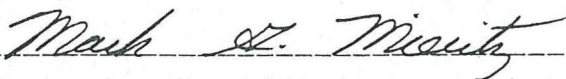
CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97823
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: NW-2
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/10/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	<5.6 H(6)	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific



Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97824
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: NW-3
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/10/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	<5.6 H(6)	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark E. Mientz

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97720
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: SW-1
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	1700 A	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark A. Meitz

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97721
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: SW-2
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/03/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	3000 A	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark A. Muintz

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97722
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: SW-3
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 08/26/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	<6.1	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark A. Mientz

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97819
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: SW-4
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/10/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET.	LIMIT	UNITS
=====	=====	=====	=====	=====	=====
78920	Gasoline	53 H(6)		5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark A. Munitz

Supervisor's signature

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PAGE: 1

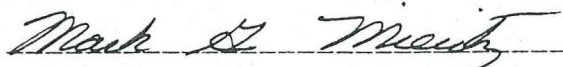
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SAMPLE #: 97820
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: SW-5
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/11/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	7700 H(6)	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific



Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97821
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: WW-1
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 08/26/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET.	LIMIT	UNITS
=====	=====	=====	=====	=====	=====
78920	Gasoline	<6.1 H(7)	5.0		mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark St. Ministry
Supervisor's signature



PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97723
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: DT-3
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	6000 E,A	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark A. Mautz

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97724
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: DT-7
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	7700 H(1),A	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark A. Maish

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97825
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: DT-11
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/10/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	<6.0 H(6)	5.0	mg/kg dry wt.

Laboratory standard used: Macro Scientific

Mark St. Ministry

Supervisor's signature

744 Heartland Trail, P.O. Box 8923, Madison, WI 53708-8923. (608) 831-4444



PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97725
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: GW-1
SAMPLE COLLECTOR: MA
METHOD: WDNR (4/92)
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/11/92
WI DNR LAB ID: 113138520

MODIFIED GASOLINE RANGE ORGANICS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78920	Gasoline	7100 H(8)	100	ug/L

Laboratory standard used: Macro Scientific

Mark A. Mianitz

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SOIL SPIKE

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	spike amount	% rec'y
Gasoline Range Organics	15.64 TO 43.85				
	total	26440690	913.5	1000	91.3%
1,1,-dichloropropane	24.95	347330	19.221		96.1% *

SOIL SPIKE DUP

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	% rec'y	abs diff	mean	RPD
Gasoline Range Organics	15.65 TO 43.84						
	total	26259260	907.2	90.7%	6.3	910.3	0.69%
1,1,-dichloropropane	24.94	352320	19.500	97.5% *			

* SURROGATE RECOVERY



SOIL SPIKE

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	spike amount	% rec'y
Gasoline Range Organics	15.74 TO 43.85				
	total	25899040	894.7	1000	89.5%
1,1-dichloropropane	24.98	348840	19.306		96.5%

SOIL SPIKE DUP

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	% rec'y	abs diff	mean	RPD
Gasoline Range Organics	15.66 TO 43.78						
	total	25555900	882.9	88.3%	11.9	888.8	1.34%
1,1-dichloropropane	24.93	335920	18.583	92.9%	*		

* SURROGATE RECOVERY

SOIL SPIKE

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	spike amount	% rec'y
Gasoline Range Organics	15.79 TO 43.52				
	total	25110480	867.5	1000	86.7%
1,1-dichloropropane	25.04	362750	20.084		100.4% *

SOIL SPIKE DUP

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	% rec'y	abs diff	mean	RPD
Gasoline Range Organics	15.69 TO 43.82						
	total	26023210	899.0	89.9%	31.6	883.2	3.57%
1,1-dichloropropane	24.97	361180	19.996	100.0%	*		

GRO CHECK STANDARD

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	percent recovery
Gasoline Range Organics	15.69 TO 43.83			
	total	30811770	1064.6	106.5%
1,1-dichloropropane	24.95	346620	19.181	95.9% *

* SURROGATE RECOVERY

SOIL SPIKE REPLICATE

MODIFIED GRO Method TPH Analysis by Purge and Trap

Analyte	Rt	area	ug/l	percent recovery	RPD
Gasoline Range Organics	15.56 TO 43.80				
	total	30028150	1037.5	103.8%	2.6%
1,1-dichloropropane	24.89	302470	16.711	83.6% *	

