Job No: 194-2068
HNP0036R.ENV

REPORT
OF

PHASE II ENVIRONMENTAL ASSESSMENT
Ryder Truck Rental, Inc.
19 West Washington Street
Yakima, Washington

Prepared for:

Ryder Truck Rental, Inc.
Mr. George Luostari
250 Praire Center Drive, Suite 125
Eden Prairie, Minnesota 55344

Prepared by:

HUNTINGDON ENGINEERING AND ENVIRONMENTAL,INC.
Consulting Engineers & Scientists
2214 North 4th Avenue
Pasco, Washington
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October, 1994

PHASE II ENVIRONMENTAL ASSESSMENT

RYDER TRUCK RENTALS, INC.
YAKIMA, WASHINGTON
JOB NO. 194-2068
SEPTEMBER, 1994

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EXECUTIVE SUMMARY

At the request of Mr. George Luostari of Ryder Truck Rental, Inc., Huntingdon has completed a Phase II Site Assessment for the Ryder Truck Rental facility, 17 West Washington Avenue, Yakima Washington. This report presents the assessment findings on the extent and magnitude of subsurface petroleum hydrocarbon contamination discovered at the subject site.

The purpose of this project is to assist responsible parties in complying with the current Washington State Department of Ecology (WDOE) regulations and guidelines for independent assessment of subsurface conditions impacted by petroleum hydrocarbons. Site specific objectives included: 1) reviewing previous assessment work for characterization purposes, 2) drilling and installing six monitoring wells, 3) verifying the extent and the magnitude of hydrocarbon release using field observations and confirmational laboratory sampling, 4) evaluating possible remedial/monitoring actions applicable to observed site conditions, and 5) reporting. These site specific objectives have been achieved.

Laboratory analysis indicates petroleum hydrocarbons exist at elevated concentrations in soil and groundwater. This contamination was characterized as diesel fuel or possibly heavier hydrocarbon compounds above Washington State Department of Ecology action levels.

The presence of contamination above state action levels requires evaluation of remediation/groundwater monitoring plan alternatives. Huntingdon recommends a check of the components of the site fuel delivery system. We recommend the initiation of quarterly monitoring to evaluate changes in hydrocarbon constituents in groundwater. Monitoring also is desired to evaluate yearly changes in groundwater elevation to choose a time during lowest groundwater for excavation of contaminated subsoils. This action could take place with tank upgrading/decommissioning prior to 1998.

Huntingdon recommends that the WDOE be notified as to the current conditions that exist at the subject site. Notification can be completed by filing this report with the WDOE Central Region.

1.0 PROJECT DESCRIPTION

1.1 Introduction

At the request of Mr. George Luostari of Ryder Truck Rental, Inc., Huntingdon has completed phase II investigation activities for the Ryder Truck Rental facility, 19 West Washington Street, Yakima, Washington. This report presents the assessment findings on the extent and magnitude of subsurface petroleum hydrocarbon contamination discovered at the subject site during our investigation.

1.2 Purpose and Scope

The purpose of this project was to assist responsible parties in complying with current Washington State Department of Ecology (WDOE) regulations and guidelines for independent assessment of sites impacted by petroleum hydrocarbons. Site specific objectives included: 1) preparation of a site specific site safety plan, 2) drill and install six monitoring wells, 3) verifying the extent and the magnitude of hydrocarbon release using field observations and confirmational laboratory sampling, 4) evaluating possible remedial/monitoring actions applicable to observed site conditions, and 5) reporting.

The following scope of services was performed for this assessment:

- A site specific site safety plan was produced prior to beginning work at the site.
- An environmental professional and drill crew were mobilized to the subject site to drill six borings and install monitoring wells.
- The drill cuttings were examined for signs of contamination including visible free product, subsoil discoloration, and odor. Selected subsoil samples were screened with a photoionization detector (PID) to detect volatile organic vapor.
- Subsoil samples were collected from the borings for laboratory analysis. These samples were analyzed for (WTPH-HCID), a Washington State hydrocarbon identification method, total petroleum hydrocarbons (WTPH, EPA Method 418.1), and total petroleum hydrocarbons as diesel (TPH-D, EPA method 8015). Sampling locations were chosen based on field observations.
- Groundwater samples were collected from the monitoring wells for laboratory analysis. These samples were analyzed for total recoverable petroleum hydrocarbons (WTPH EPA Method 418.1) and for total petroleum hydrocarbons as diesel (TPH-D EPA method 8015). These analytical methods were choosen based on soil analytical evaluations.

