

UST CLOSURE REPORT

3683

Benton County Area I yard - Prosser

Site Location:

9th Street & Sheridan Avenue
Prosser, Washington

WSI Job No. - 198-091-01

Prepared For:

Petroleum Pump & Equipment Co.

Prepared By:

White Shield Environmental
801 Grandridge Road
Grandview, WA 98930



May 14, 1999

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 REPORT DATE: 2

2.0 TO BE SUBMITTED TO: 2

3.0 OWNERS' NAME..... 2

4.0 LOCATION OF PROPERTY 2

5.0 ON-SITE PERSONNEL 2

6.0 SCOPE AND CONDITIONS..... 2

7.0 LOCATION OF TANK ON PROPERTY 2

9.0 SITE HISTORY 3

10.0 NOTIFICATION AND PERMITS 3

11.0 TANK REMOVAL CHRONOLOGY 3

 11.1 DATES OF SPECIFIC FIELD ACTIVITIES..... 3

12.0 VISUAL OBSERVATIONS 3

13.0 SAMPLING PROCEDURES..... 4

14.0 SAMPLE SCREENING..... 4

15.0 LABORATORY RESULTS 5

16.0 BACKFILLING 6

17.0 DISPOSAL..... 6

 17.1 DISPOSAL OF THE TANKS..... 6

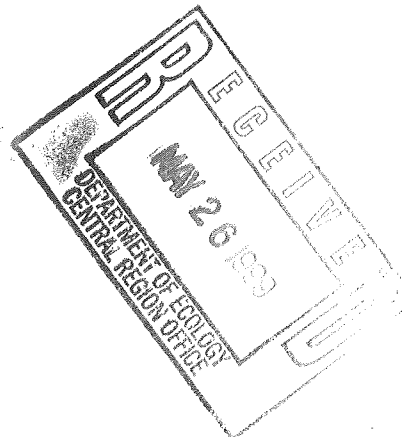
 17.2 SOIL DISPOSAL..... 7

18.0 CONCLUSION 7

 18.1 SOIL ANALYSIS SUMMARY..... 7

 18.2 RECOMMENDATION..... 7

19.0 LIMITATIONS 7



EXHIBITS

- A. COMMUNICATION
 - UST Site Check/Site Assessment Checklist
 - UST Permanent Closure & Site Assessment Notice

- B. MAPS AND DRAWINGS
 - Site Location Map
 - Site Map
 - Sample Location Sketch

- C. LABORATORY RESULTS AND CHAIN OF CUSTODY
 - Laboratory Reports
 - Chain of Custody

- D. FIELD DATA
 - Field Notes
 - Sampling Log

- E. MTCA METHOD A CLEANUP REQUIREMENTS

- F. SITE PHOTOGRAPHS

EXECUTIVE SUMMARY

The purpose of this project was the removal and decommissioning of one 20,000-gallon diesel fuel underground storage tank (UST) and two 12,000-gallon gasoline UST's at Benton County Roads Department, Prosser, WA.

On January 5, 1998, White Shield, Inc. (WSI) provided site assessment services for the removal of one 20,000-gallon diesel fuel underground storage tank (UST) and two 12,000-gallon gasoline UST's. The location of this UST system was at the Benton County Roads Department, at the intersection of 9th Street and Sheridan Avenue, Prosser, WA.

This system was used for the storage and dispensing of fuel for maintenance equipment for the daily operation of the Benton County Roads Department. Petroleum Pump provided backhoe and decommissioning services. OnSite Environmental Inc., Redmond, WA, provided the laboratory analytical services.

The UST system was removed from an excavation measuring 36' in width x 43' in length x 14' in depth. Eleven samples were collected from the excavation for field screening and laboratory analysis, and three samples were collected from the stockpiles of excavated soil. Field screening was conducted using a Foxboro Organic Vapor Analyzer for volatiles and Thin Layer Chromatography for semi-volatile (diesel) and non-volatile compounds (motor oil). The results from the field screening of samples collected from the sidewalls, bottom and overburden stockpile indicated no apparent petroleum contamination. However, the soil excavated from beneath the fuel lines next to the gasoline UST #1 appeared to be contaminated. Field screening from the samples collected were inconclusive. The soil appeared to be stained and had an odor of possible petroleum contamination.

Laboratory analyses of the soil samples collected from the excavation and stockpile revealed no petroleum contamination exceeding the MTCA Method A Cleanup Levels.

A total of approximately 8 cubic yards of possible petroleum contaminated soil was transported by Petroleum Pump to Lower Valley Remediation for disposal.

Based on our visual observations, site information and laboratory analytical results, WSI finds no evidence of petroleum concentrations remaining within the UST excavation in excess of the Cleanup Levels established by the Model Toxics Control Act (WAC 173-340-720) and no further action is required.

1.0 REPORT DATE:

May 20, 1999

2.0 TO BE SUBMITTED TO:

Washington State Department of Ecology
15 West Yakima Avenue, Suite 200
Yakima, WA 99205

Department of Ecology
P.O. Box 47655
Olympia, WA 98504

3.0 OWNERS' NAME

Benton County Roads
620 Market Street
P.O. Box 1001
Prosser, WA 99350

4.0 LOCATION OF PROPERTY

The site is located at intersection of 9th Street and Sheridan Avenue, Prosser, WA. Refer to Exhibit B, Site Location Map and Site Sketch.

5.0 ON-SITE PERSONNEL

Jim Christiansen
Petroleum Pump Company Inc.
23 West Columbia Drive
Kennewick, WA

Rick Funderburk
White Shield, Inc.
801 Grandridge Road
Grandview, WA 98930

6.0 SCOPE AND CONDITIONS

This report documents the excavations, cleaning and removal of one 20,000-gallon diesel fuel underground storage tank (UST), two 12,000 gallon gasoline UST's piping and plumbing associated with it and the disposal of related waste products. A summary of work, observations, laboratory reports, correspondence and all relevant documents are provided.

Petroleum Pump Company Inc., Kennewick WA, provided the UST decommissioning, excavation and transportation services. The laboratory analyses of fourteen samples, (seven composite samples and four individual samples), were provided by On Site Environmental Laboratory, Redmond, Washington. White Shield, Inc., provided site assessment services.

7.0 LOCATION OF TANK ON PROPERTY

Please refer to the Site Sketch shown in Exhibit B.

UST SYSTEM DATA

SITE ID	Date Installed	Size (gal)	Type	Contents	Status
3683	11/30/82	12,000	Steel	Unleaded Gasoline	Removed
3683	11/30/82	12,000	Steel	Unleaded Gasoline	Removed
3683	11/30/82	20,000	Steel	Diesel Fuel	Removed

The dispenser islands were located to the south of the UST's. There were two separate islands both containing one gasoline dispenser and a diesel fuel dispenser. Refer Appendix B, Site Sketch.

9.0 SITE HISTORY

The UST was installed at the site in November 1982. The UST system was used for the storage and dispensing of fuel for maintenance equipment used in the daily operations of the Benton County Roads Department.

10.0 NOTIFICATION AND PERMITS

This site is currently under the regulatory authority of the Washington State Department of Ecology (WSDOE). The required Thirty-Day Notice to remove the UST was submitted to WSDOE by Petroleum Pump Company Inc. This report shall serve as a permanent record of the UST decommissioning and site assessment.