* SURROGATE RECOVERY

MODIFIED GRO METHOD

Analyte	ug/l	RT	area	sample amount	spike amount	percent recovery
MTBE	12.922	15.58	692980	0	20	65%
BENZENE	20.572	23.19	3369800	0	20	103%
1,4-DIFLUOROBENZENE	21.770	24.48	1121200	0	20	109%
TOLUENE	20.124	28.79	2792500	0	20	101%
ETHYLBENZENE	21.159	32.7	2484500	0	20	106%
M,P-XYLENES	39.750	32.99	5808400	0	20	99%
O-XYLENES	20.115	33.99	2370000	0	20	101%
BROMOFLUOROBENZENE	22.692	35.31	1980500	0	20	113%
1,3,5-TRIMETHYLBENZENE	20.535	36.36	2817800	0	20	103%
1,2,4-TRIMETHYLBENZENE	20.500	37.3	2005000	0	20	102%



CASE NARRATIVE
VOLATILE ORGANIC GC ANALYSIS

PROJECT NAME: WDOT - FAIRCHILD
PROJECT NUMBER: 10370.01
SAMPLE NUMBER(S): 97724, 97725, 97819, 97820
METHOD: PVOC
DATE: 10/02/92

These samples were analyzed at least once within the 14-day holding time. Reanalysis occurred after the expiration of the holding time in order to confirm high levels and to meet RMT quality control measures.



Organic GC/MS Data Qualifier Sheet

- B(n) Analyte present in the method blank. If the processes that were applied to the sample were applied to the method blank, the value of the analyte in the method blank would likely be "n."
- D Analyte value from a diluted analysis.
- E Analyte concentration exceeds calibration range (see Case Narrative).
- H(n) Analysis performed "n" days past holding time.
- J Estimated concentration of tentatively identified compound (TIC).
- NR Not required.
- Q Qualitative mass spectral evidence of analyte present; concentration is less than the reporting limit.
- U Analyte undetected.
- W Sample received with headspace.

Effective 3/2/92



CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97822
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 10/06/92
COLLECTION DATE: 08/21/92
STATION ID: NW-1
SAMPLE COLLECTOR: MA

VOLATILE ORGANIC ANALYSIS REPORT

PARAMETER =====	RESULT =====	UNITS =====
Methyl-tert-butyl-ether	<1.2	ug/kg dry wt.
Benzene	<1.2	ug/kg dry wt.
Toluene	2.0	ug/kg dry wt.
Ethylbenzene	<1.2	ug/kg dry wt.
Xylene, total	<3.6	ug/kg dry wt.
1,3,5-Trimethylbenzene	<1.2	ug/kg dry wt.
1,2,4-Trimethylbenzene	<1.2	ug/kg dry wt.

Mark A. Mieritz
Mark Mieritz, Organic Supervisor

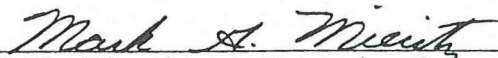


CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97823
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 09/30/92
COLLECTION DATE: 08/21/92
STATION ID: NW-2
SAMPLE COLLECTOR: MA

VOLATILE ORGANIC ANALYSIS REPORT

PARAMETER =====	RESULT =====	UNITS =====
Methyl-tert-butyl-ether	<1.1	ug/kg dry wt.
Benzene	<1.1	ug/kg dry wt.
Toluene	<1.1	ug/kg dry wt.
Ethylbenzene	<1.1	ug/kg dry wt.
Xylene, total	<3.4	ug/kg dry wt.
1,3,5-Trimethylbenzene	<1.1	ug/kg dry wt.
1,2,4-Trimethylbenzene	<1.1	ug/kg dry wt.