- This report was prepared to summarize the field activities performed and the findings of the environmental assessment. The report renders our evaluation concerning the extent and magnitude of petroleum hydrocarbon contamination at the subject site and makes recommendations relative to remediation.

1.3 Project Background

In August of 1994 Huntingdon was contacted by Ryder Truck Rental,Inc. to provide a proposal for a phase II investigation at the Ryder site in Yakima, Washington. Ryder personnel indicated two underground storage tanks had been removed. One was removed from the north side of a vehicle manitaninace area with the second from inside the shop building under the floor. They related the location of currently existing underground storage tanks at the site as well as the location of environmental soil borings which had been completed to assess site conditions prior to the tank removals.

2.0 SITE CHARACTERISTICS

2.1 Site Description

The subject site is identified as the Ryder Truck Rental facility, 19 West Washington Avenue, Yakima, Washington. The present occupant of the property is Ryder Truck Rental, Inc. which may be contacted by mail at 250 Prairie Center Drive, Suite 125, Eden Prairie, Minnesota 55344 by phone at (612) 947-6250. The project contact is Mr. George Luostari. An approximate legal description is the southwest quarter of the northeast quarter of Section 31, Township 13 North, Range 19 East, Yakima County, Washington. Based on the USGS 7.5 minute series topographic map of the area (Yakima East Quadrangle), the latitude is 46 degrees 33 minutes 54 seconds north and the longitude is 120 degrees 29 minutes 49 seconds west. The approximate location is depicted in the Site Location Map (Figure 1). The subject site is bounded by the S.S. Steiner Company to the north, Zellerback and Yakima Brewing and Malting companies to the west, West Washington Street and the Golden Villa Mobile Park to the south, and the S.S. Steiner Company and Budget Rent a Car company to the east. The subject site hosts a large truck parking area, a truck repair service shop, an office and several storage buildings. Specific features of the site are shown in the General Site Plan (Figure 2).

2.2 Geology

The subject site is situated on the west portion of the Columbia Plateau geologic province east of the Cascade Mountains in the western portion of the Yakima River valley. The Columbia Plateau is comprised of a series of flood basalt which cover most of eastern Washington. The basalt flows of the Columbia Basalt Group are Miocene in age, forming an extensive volcanic plateau (Alt & Hyndman, 1984). The Columbia basalt in the Yakima Valley region is overlain by river gravel deposits at the subject site. A series of east - west trending mountains cross this area to the north and south.