11.0 TANK REMOVAL CHRONOLOGY

11.1 DATES OF SPECIFIC FIELD ACTIVITIES

Mobilization	01/04/99
Tank Removals	01/05/98
Soil Excavation	01/05/99
Sampling	01/05/99
Backfilling	01/20/99
Analytical Results Received	01/20/99
Report Completed	05/20/99

12.0 VISUAL OBSERVATIONS

The site is located at the intersection of 9th Street and Sheridan Avenue, Prosser, WA. Refer to Exhibit B, Site Location Map and Site Sketch.

One 20,000 gallon diesel fuel UST and two 12,000 gallon gasoline USTs were removed from a single excavation measuring 43' in length, 36' in width and 14' in depth, on January 5, 1999. The soil within the excavation is a brown fine to medium sand with gravel and small cobbles. No groundwater was encountered in the excavation.

Minor staining was observed along the fuel lines next to the gasoline UST #1. A total of approximately 8 yards of soil was excavated and stockpiled.

The results from the field screening of samples collected from the sidewalls, bottom and overburden stockpile indicated no apparent petroleum contamination. However, the soil excavated from beneath the fuel lines next to the gasoline UST #2 appeared to be contaminated. Field screening from the samples collected were inconclusive. The soil appeared to be stained and had an odor of possible petroleum contamination.

A visual inspection of the three UST's revealed no indication of holes or apparent leakage.

13.0 SAMPLING PROCEDURES

The sampling plan (Exhibit B) and the attached field-sampling log (Exhibit D) show the location, depth and type of samples taken. In general sample collection and control followed the following protocol:

Select a laboratory certified clean sample jar for sample collection.

Using clean latex gloves and clean sampling utensils (tri-sodium phosphate, chlorine solution, tap water rinse and distilled water rinse cycle) tightly pack the soil sample in the sample jar (4 oz.) to the top of the jar to prevent any airspace.

Label the jar with the soil sample number, the type of laboratory test required, the date, name of site and sampler. The sample is then entered on the chain of custody form.

Cool the sample in wet ice to approximately 4 degrees centigrade.

Repack the samples for shipment to the laboratory in blue ice and a cooler.

Relinquish sample to courier for shipment to the laboratory.

14.0 SAMPLE SCREENING

For field analysis of semi-volatile (diesel) and non-volatile compounds (motor oil), WSI uses Thin Layer Chromatography (TLC) for qualitative and quantitative analysis. This analytical technique utilizes the principle of chromatography to separate individual components for comparison to known standards.

TLC is classified as a solid-liquid chromatographic system, meaning there are two phases through which an extract of the sample is passed; a solid phase (silica gel) and a liquid phase (a solvent such as hexane).

The solid phase is stationary and is coated on a glass plate. During the chromatography process, the liquid phase carries the sample through the solid phase. The solvent moves at a fairly constant rate through the solid phase. However, the compound in the sample (analyte) are partitioned by a relative attractiveness of the analyte between the solid phase and the liquid phase. Analytes strongly attracted to the silica will remain on the silica longer and move more slowly than analytes that are not as strongly attracted to the silica. When the chromatography is stopped, the distance the analyte has moved relative to the distance the solvent has moved is used to identify the compound. When the plate is viewed under ultraviolet light, the analytes can be seen and compared to standards of known concentration for quantitative analysis.

For field analysis of compounds containing volatile organic, WSI uses a Foxboro Organic Vapor Analyzer (OVA) in conjunction with the interim headspace method as recommended by the manufacturer. This method is used to confirm the presence or absence of volatile components in the soil and provides only a rough indication of the contaminant concentrations. The analysis procedure involves:

Selecting a clean, wide mouth jar (1 qt.) and filling the bottom 1/3 with a discrete soil sample.

Place aluminum foil over the top of the jar and place a ring over the jar to create a seal.

Boil the sample for 10 minutes. This causes the volatile compounds to become vapors and collect in the space above the soil.

Remove the sample from the boiling water and insert the instrument probe through the aluminum foil for vapor analysis.

Record the instrument response on the Field Form.

FIELD SCREENING RESULTS FIELD SCREENING RESULTS

Results are in parts per million (ppm)

SAMPLE NUMBER	LOCATION/DEPTH	TLC	OVA
PPC-0391-201sp	Stockpile	NT	50
PPC-0391-202sp	Stockpile	NT	125
PPC-0391-203sp	Stockpile	NT	60
PPC-0391-204	East sidewall 5'	NT	ND
PPC-0391-205	West sidewall 5'	ND	ND
PPC-0391-206	South sidewall 5'	ND	ND
PPC-0391-207	North sidewall 5'	ND	ND
PPC-0391-208D	Gasoline Dispenser 3' /	NT	ND
PPC-0391-209D	Diesel Fuel Dispenser 3'	ND	NT
PPC-0391-210	Bottom Gasoline UST #1 16'	ND	ND
PPC-0391-211	Bottom Diesel Fuel UST 16'	ND	NT
PPC-0391-212	Bottom Gasoline UST #2 16'	NT	ND
PPC-0391-213D	Gasoline Dispenser 3'	NT	ND
PPC-0391-214D	Diesel Fuel Dispenser 3'	ND	NT

NT=Not Tested

ND=Non Detect

15.0 LABORATORY RESULTS

On January 5, 1999 the samples were delivered to OnSite Environmental, Redmond, WA. The following table summarizes the laboratory results. The laboratory reports are included in Exhibit C

LABORATORY ANALYTICAL RESULTS
Results are in parts per million (ppm)

SAMPLE NUMBER	LOCATION/DEPTH	NWTPH-Dx		NWTPH-G	B	T	E	X
		DEISEL FUEL	HEAVY OIL					
PPC-0391-201sp PPC-0391-202sp	Stockpile	NT	NT	ND	ND	ND	ND	ND
PPC-0391-203sp	Stockpile	NT	NT	ND	ND	ND	ND	ND
PPC-0391-204	East sidewall 5'	NT	NT	ND	ND	ND	ND	ND
PPC-0391-206	South sidewall 5'	NT	NT	ND	ND	ND	ND	ND
PPC-0391-205	West sidewall 5'	NT	NT	ND	ND	ND	ND	ND
PPC-0391-206	South sidewall 5'	NT	NT	ND	ND	ND	ND	ND
PPC-0391-208D PPC-0391-213D	Gasoline Dispenser #1 Gasoline Dispenser #2	NT	NT	ND	ND	ND	ND	ND
PPC-0391-210	Bottom Gasoline UST #1 16'	NT	NT	ND	ND	ND	ND	ND
PPC-0391-211	Bottom Gasoline UST #2 16'	NT	NT	ND	ND	ND	ND	ND
PPC-0391-212	Bottom Deisel Fuel UST 16'	ND	ND	NT	NT	NT	NT	NT
PPC-0391-204 PPC-0391-207	East sidewall @ 5' North sidewall @5'	ND	ND	NT	NT	NT	NT	NT
PPC-0391-209D	Diesel Fuel dispenser #1 @3'	ND	ND	NT	NT	NT	NT	NT
PPC-0391-214D	Diesel Fuel dispenser #1 @3'	ND	ND	NT	NT	NT	NT	NT
PPC-0391-205	West sidewall @5'	ND	ND	NT	NT	NT	NT	NT
PPC-0391-207	North sidewall @ 5	ND	ND	NT	NT	NT	NT	NT

NWTPH-Dx = Northwest Total Petroleum Hydrocarbons, Diesel extended

NWTPH-G = Northwest Total Petroleum Hydrocarbons, Gasoline

B = Benzene

T = Toluene

E = Ethyl benzene

X = Total Xylenes

16.0 BACKFILLING

The excavation was back-filled once laboratory results were received on January 20, 1999.