Mark Mieritz, Organic Supervisor



CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97824
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 09/30/92
COLLECTION DATE: 08/21/92
STATION ID: NW-3
SAMPLE COLLECTOR: MA

VOLATILE ORGANIC ANALYSIS REPORT

PARAMETER =====	RESULT =====	UNITS =====
Methyl-tert-butyl-ether	<1.1	ug/kg dry wt.
Benzene	<1.1	ug/kg dry wt.
Toluene	1.5	ug/kg dry wt.
Ethylbenzene	<1.1	ug/kg dry wt.
Xylene, total	<3.4	ug/kg dry wt.
1,3,5-Trimethylbenzene	<1.1	ug/kg dry wt.
1,2,4-Trimethylbenzene	<1.1	ug/kg dry wt.

Mark E. Mieritz
Mark Mieritz, Organic Supervisor

PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97720
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: SW-1
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<2900	1.0	ug/kg dry wt.
78124	Benzene	<2900	1.0	ug/kg dry wt.
78131	Toluene	<2900	1.0	ug/kg dry wt.
78113	Ethylbenzene	11000	1.0	ug/kg dry wt.
81551	Xylene, total	25000	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	26000	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	18000	1.0	ug/kg dry wt.

Mark St. Mueny

Supervisor's signature



PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97721
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: SW-2
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<5600	1.0	ug/kg dry wt.
78124	Benzene	<5600	1.0	ug/kg dry wt.
78131	Toluene	<5600	1.0	ug/kg dry wt.
78113	Ethylbenzene	19000	1.0	ug/kg dry wt.
81551	Xylene, total	52000	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	33000	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	49000	1.0	ug/kg dry wt.

Mark A. Mouty

Supervisor's signature

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PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97722
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: SW-3
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 08/26/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<61	1.0	ug/kg dry wt.
78124	Benzene	<61	1.0	ug/kg dry wt.
78131	Toluene	<61	1.0	ug/kg dry wt.
78113	Ethylbenzene	<61	1.0	ug/kg dry wt.
81551	Xylene, total	<180	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	<61	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	<61	1.0	ug/kg dry wt.

Mark A. Minsky
Supervisor's signature

PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97819
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: SW-4
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/10/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<56 H(6)	1.0	ug/kg dry wt.
78124	Benzene	700 H(6)	1.0	ug/kg dry wt.
78131	Toluene	1200 H(6)	1.0	ug/kg dry wt.
78113	Ethylbenzene	810 H(6)	1.0	ug/kg dry wt.
81551	Xylene, total	3500 H(6)	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	450 H(6)	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	980 H(6)	1.0	ug/kg dry wt.

Mark A. Mearns
Supervisor's signature



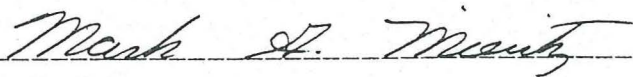
PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97820
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001
STATION ID: SW-5
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
EXTRACTION DATE:
ANALYSIS DATE: 09/11/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<24000 H(6)	1.0	ug/kg dry wt.
78124	Benzene	<24000 H(6)	1.0	ug/kg dry wt.
78131	Toluene	670000 H(6)	1.0	ug/kg dry wt.
78113	Ethylbenzene	240000 H(6)	1.0	ug/kg dry wt.
81551	Xylene, total	1000000 H(6)	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	220000 H(6)	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	360000 H(6)	1.0	ug/kg dry wt.



Supervisor's signature



CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97821
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 09/30/92
COLLECTION DATE: 08/21/92
STATION ID: WW-1
SAMPLE COLLECTOR: MA

VOLATILE ORGANIC ANALYSIS REPORT

PARAMETER =====	RESULT =====	UNITS =====
Methyl-tert-butyl-ether	<1.1	ug/kg dry wt.
Benzene	<1.1	ug/kg dry wt.
Toluene	1.7	ug/kg dry wt.
Ethylbenzene	<1.1	ug/kg dry wt.
Xylene, total	<3.3	ug/kg dry wt.
1,3,5-Trimethylbenzene	<1.1	ug/kg dry wt.
1,2,4-Trimethylbenzene	<1.1	ug/kg dry wt.

Mark A. Mieritz
Mark Mieritz, Organic Supervisor

PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97723
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: DT-3
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/28/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<5300 A	1.0	ug/kg dry wt.
78124	Benzene	<5300 A	1.0	ug/kg dry wt.
78131	Toluene	<5300 A	1.0	ug/kg dry wt.
78113	Ethylbenzene	35000 A	1.0	ug/kg dry wt.
81551	Xylene, total	100000 A	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	94000 A	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	170000 A	1.0	ug/kg dry wt.