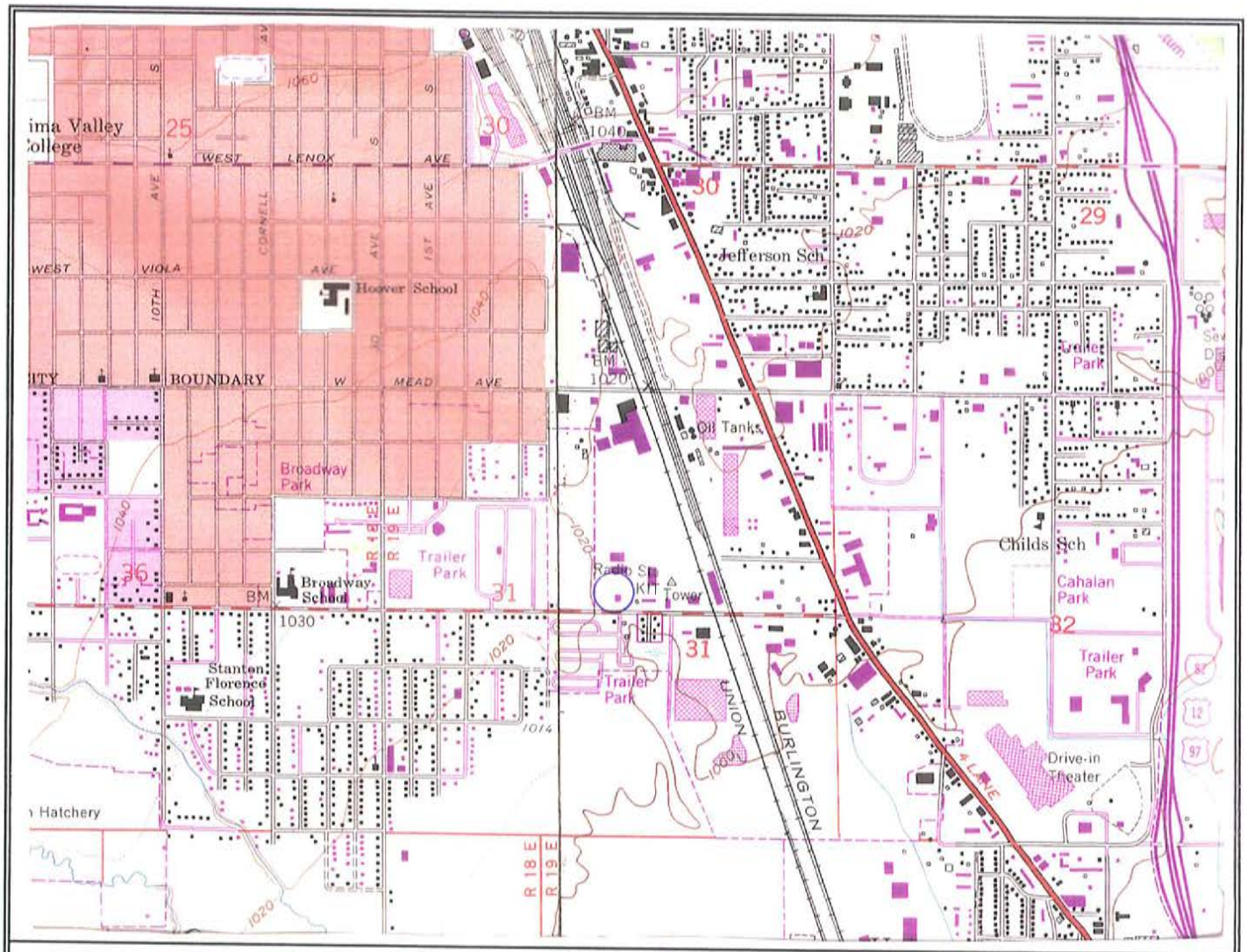
The site stratigraphy is characterized by silt and gravel. Surface materials are asphalt pavement or concrete. Subsurface materials, as observed during excavating and drilling activities, consist primarily of brown silty sand overlying sandy gravel at 3 - 13 feet. Area soils are classified as Naches silt loam (Soil, 1993). For more details on subsurface conditions, please refer to the Boring Logs in Appendix 1.

2.3 Hydrology

The subject site is located in the Yakima River drainage basin. The average rainfall for the area is estimated to be 6 to 8 inches per year. Natural surface drainage is to the southeast toward Wide Hollow Creek. The nearest surface water is a drainage channel located approximately 3000 feet to the southeast. Based on the information provided by installed monitoring wells, groundwater contact is 2 to 4 feet BGS but is subject to seasonal fluctuations and will probably drop during the winter season when irrigation is curtailed. The groundwater flow direction, based on groundwater data collected on September 12 and 29, 1994 is determined to be southeast and is shown on the Detailed Site Plan (Figure 3).

2.4 Site History

Based on information provided by Ryder the site has been a Ryder Truck Rental facility for nine years. Prior to Ryder occupying the site, the property was occupied by Fairchild General Freight Company, the present site owner.