17.0 DISPOSAL

17.1 DISPOSAL OF THE TANKS

Petroleum Pump Company Inc., inerted, cleaned and decommissioned the UST. The UST was transported to Pacific Steel in Kennewick, WA. to recycle the steel.

17.2 SOIL DISPOSAL

Approximately eight cubic yards of possible contaminated soil generated from the excavation activities were transported by Petroleum Pump Company Inc. to the Lower Valley Remediation facility Mabton, WA.

18.0 CONCLUSION

18.1 SOIL ANALYSIS SUMMARY

Analytical laboratory results disclosed that there was no petroleum contamination exceeding the MTCA Method A Cleanup Levels in the excavation or in the stockpile generated during the excavation of the UST's.

Approximately 8 cubic yards of possible contaminated soil was generated during the excavation activities. Laboratory analyses revealed that the contamination was below detection limits. Petroleum Pump Company Inc. transported the contaminated soil to Lower Valley Remediation, Mabton, WA. for disposal.

18.2 RECOMMENDATION

White Shield, Inc., recommends no further action for this site.

19.0 LIMITATIONS

In performing our professional services, WSI uses a degree of care ordinarily exercised under similar circumstances by members of our profession. No warranty, expressed or implied, is made or intended. Our conclusions and recommendations, developed from our field and laboratory investigation reported herein, are based upon this firm's understanding of the project and are in concurrence with generally accepted practice.



UNDERGROUND STORAGE TANK Closure and Site Assessment Notice

FOR OFFICE USE ONLY	
ID #:	_____
Owner ID #:	_____

See back of form for instructions

Please the appropriate box(es)

- Temporary Tank Closure
 Change-In-Service
 Permanent Tank Closure
 Site Check/Site Assessment

Site Information

Owner Information

(This form will be returned to this address)

Site ID Number 3683 UST Owner/Operator Benton County Roads
(Available from Ecology if the tanks are registered)
Site/Business Name Benton County Roads Mailing Address 620 Market Street
Street
Site Address Intersection of 9th St. & Sheridan Ave. Box #1001
Street P.O. Box
City/State Prosser, WA City/State Prosser, WA
Zip Code 99350 Telephone (____) _____ Zip Code 99350 Telephone (____) _____

Owner's Signature _____

Tank Closure/Change-In-Service Company

Service Company Petroleum Pump
Certified Supervisor James Christensen Decommissioning Certification No. 1039398-26
Supervisor's Signature James Christensen
Address PETROLEUM PUMP CO., INC. P.O. Box _____
Street 23 W. COLUMBIA DR.
City KENNEWICK, WA 99336 Telephone (____) _____
State Zip Code _____
(509) 586-4151

Site Check/Site Assessor

Certified Site Assessor RICK FUNDERBURK
Address 601 GRANDIDGE ROAD P.O. Box _____
Street
City GRANDVIEW State WA Zip Code 98930 Telephone (509) 882-1144
City State Zip Code

Tank Information

Tank ID	Closure Date	Closure Method	Tank Capacity	Substance Stored
Area I-1	1/5/99	Removal	12,000	Gasoline
Area I-2	1/5/99	Removal	12,000	Gasoline
Area I-3	1/5/99	Removal	20,000	Diesel Fuel

Contamination Present at the Time of Closure

Yes No Unknown
Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.

Yes No
If contamination is present, has the release been reported to the appropriate regional office?

Instructions

Please Read Carefully

AFTER COMPLETING THIS FORM, RETURN TO:

TOXICS CLEANUP PROGRAM
DEPARTMENT OF ECOLOGY
P.O. BOX 47655
OLYMPIA, WA 98504-7655

This form is to be completed by the tank owner and submitted to Ecology within 30 days of tank closure. Mark the appropriate box(es) for temporary tank closure, permanent tank closure, change-in-service, or site assessment.

Permanent Closure and Change-In-Service require a site assessment be performed.

Site and Owner Information

Fill in the site and owner information. Include the Ecology site number, if known; also, be sure to provide telephone numbers so that any problems can be resolved quickly. The tank owner **MUST** sign this form.

Tank Closure/Change-In-Service Company and Site Check/Site Assessor

List the closure company and fill in the site assessor information for permanent closure or change-in-service. Ask to see the closure company supervisor's IFCI Certification and make sure that the certified supervisor signs this form.

Please note: Individuals performing services **MUST** be certified by the International Fire Code Institute (IFCI), or other nationally recognized association by which they demonstrate appropriate knowledge pertaining to USTs or have passed another qualifying exam approved by the Department.

Tank Information and Contamination Present at Time of Closure

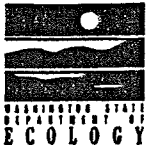
Please fill in the tank information requested using tank ID numbers previously reported to Ecology. In the column entitled "Closure Method," indicate what manner of closure was used, such as closure in place or removal. Check the appropriate box(es) indicating if contamination is present and has been reported. Contamination found or suspected at the site must be reported to the appropriate Ecology regional office within 24 hours [see below for telephone numbers]. **If contamination is confirmed, a site characterization report must be submitted to the regional office within 90 days; if contamination is not confirmed, then this form, a site assessment checklist, and a site assessment report must be submitted to the above address within 30 days.**

Central	Eastern	Southwest	Northwest
(509) 574-2490 (voice)	(509) 456-2926 (voice)	(360) 407-6300 (voice)	(206) 649-7000 (voice)
(509) 454-7673 (TDD)	(509) 458-2055 (TDD)	(360) 407-6306 (TDD)	(206) 649-4259 (TDD)

The following tanks are exempt from notification requirements:

- ❖ Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must not be for resale or used for business purposes.
- ❖ Tanks used for storing heating oil that is used on the premises where the tank is located.
- ❖ Tanks with a capacity of 110 gallons or less.
- ❖ Equipment or machinery tanks such as hydraulic lifts or electrical equipment tanks.
- ❖ Emergency overflow tanks, catch basins, or sumps.

For more information, call toll free in the state of Washington 1-800-826-7716 (Message).