Mark A. Munitz

Supervisor's signature



PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97724
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: DT-7
SAMPLE COLLECTOR: MA
METHOD: EPA 8020
pH : UNPRESERVED

REPORT DATE: 10/28/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/03/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<11000 H(1),A	1.0	ug/kg dry wt.
78124	Benzene	<11000 H(1),A	1.0	ug/kg dry wt.
78131	Toluene	40000 H(1),A	1.0	ug/kg dry wt.
78113	Ethylbenzene	59000 H(1),A	1.0	ug/kg dry wt.
81551	Xylene, total	260000 H(1),A	3.0	ug/kg dry wt.
77226	1,3,5-Trimethylbenzene	100000 H(1),A	1.0	ug/kg dry wt.
77222	1,2,4-Trimethylbenzene	210000 H(1),A	1.0	ug/kg dry wt.

Mark A. McIntyre
Supervisor's signature



CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97825
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 10/05/92
COLLECTION DATE: 08/21/92
STATION ID: DT-11
SAMPLE COLLECTOR: MA

VOLATILE ORGANIC ANALYSIS REPORT

PARAMETER =====	RESULT =====	UNITS =====
Methyl-tert-butyl-ether	<1.2	ug/kg dry wt.
Benzene	<1.2	ug/kg dry wt.
Toluene	1.3	ug/kg dry wt.
Ethylbenzene	<1.2	ug/kg dry wt.
Xylene, total	<3.6	ug/kg dry wt.
1,3,5-Trimethylbenzene	<1.2	ug/kg dry wt.
1,2,4-Trimethylbenzene	<1.2	ug/kg dry wt.



Mark Mieritz, Organic Supervisor



PAGE: 1

CLIENT: WDOT - FAIRCHILD
SAMPLE #: 97725
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001
STATION ID: GW-1
SAMPLE COLLECTOR: MA
METHOD: EPA METHOD 8021
pH : PRESERVED

REPORT DATE: 10/05/92
COLLECTION DATE: 08/20/92
EXTRACTION DATE:
ANALYSIS DATE: 09/11/92
WI DNR LAB ID: 113138520

VOLATILE ORGANIC ANALYSIS REPORT

DNR #	PARAMETER	RESULT	METHOD DET. LIMIT	UNITS
=====	=====	=====	=====	=====
78032	Methyl-tert-butyl-ether	<10 H(8)	1.0	ug/L
78124	Benzene	<10 H(8)	1.0	ug/L
78131	Toluene	61 H(8)	1.0	ug/L
78113	Ethylbenzene	33 H(8)	1.0	ug/L
81551	Xylene, total	91 H(8)	3.0	ug/L
77226	1,3,5-Trimethylbenzene	100 H(8)	1.0	ug/L
77222	1,2,4-Trimethylbenzene	64 H(8)	1.0	ug/L



Supervisor's signature



Analyte	ug/l	RT	area	% rec'y	absolute difference	mean	RPD
MTBE	12.608	15.5	675580	63%	0.315	12.765	2.5%
BENZENE	20.633	23.15	3380100	103%	0.060	20.602	0.3%
1,4-DIFLUOROBENZENE	21.173	24.44	1089100	106%	0.597	21.472	2.8%
TOLUENE	20.407	28.74	2835600	102%	0.283	20.266	1.4%
ETHYLBENZENE	21.416	32.65	2517400	107%	0.257	21.287	1.2%
M,P-XYLENES	40.222	32.94	5881900	101%	0.471	39.986	1.2%
O-XYLENES	20.371	33.94	2402000	102%	0.256	20.243	1.3%
BROMOFLUOROBENZENE	22.384	35.25	1951900	112%	0.308	22.538	1.4%
1,3,5-TRIMETHYLBENZENE	20.844	36.3	2863500	104%	0.309	20.689	1.5%
1,2,4-TRIMETHYLBENZENE	20.815	37.24	2040500	104%	0.315	20.657	1.5%



SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report Date: 09-14-92

RMT SAMPLE NO.