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SCALE 1:24 000

1 0 1/2 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

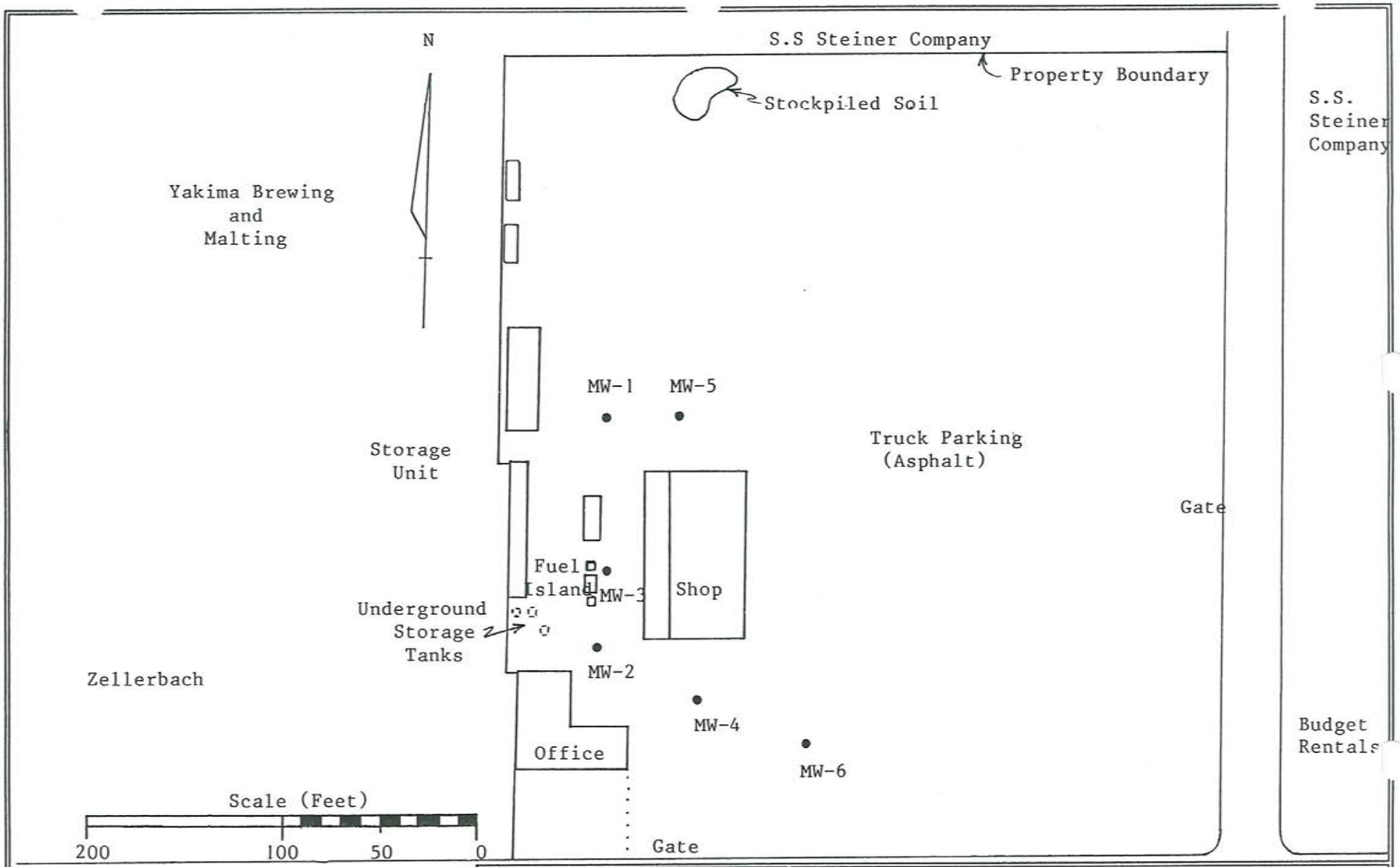
HUNTINGDON

Job No.: 194-2068

Site Location Map

USGS 7.5 Minute Series (Yakima East Quadrangle)
Phase II Environmental Assessment
Ryder Truck Rentals, Inc.
Yakima, Washington