UNDERGROUND STORAGE TANK Site Check / Site Assessment Checklist

FOR OFFICE USE ONLY	
/ #:	_____
Owner #:	_____

INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by IFCI or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSEMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This form must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section
Department of Ecology
PO Box 47655
Olympia WA 98504-7655

SITE INFORMATION

Site ID Number (Available from Ecology if the tanks are registered): 3683

Site/Business Name: Benton County Roads

Site Address: Intersection of 9th Street and Sheridan Avenue Telephone: ()

Prosser Street WA 99350

City State Zip Code

TANK INFORMATION

	Tank ID No.	Tank Capacity	Substance Stored
AREA	I-1	12,000	Gasoline
AREA	I-2	12,000	Gasoline
AREA	I-3	20,000	Diesel Fuel

REASON FOR CONDUCTING SITE CHECK / SITE ASSESSMENT

Check one:

- Investigate suspected release due to on-site environmental contamination.
- Investigate suspected release due to off-site environmental contamination.
- Extend temporary closure of UST system for more than 12 months.
- UST system undergoing change-in-service.
- UST system permanently closed-in service.
- UST system permanently closed with tank removed.
- Abandoned tank containing product.
- Required by Ecology or delegated agency for UST system closed before 12/22/88.
- Other (describe): _____

CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	YES	NO
1. The location of the UST site is shown on a vicinity map.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A summary of UST system data is provided. (see Section 3.1.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. The soils characteristics at the UST site are described. (see Section 5.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Is there any apparent groundwater in the tank excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. A brief description of the surrounding land use is provided. (see Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- groundwater samples distinguished from soil samples (if applicable)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- samples collected from stockpiled excavated soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- tank and piping locations and limits of excavation pit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- adjacent structures and streets	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- approximate locations of any on-site and nearby utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Any factors that may have compromised the quality of the data or validity of the results are described.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SITE ASSESSOR INFORMATION

Rick Funderburk

Person registered with Ecology

White Shield, Inc.

Firm Affiliated with

Business Address: 801 Grandridge Road,

Telephone: (509) 882-1144

Grandview

Street

WA

98930

City

State

Zip Code

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

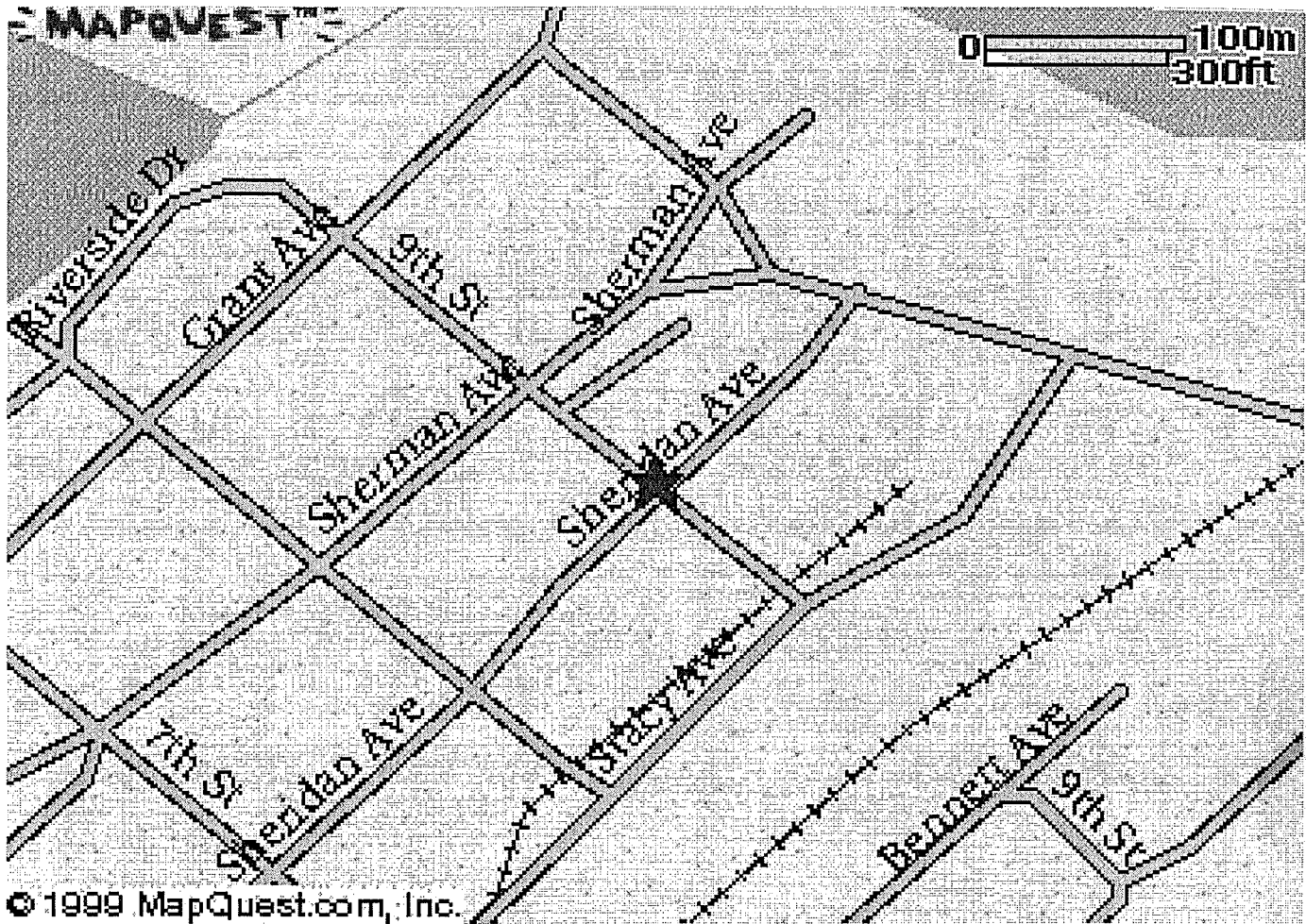
5/14/99

Date

Signature of Person Registered with Ecology

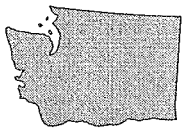
MAPQUEST

0 100m
300ft



© 1999 MapQuest.com, Inc.