97819

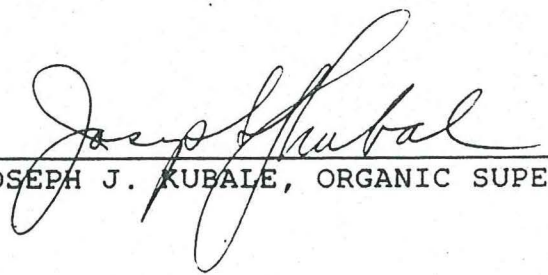
Client Name: WDOT-FAIRCHILD

Project # : 10370.01

Matrix: (soil/water) SOIL
Sample wt/vol: 30 (g/ml) G
Level: (low/med) LOW
GPC Cleanup: (Y/N) N
Moisture: 13
Column: (pack/cap) CAP

Field Sample ID: SW-4
Lab File ID: >PBD42
Sampling Date: 08-21-92
Date Extracted: 09-01-92
Analysis Date: 09-02-92
Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS:UG/KG		
		Conc.	EQL	Code
91-20-3	Naphthalene	380.	U	
91-57-6	2-Methylnaphthalene	380.	U	
90-12-0	1-Methylnaphthalene	380.	U	
208-96-8	Acenaphthylene	380.	U	
83-32-9	Acenaphthene	380.	U	
86-73-7	Fluorene	380.	U	
85-01-8	Phenanthrene	380.	U	
120-12-7	Anthracene	380.	U	
206-44-0	Fluoranthene	380.	U	
129-00-0	Pyrene	380.	U	
56-55-3	Benzo(a)anthracene	380.	U	
218-01-9	Chrysene	380.	U	
205-99-2	Benzo(b)fluoranthene	380.	U	
207-08-9	Benzo(k)fluoranthene	380.	U	
50-32-8	Benzo(a)pyrene	380.	U	
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U	
53-70-3	Dibenz(a,h)anthracene	380.	U	
191-24-2	Benzo(g,h,i)perylene	380.	U	


JOSEPH J. KUBALE, ORGANIC SUPERVISOR



page: 1 of 1

CLIENT: WDOT - FAIRCHILD
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 09/17/92
SAMPLE COLLECTOR: MA

INORGANIC ANALYSIS REPORT

SAMPLE =====	DATE =====	STATION ID =====	Lead =====	UNITS =====
97820	08/21/92	SW-5	13	mg/kg dry wt.
97821	08/21/92	WW-1	49	mg/kg dry wt.
97824	08/21/92	NW-3	1.2	mg/kg dry wt.
97825	08/21/92	DT-11	2.3	mg/kg dry wt.

(Handwritten red circle around the Lead column values 13, 49, 1.2, 2.3 with a question mark below it)

Eric L Thomas 9/18/92
Eric L Thomas, Inorganic Supervisor



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CLIENT: WDOT - FAIRCHILD
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001

REPORT DATE: 09/23/92
SAMPLE COLLECTOR: MA

INORGANIC ANALYSIS REPORT

SAMPLE =====	DATE =====	STATION ID =====	Lead =====	UNITS =====
97721	08/20/92	SW-2	2.6	mg/kg dry wt.
97723	08/20/92	DT-3	13	mg/kg dry wt.
97724	08/20/92	DT-7	4.2	mg/kg dry wt.

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CLIENT: WDOT - FAIRCHILD
PROJECT #: 10370.01
WORK ORDER #: 920825-1037001

REPORT DATE: 09/17/92
SAMPLE COLLECTOR: MA

INORGANIC ANALYSIS REPORT

SAMPLE =====	DATE =====	STATION ID =====	Solids, total =====	UNITS =====
97820	08/21/92	SW-5	84.2	%
97821	08/21/92	WW-1	90.2	%
97824	08/21/92	NW-3	91.3	%
97825	08/21/92	DT-11	83.2	%

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CLIENT: WDOT - FAIRCHILD
PROJECT #: 10370.01
WORK ORDER #: 920824-1037001

REPORT DATE: 09/23/92
SAMPLE COLLECTOR: MA

INORGANIC ANALYSIS REPORT

SAMPLE =====	DATE =====	STATION ID =====	Solids, total =====	UNITS =====
97721	08/20/92	SW-2	89.2	%
97723	08/20/92	DT-3	93.0	%
97724	08/20/92	DT-7	92.2	%

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