DATE:	Mounted By:	Reviewed By:	SCALE:	FIGURE NO.
1994	PD	GH	As Shown	1

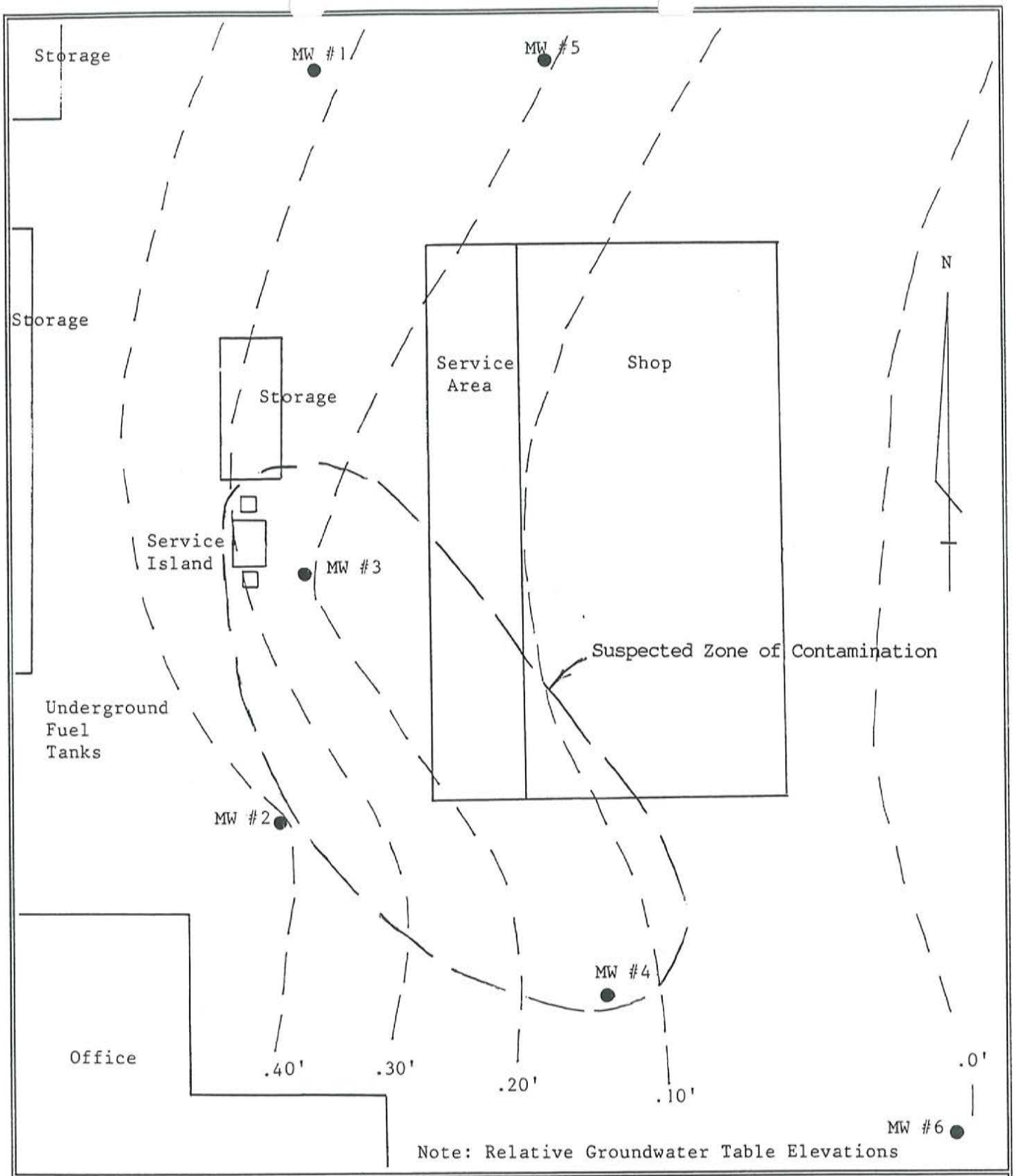


HUNTINGDON

Job No.: 194-2068

Site Plan
Ryder Truck Rentals, Inc.
19 West Washington Street
Yakima, Washington

DATE:	Drawn By:	Reviewed By:	SCALE:	FIGURE
9/94		GH	N/A	



HUNTINGDON, INC.

Job No.: 194-2068

DETAILED SITE PLAN

Ryder Phase II Environmental Assessment
YAKIMA, WASHINGTON

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	FIGURE NO.
10/94	PD	GH	1"=20'	3

3.0 ASSESSMENT FINDINGS

3.1 Field Methods

The nature and extent of contamination was assessed by collecting subsoil and groundwater samples from strategically placed groundwater monitoring wells. The monitoring wells were drilled and installed in accordance with WDOE guidelines. The borings were advanced through the overburden soils with a 6-inch I.D. air-rotary drill; monitor well #6 was installed with an auger drill rig. Subsoil samples were collected using a 3 inch I.D. split spoon sampler driven into the subsurface strata using a 140-pound hammer falling 30 inches. The spilt spoon sampler was decontaminated with an Alconox wash between sampling events to prevent possible cross-contamination of subsoil samples. Subsoil samples retained for laboratory analysis were placed in coolers with ice until received by our state certified laboratory.