WSI
▲▲▲



Quadrangle Location

SITE MAP

**Benton County Roads Dept.
9th Street & Sheridan Ave.
Prosser, WA 99350**

DATE:
May 14, 1999

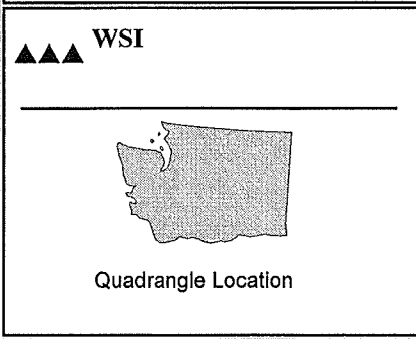
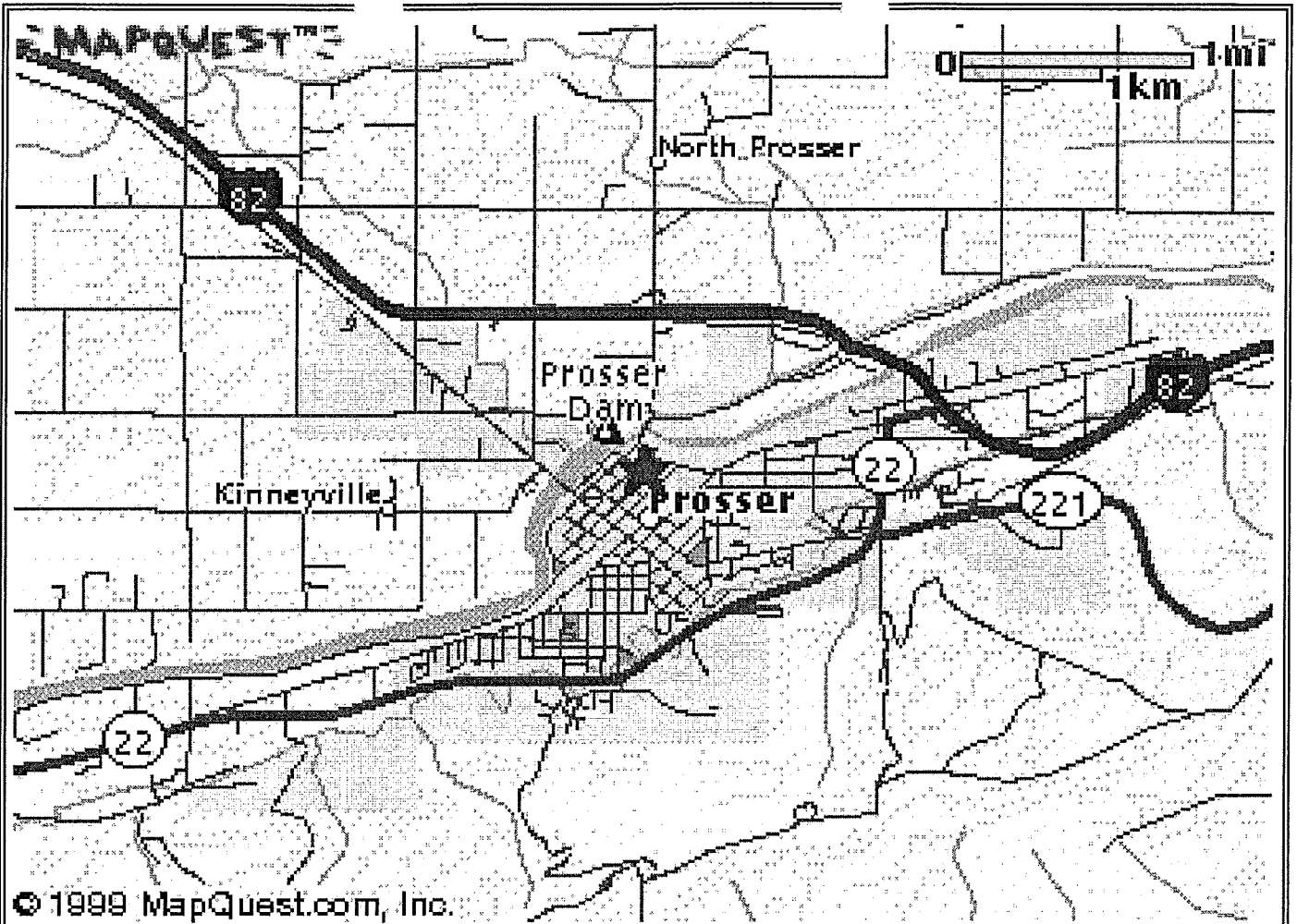
Mounted By:
GV

Reviewed By:
RF

SCALE:
As Shown

EXHIBIT B

Job No: 199-091-01



SITE LOCATION MAP

Benton County Roads Dept.
9th Street & Sheridan Ave.
Prosser, WA 99350

DATE:
May 14, 1999

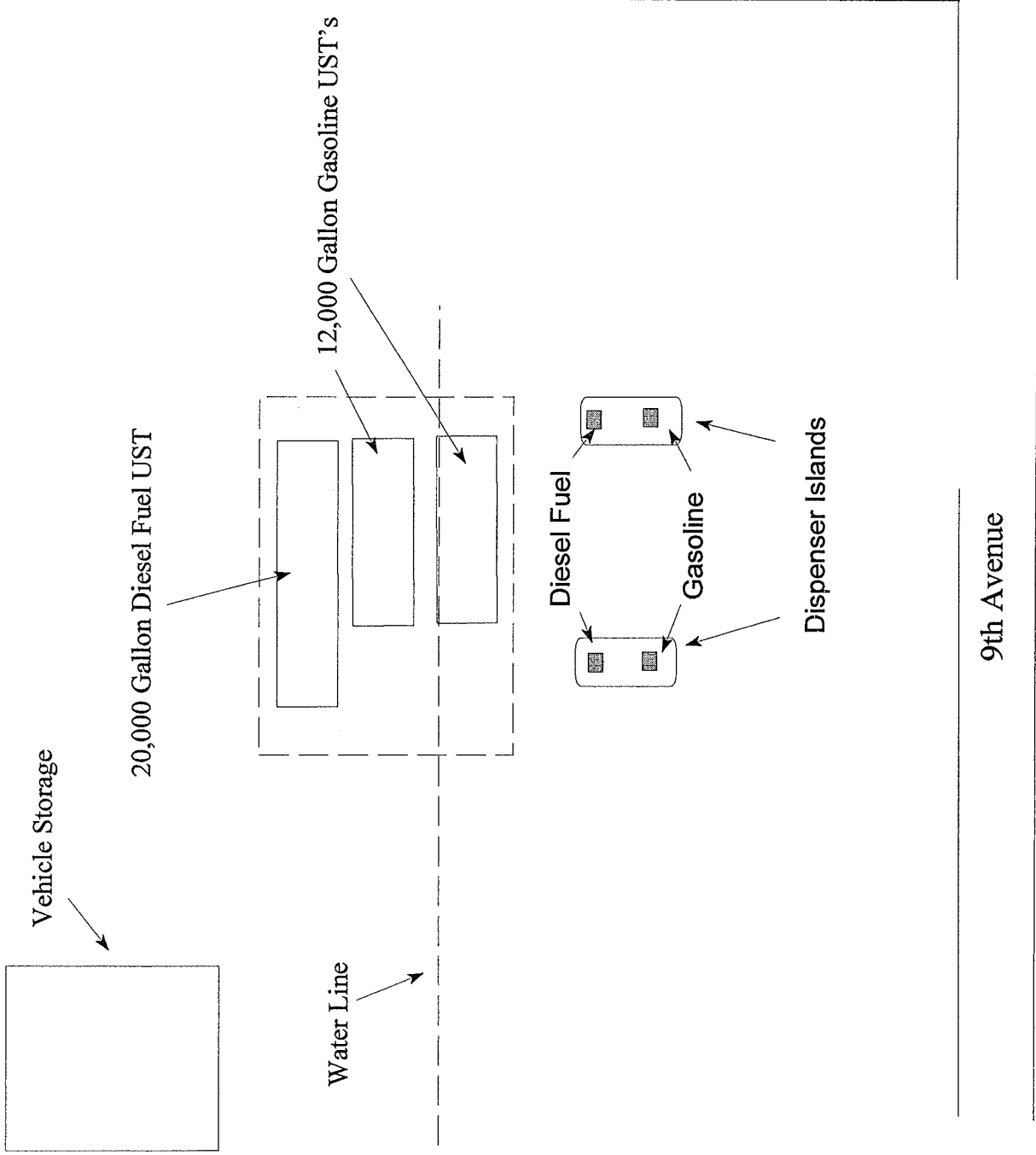
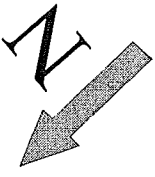
Mounted By:
GV