The collected subsoil samples were examined for discoloration and/or odors and for the presence of volatile organic vapors. Volatile organic vapor screening procedures consisted of scanning excavated subsoil samples with a photoionization detector (PID), Microtip Model 102, to determine if volatile organic compounds were present. Headspace samples were prepared by placing representative subsoil samples in a clean glass container, covering the container with aluminum foil, sealing the container, and allowing the sample to warm to approximately 75 degrees F. The headspace (air trapped in the uppermost portion of the container) of each sample was then measured with the PID to detect volatile compounds. This methodology is considered representative of in-situ conditions but is dependent on field conditions, including the chemical nature of the contaminant, soil moisture content and weather conditions. Drill cuttings were covered with plastic with previously stockpiled soil already on site.

Groundwater samples were obtained following well installation. Samples were collected using pre-cleaned disposable bailers after well development. The wells were developed by purging three well volumes of water and allowing the groundwater level to stabilize near the original level. Groundwater was collected between groundwater contact and 2 feet below the water surface. Groundwater samples retained for laboratory analysis were placed in coolers with ice until received by National Environmental Testing Laboratory. The collected groundwater

samples were examined for evidence of petroleum hydrocarbons.

3.2 Field Observations

An environmental professional from Huntingdon and a drilling crew from R&R Drilling were mobilized to the subject site to install five monitoring wells on September 1, 1994. MW-6 was installed on September 29, 1994 with Huntingdon's auger rig. The monitoring well locations were determined by Ryder and Huntingdon personnel during a site visit on September 1, 1994. Field observations for each boring are summarized in Table 1, while more detailed information is provided on the Boring Logs (Appendix 1).

Subsoil and groundwater impact was noted visually during well installation. Field observations and PID results are summarized in table 1. Minor soil discoloration and groundwater impact was noted in monitor well 3. The PID registered low volatile organic vapor concentrations in subsoil samples collected from MW 4 and 5, and moderate levels from MW 3. As discussed in section 3.1, this screening methodology is dependent upon field conditions. Screening results are used to assist field personnel in evaluating subsoil conditions and should not be interpreted as actual contaminant concentrations. Subsoil samples obtained near and above groundwater contact were retained for laboratory analysis.

3.3 Analytical Results

Representative subsoil samples were obtained from near and above groundwater contact in each of the six monitoring well borings except where poor soil retrieval occurred in the split spoon. Groundwater samples were collected on September 8th and 29th, 1994, after developing monitoring wells. The samples were collected in laboratory supplied containers, labelled, and shipped in coolers with ice for temporary storage until received by National Environmental Testing Laboratory in Portland, Oregon. Analytical results are summarized in Table 2 and 3, the laboratory reports are contained in Appendix 3. The sample locations are shown on the logs and Figure 3.

Soil sample results indicated petroleum hydrocarbon impact in several wells. Laboratory results (Table 2) show total petroleum hydrocarbons (TPH-D) Method 8015 as diesel, concentrations

in soil samples exceeded WDOE Method A action levels of 200 mg/kg in MW 3 and MW 5.

Table 1
Summary of Field Observations
Soil Borings

Boring No.	Sample Depth (feet)	Soil Discoloration	Max. Volatile Organic Vapor
MW-1	0.9-2.4	None / NA	0.0 ppm[2]
MW-1	3.5-5.0	None / NA	0.4 ppm
MW-2	1.5-1.9	None / NA	0.0 ppm
MW-2	3.0-4.5	None / NA	0.0 ppm
MW-3	3.0-4.5	Minor	122 ppm
MW-4	1.0-2.5	None / NA	7.0 ppm
MW-4	3.0-4.5	None / NA	6.1 ppm
MW-5	3.0-4.5	None / NA	9.4 ppm
MW-5	1.5-3.0	None / NA	27.5 ppm
MW-6	1.5-3.5	None / NA	6.2 ppm

[1] Depth is in feet below ground surface.
[2] Volatile organic vapor concentrations are reported in parts per million or ppm.
NA signifies "not applicable".

Total recoverable petroleum hydrocarbon (Method 418.1) levels were also over the action level in MW 2, 3 and 5.

Elevated concentrations of total petroleum hydrocarbons were detected in groundwater samples in MW-3 and MW-4. Groundwater from MW-3 indicated a TPH-D concentration of 126,000 ug/l and 4410 ug/l for MW-4. In addition elevated concentrations from TPH method 418.1 were detected in these wells. Analytical results of 154,000 ug/l and 3680 ug/l were detected in MW-3 and MW-4 respectively. The action level for total petroleum hydrocarbons in Washington State groundwater is 1,000 ug/l.