Reviewed By:
RF

SCALE:
As Shown

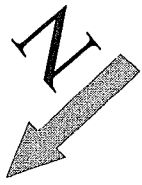
EXHIBIT B

Job No: 199-091-01

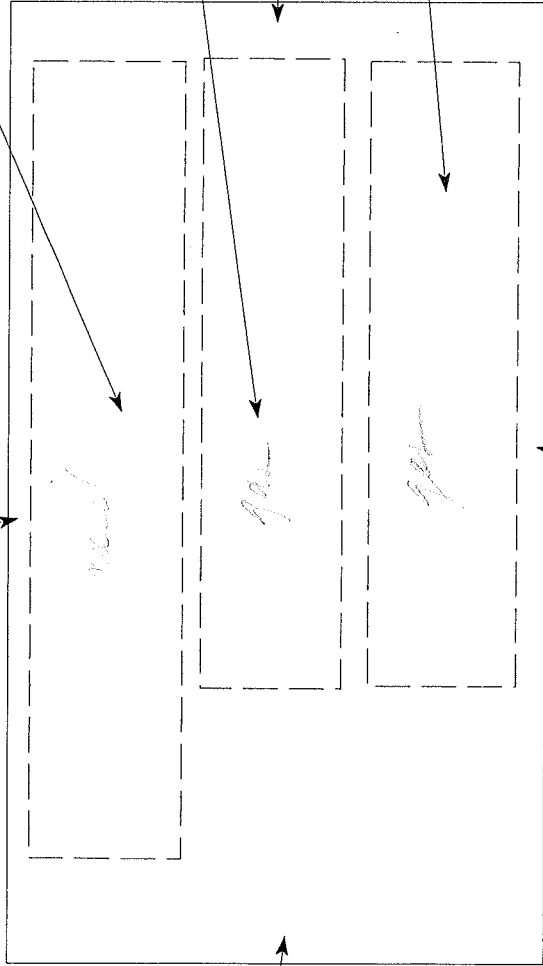


Sheridan

Benton County Roads Department
Site Location Sketch
9th and Sheridan
Prosser, WA



PPC-3198-207



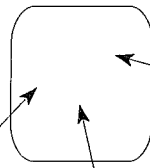
PPC-3198-211

PPC-3198-205

PPC-3198-204

PPC-3198-212

PPC-3198-203sp



PPC-3198-206

PPC-3198-202sp

PPC-3198-201sp



PPC-3198-214D

PPC-3198-209D

PPC-3198-213D

PPC-3198-208D

January 15, 1999

Rick Funderburk
White Shield, Inc.
P.O. Box 477
Grandview, WA 98930

Re: Analytical Data for Project PPC-3198
Laboratory Reference No. 9901-040

Dear Rick:

Enclosed are the analytical results and associated quality control data for samples submitted on January 9, 1999.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Chemist

Enclosures

Date of Report: January 15, 1999
 Samples Submitted: January 9, 1999
 Lab Traveler: 01-040
 Project: PPC-3198

NWTPH-G/BTEX

Date Extracted: 1-11-99
 Date Analyzed: 1-11-99

Matrix: Soil
 Units: mg/Kg (ppm)

Client ID: **PPC-3198-201SP&PPC-3198-202SP** **PPC-3198-203SP**
 Lab ID: 01-040-01,02 COMP. 01-040-03

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.26	ND		0.054
Toluene	ND		0.26	ND		0.054
Ethyl Benzene	ND		0.26	ND		0.054
m,p-Xylene	ND		0.26	ND		0.054
o-Xylene	ND		0.26	ND		0.054
TPH-Gas	ND		26	ND		5.4
Surrogate Recovery: Fluorobenzene	83%			102%		

Date of Report: January 15, 1999
 Samples Submitted: January 9, 1999
 Lab Traveler: 01-040
 Project: PPC-3198

NWTPH-G/BTEX

Date Extracted: 1-11-99
 Date Analyzed: 1-11-99

Matrix: Soil
 Units: mg/Kg (ppm)

Client ID: **PPC-3198-204&PPC-3198-206** **PPC-3198-205&PPC-3198-206**
 Lab ID: 01-040-04,06 COMP. 01-040-05,06 COMP.

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.053	ND		0.056
Toluene	ND		0.053	ND		0.056
Ethyl Benzene	ND		0.053	ND		0.056
m,p-Xylene	ND		0.053	ND		0.056
o-Xylene	ND		0.053	ND		0.056
TPH-Gas	ND		5.3	ND		5.6
Surrogate Recovery: Fluorobenzene	92%			99%		

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

NWTPH-G/BTEX

Date Extracted: 1-11-99
Date Analyzed: 1-11-99

Matrix: Soil
Units: mg/Kg (ppm)

Client ID: **PPC-3198-208D&PPC-3198-213D** **PPC-3198-210**
Lab ID: 01-040-08,09 COMP. 01-040-12

	Result	Flags	PQL	Result	Flags	PQL
Benzene	ND		0.057	ND		0.057
Toluene	ND		0.057	ND		0.057
Ethyl Benzene	ND		0.057	ND		0.057
m,p-Xylene	ND		0.057	ND		0.057
o-Xylene	ND		0.057	ND		0.057
TPH-Gas	ND		5.7	ND		5.7
Surrogate Recovery: Fluorobenzene	85%			94%		

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

NWTPH-G/BTEX

Date Extracted: 1-11-99
Date Analyzed: 1-11-99

Matrix: Soil
Units: mg/Kg (ppm)

Client ID: **PPC-3198-212**
Lab ID: 01-040-14

	Result	Flags	PQL
Benzene	ND		0.053
Toluene	ND		0.053
Ethyl Benzene	ND		0.053
m,p-Xylene	ND		0.053
o-Xylene	ND		0.053
TPH-Gas	ND		5.3
Surrogate Recovery: Fluorobenzene	95%		

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

**NWTPH-G/BTEX
METHOD BLANK QUALITY CONTROL**

Date Extracted: 1-11-99

Date Analyzed: 1-11-99

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: MB0111S1

	Result	Flags	PQL
Benzene	ND		0.050
Toluene	ND		0.050
Ethyl Benzene	ND		0.050
m,p-Xylene	ND		0.050
o-Xylene	ND		0.050
TPH-Gas	ND		5.0
Surrogate Recovery: Fluorobenzene	113%		

7

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

**NWTPH-G/BTEX
DUPLICATE QUALITY CONTROL**

Date Extracted: 1-11-99
Date Analyzed: 1-11-99

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID:	01-039-1 Original	01-039-1 Duplicate	RPD	Flags
Benzene	ND	ND	NA	
Toluene	ND	ND	NA	
Ethyl Benzene	ND	ND	NA	
m,p-Xylene	ND	ND	NA	
o-Xylene	ND	ND	NA	
TPH-Gas	ND	ND	NA	
Surrogate Recovery:				
Fluorobenzene	103%	100%		

Date of Report: January 15, 1999
 Samples Submitted: January 9, 1999
 Lab Traveler: 01-040
 Project: PPC-3198