Table 2
Summary of Analytical Results
Subsoil Samples

Location/Depth	Matrix	Analysis	Concentration[2]	
			TPH[3]	TPH-D
MW-1,3.5-5.0	Soil	TPH-418.1/TPH-D	N/D	N/D
MW-2,1.5-1.9	Soil	TPH-418.1/TPH-D	1,030 mg/kg	97 mg/kg
MW-3,3.0-4.5	Soil	TPH-418.1/TPH-D	21,100 mg/kg	950 mg/kg
MW-4,3.0-4.5	Soil	TPH-418.1/TPH-D	111.5 mg/kg	N/D
MW-5,1.5-3.0	Soil	TPH-418.1/TPH-D	8,630 mg/kg	2,260 mg/kg
MW-5,3.0-4.5	Soil	TPH-418.1/TPH-D	1,380 mg/kg	198 mg/kg
MW-6,1.5-3.5	Soil	TPH-418.1/TPH-D	N/D	N/D

Table 3
Summary of Analytical Results
Groundwater Samples

Location[1]	Matrix	Analysis	Concentration[2]	
			TPH 418.1[3]	TPH-D
MW-1	Water	TPH-418.1/TPH-D	N/D	N/D
MW-2	Water	TPH-418.1/TPH-D	N/D	0.281 mg/L
MW-3	Water	TPH-418.1/TPH-D	154 mg/l	126 mg/L
MW-4	Water	TPH-418.1/TPH-D	3.68 mg/l	4.410 mg/L
MW-5	Water	TPH-418.1/TPH-D	N/D	N/D
MW-6	Water	TPH-418.1/TPH-D	N/D	N/D

[1] Sample locations are characterized by area and depth from which the sample was obtained.
[2] Soil sample results are reported as a dry weight basis in milligrams per kilogram (mg/kg) water samples are reported in milligrams or micrograms per liter.
[3] TPH = Total Recoverable Petroleum Hydrocarbons

4.0 RELEASE CHARACTERIZATION

The purpose of this section is to provide information about the extent and magnitude of environmental impact observed at the subject site.

4.1 Type of Release

During the course of this project, one subsurface sample was collected for petroleum product identification purposes. The analytical results from this sample indicated contamination in the

form of diesel fuel.

Analytical results also suggested, heavier petroleum hydrocarbons components were present in soil samples as observed in higher concentrations of TPH 418.1 since at times the amount of TPH-D did not equal the amount of TPH 418.1. The existence of a former tank containing used oil at the north end of the service bay may explain heavier hydrocarbon contamination in the soil of MW-5. The TPH 418.1 shown in the soils and water of MW-3 is probably from diesel since the values in TPH-D and TPH 418.1 are so close the same; this same reasoning can be taken in the water sample in MW-4. High TPH values only in the soil in MW-2 may possibly be explained by dust control measures on the lot in earlier times, prior to asphalting; this explanation may also be valid for the soil in MW-5. Free petroluem product was not found during our investigation.

4.2 Source of Release

Since the level of diesel contamination is higher in MW-3 than MW-4 it is assumed the source is near MW-3. The source of the high levels of diesel in MW-3 may be either contamination from the truck wash area immediately over that location or overfill. High levels of diesel contamination in the soils at MW 5 are probably due to a surface spill since water was not impacted. The source of contamination in the soils and water in MW-2 may be a spill or proximity to a leaky tank or line.

4.3 Magnitude of Release

An effort has been made to estimate the quantity of petroleum product released at the Ryder site. Due to limited soil and groundwater information and historical information this estimate is difficult.

4.4 Extent of Release

The placement of the monitor wells at the site has helped diliniate the extent of the release. Figure 3 provides an estimate of the hydrocarbon plume in the groundwater at the site.

Certain physical parameters may have controlled the extent of the release. It appears that the source of contamination is from a release in the vicinity of MW 3 and the impact of the release is confined to a zone encompassing MW 4. Petroleum hydrocarbon migration may have been partially controlled by molecular diffusion, artificially induced gradients or boundary effects. The service pit foundation extends beneath the static water level of the unconfined aquifer and may have effected contaminant migration.