**NWTPH-G/BTEX
 MS/MSD QUALITY CONTROL**

Date Extracted: 1-8-99
 Date Analyzed: 1-8-99

Matrix: Soil
 Units: mg/Kg (ppm)

Spike Level: 1.00 ppm

Lab ID:	01-027-01 MS	Percent Recovery	01-027-01 MSD	Percent Recovery	RPD
Benzene	0.836	84	0.866	87	3.6
Toluene	0.857	86	0.892	89	3.9
Ethyl Benzene	0.862	86	0.896	90	3.9
m,p-Xylene	0.861	86	0.894	89	3.8
o-Xylene	0.859	86	0.885	88	2.9

Surrogate Recovery:
 Fluorobenzene 81% 84%

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

NWTPH-Dx

Date Extracted: 1-11-99
Date Analyzed: 1-12&13-99

Matrix: Soil
Units: mg/Kg (ppm)

Client ID:	PPC-3198-204,207	PPC-3198-205,207	PPC-3198-209D,214D
Lab ID:	01-040-04,07	01-040-05,07	01-040-10,11

Diesel Fuel:	ND	ND	ND
PQL:	27	28	29

Heavy Oil:	ND	ND	ND
PQL:	54	57	57

Surrogate Recovery:			
o-Terphenyl	89%	92%	88%

Flags:

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

NWTPH-Dx

Date Extracted: 1-11-99
Date Analyzed: 1-12&13-99

Matrix: Soil
Units: mg/Kg (ppm)

Client ID: PPC-3198-211
Lab ID: 01-040-13

Diesel Fuel: ND
PQL: 27

Heavy Oil: ND
PQL: 54

Surrogate Recovery:
o-Terphenyl 88%

Flags:

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

**NWTPH-Dx
METHOD BLANK QUALITY CONTROL**

Date Extracted: 1-11-99
Date Analyzed: 1-11-99

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: MB0111S1

Diesel Fuel: ND
PQL: 25

Heavy Oil: ND
PQL: 50

Surrogate Recovery:
o-Terphenyl 110%

Flags:

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

**NWTPH-Dx
DUPLICATE QUALITY CONTROL**

Date Extracted: 01-11-99
Date Analyzed: 01-11-99

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 01-037-06 01-037-06 DUP

Diesel Fuel: ND ND
PQL: 25 25

RPD: N/A

Surrogate Recovery:
o-Terphenyl 97% 89%

Flags:

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted: 1-11-99
Date Analyzed: 1-13-99

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 01-040-13 01-040-13 DUP

Diesel Fuel: ND ND
PQL: 25 25

RPD: N/A

Surrogate Recovery:
o-Terphenyl 88% 90%

Flags:

Date of Report: January 15, 1999
Samples Submitted: January 9, 1999
Lab Traveler: 01-040
Project: PPC-3198

Date Analyzed: 1-11-99

% MOISTURE

Client ID	Lab ID	% Moisture
PPC-3198-201sp	01-040-01	3.0
PPC-3198-202sp	01-040-02	6.0
PPC-3198-203sp	01-040-03	7.0
PPC-3198-204	01-040-04	4.0
PPC-3198-205	01-040-05	15
PPC-3198-206	01-040-06	7.0
PPC-3198-207	01-040-07	10
PPC-3198-208D	01-040-08	13
PPC-3198-213D	01-040-09	14
PPC-3198-209D	01-040-10	14
PPC-3198-214D	01-040-11	12
PPC-3198-210	01-040-12	13
PPC-3198-211	01-040-13	8.0
PPC-3198-212	01-040-14	5.0



DATA QUALIFIERS AND ABBREVIATIONS

- A - Due to high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- D - Data from 1:____ dilution.
- E - The value reported exceeds the quantitation range, and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- G - Insufficient sample quantity for duplicate analysis.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- M - Predominantly _____ range hydrocarbons present in the sample.
- N - Hydrocarbons in the gasoline range (C7-toluene) are present in the sample.
- O - Hydrocarbons in the heavy oil range (>C24) are present in the sample.
- P - Hydrocarbons in the diesel range (C12-C24) are present in the sample which are elevating the oil result.
- Q - The RPD of the results between the two columns is greater than 25.
- R - Hydrocarbons outside the defined gasoline range are present in the sample; NWTPH-Dx recommended.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- X - Sample underwent silica gel cleanup procedures.
- Y - Sample underwent acid cleanup procedures.
- Z - Interferences were present which prevented the quantitation of the analyte below the detection limit reported.
- ND - Not Detected
MRL - Method Reporting Limit
PQL - Practical Quantitation

10:00 DEPARTED OFFICE.

10:20 ARRIVED ON SITE. DIESEL UST HAS BEEN REMOVED AND HAULED OFF SITE.
STAININGS OBSERVED AROUND ALL SPOTS ON BOTH GASOLINE USTs.
BEGAN EXCAVATING FOR REMOVAL OF GASOLINE USTs.

ENCOUNTERED WATER LINE ALONG THE TOP OF THE GASOLINE UST. CONTACTED
IRRIGATION DISTRICT.

REMOVED GASOLINE UST. LOADED ON THE UST on TRAILER.

EXCAVATED SOIL FROM TOP OF AER LINES NEXT TO UST #2.

WILL WAIT AND SAMPLE TOXICOLOGY ONCE ALL USTs ARE
REMOVED.

DEPARTED SITE.

XSD Arrived on site. Setup equipment. Begin sampling.
Sample sidewalks. Brown fine to medium sands with GRAVEL
AND small rocks from 1-16'. No GW present.
Removed soil next to gasoline VST. Some STRONG
OBSERVED.

Field subsampling of fine soil stockpile is inconclusive.
Will take this soil to lower valley remediation for
DISPOSAL.

Concrete was removed from dispenser islands.
Begin sampling beneath dispensers. No apparent
contamination present.

Will wait till lab results prior to backfilling.

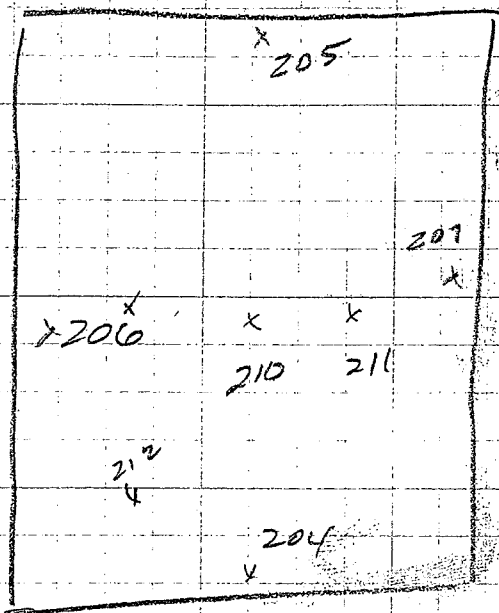
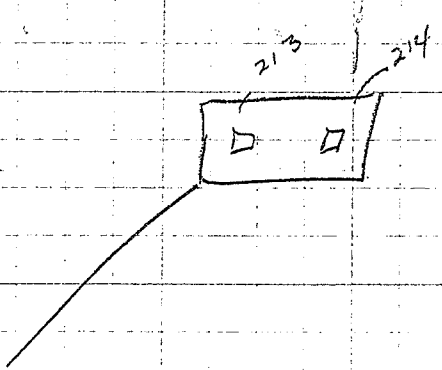
Excavations appears to be free of contamination.

Loaded equipment departed site.

Sample #	Location / Depth	DVA	TCC	odor
TPC-3198-201sp	STOCKPILE	~50	NT	YES
-202sp		~105	NT	
-203sp		~60	NT	
-204	ESW 5'	ND	NT	NO
-205	NSW 5'	ND	ND	NO
-206	SSW 5'	ND	ND	NO
-207	NSW 5'	ND	ND	NO
-208D	GASOLINE Dispenser 3'	ND	NT	ND
-209D	DIESEL Dispenser 3'	NT	ND	ND
-210	Bottom GASOLINE #2 16'	ND	NT	NO
-211	Bottom DIESEL Fuel 16'	NT	ND	NO
-212	Bottom GASOLINE #1 16'	ND	NT	NO
-213D	GASOLINE Dispenser 3'	ND	NT	ND
-214D	DIESEL Fuel Dispenser	NT	ND	NO

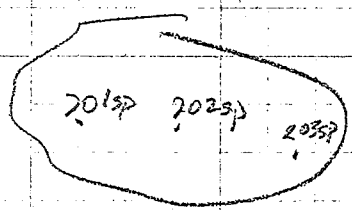
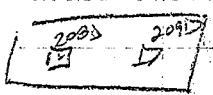


USE
EXCAVATION



N/A

DISASTER
ISLANDS



Device
Storage
Area

USE
LOCATION

Vent

Vent
Lashes

Pipe

Canopy

4+6

Table 2
Method A Cleanup Levels - Soil^a

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20.0 mg/kg ^b
Benzene	71-43-2	0.5 mg/kg ^c
Cadmium	7440-43-9	2.0 mg/kg ^d
Chromium	7440-47-3	100.0 mg/kg ^e
DDT	50-29-3	1.0 mg/kg ^f
Ethylbenzene	100-41-4	20.0 mg/kg ^g
Ethylene dibromide	106-93-4	0.001 mg/kg ^h
Lead	7439-92-1	250.0 mg/kg ⁱ
Lindane	58-89-9	1.0 mg/kg ⁱ
Methylene chloride	75-09-2	0.5 mg/kg ^k
Mercury (inorganic)	7439-97-6	1.0 mg/kg ^l
PAHs (carcinogenic)		1.0 mg/kg ^m
PCB Mixtures		1.0 mg/kg ⁿ
Tetrachloroethylene	127-18-4	0.5 mg/kg ^o
Toluene	108-88-3	40.0 mg/kg ^p
TPH (gasoline)		100.0 mg/kg ^q
TPH (diesel)		200.0 mg/kg ^r
TPH (other)		200.0 mg/kg ^s
1,1,1 Trichloroethane	71-55-6	20.0 mg/kg ^t
Trichloroethylene	79-01-5	0.5 mg/kg ^u
Xylenes	1330-20-7	20.0 mg/kg ^v

^a Caution on misusing method A tables. Method A tables have been developed for specific purposes. They are intended to provide conservative cleanup levels for sites undergoing remedial cleanup actions or those sites with relatively few hazardous substances. The tables may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in these tables should not automatically be used to define cleanup levels that must be met for financial transactions, real estate, insurance coverage or placement, or similar transactions or purposes. Exceeding the values in these tables do not necessarily trigger requirements for cleanup action under this chapter.

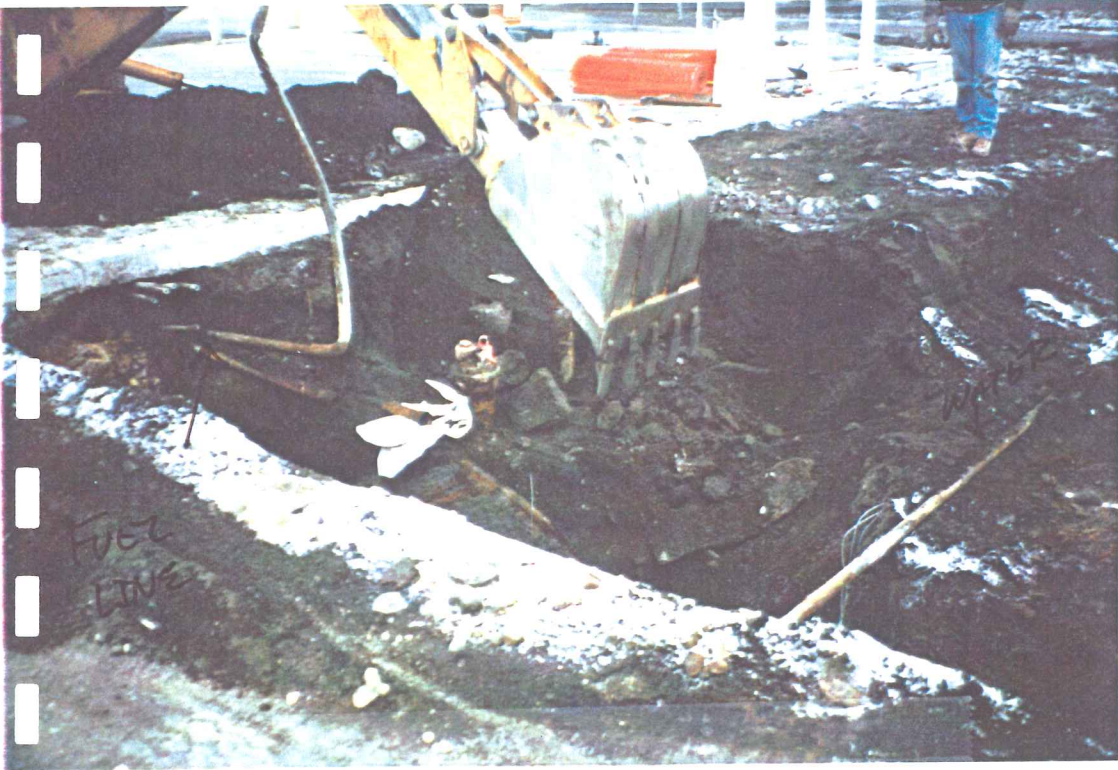
- ^b Arsenic. Cleanup level based on background concentrations in the state of Washington.
- ^c Benzene. Cleanup level based on protection of ground water.
- ^d Cadmium. Cleanup level based on plant protection.
- ^e Chromium. Cleanup level based on health risks associated with inhalation of resuspended particulates.
- ^f DDT. Cleanup level based on concentrations derived using the procedures in subsection (3)(a)(iii)(B) of this section.
- ^g Ethylbenzene. Cleanup level based on protection of ground water.
- ^h Ethylene dibromide. Cleanup level based on protection of ground water.
- ⁱ Lead. Cleanup level based on preventing unacceptable blood lead levels.



Photograph No: 1
UST excavation upon arrival.
The diesel fuel UST had been
removed prior to approval.



Photograph No. 2: Bottom of
UST excavation. Sample
locations for #PPC-3198-210 and
211. Bottom of diesel fuel UST
and gasoline UST #2.



Photograph No. 3: Gasoline UST #1 and fuel lines being exposed.