5.0 REMEDIAL/MONITORING ACTIONS

The petroleum hydrocarbon contamination described in the preceding sections appears limited to the subject site. Excavation may not be prudent at this location due to the shallow groundwater table and the harm which would be effected surface structures at the site. Groundwater remediation methods may be ineffective in removing the bulk of the petroleum hydrocarbons which have impacted the site since the contaminant is not highly volatile. This is apparent from our knowledge of the characteristics of diesel fuel having insufficient volatile components to allow air stripping. Sparging which uses the same approach as air stripping would have little effect. Measurements of fuel on top of the water table in MW-3 were nil suggesting a skimmer would have little effect in reducing the level of contaminant. The oil/water separator already in place at the site is effective in reducing surface contamination but is tied only into the truck wash drain. The water table is too high and the volatile too low to make vapor extraction reasonable as an alternative. Bio-remediation is feasible at the site but probably not financially prudent due to the number of wells which will have to be completed for injection and testing. A groundwater pumping carbon filtration system may be a feasable method of contaminant reduction in the groundwater but due to the volume of water which may be need to be pumped to effect capture of the plume, this proposal may not be viable at this time.

6.0 PUBLIC SAFETY

Public exposure to the subsurface contamination appears minimal if not improbable. The surface of the site is covered with asphalt pavement and concrete. A groundwater drinking well is

currently present at the site; this well has been tested and found clean. Although no well log could be found for this well at WDOE, we can assume that it is screened for a deeper aquifer and is sealed from the impacted surface aquifer. The entire section was checked for the existence of water wells from WDOE records and none were found close to the Ryder location. Open excavations and other unsecured accesses to the subsurface are not present. The petroleum hydrocarbon plume does not appear to extend beyond the property boundary.

7.0 CONCLUSIONS

Huntingdon has completed hydrocarbon investigation activities for the Ryder Truck Rental facility located at 19 West Washington Street in Yakima, Washington.

The purpose of this project was to assist responsible parties in complying with the current Washington State Department of Ecology (WDOE) regulations and guidelines for independent assessment of subsurface conditions impacted by petroleum hydrocarbons. Site specific objectives were realized as follows:

Objective 1
Drill and install six monitoring wells to determine the boundaries of environmental impact.

- The monitoring wells were drilled and installed in accordance with WDOE guidelines.
- The nature and extent of contamination was assessed by collecting subsoil and groundwater samples analyzed for TPH 418.1 and TPH-D from strategically placed groundwater monitoring wells.

Objective 2
Verify the extent and magnitude of a hydrocarbon release using field observations and confirmational laboratory sampling.

- The subsurface appears to have been impacted by diesel fuel.

- Petroleum hydrocarbon decrease away from MW-3 and do not appear to extend beyond the subject site property boundaries.

Objective 3
Evaluate possible remedial/monitoring actions applicable to observed site conditions.

- To insure current plume conditions are constant, the subject site should be monitored to observe any significant changes in plume migration patterns and/or fluctuations in petroleum hydrocarbon concentrations.

- Recommend responsible remedial action.

8.0 RECOMMENDATIONS

Huntingdon has several recommendations regarding the site:

* The existing fuel delivery/UST system which provides fuel to the pump island west of the shop is a potential concern and should be inspected for leaks.

* Huntingdon recommends that a quarterly groundwater monitoring plan be implemented for two years to observe any significant changes in plume migration patterns and/or fluctuations in petroleum hydrocarbon concentrations. Evaluation for free product is recommended the monitoring period also. At the end of this period, the collected subsurface sampling data should be reviewed and the site re-evaluated.

* If it is indicated that contamination is spreading off site during monitoring, the most valid remediation technique should be initiated prior to the end of the monitoring period.

* Any building renovations, tank upgrades or excavation work done at the subject site should be carefully planned to include remediation of impacted subsoils. The data collected during the monitoring period can be used to evaluate when low

water periods occur so excavation can be timed for those periods to maximize the soil remediation effort.

* Huntingdon recommends that the WDOE be notified as to the current conditions that exist at the subject site. Notification can be completed by filing this report with the WDOE Eastern Region.

9.0 LIMITATIONS

This work was performed in accordance with the generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Huntingdon observed a degree of care and skill generally exercised by other consultants under similar circumstances and conditions. Huntingdon's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgement concerning the significance of the data gathered during the course of monitoring. Other than this, no warranty is implied or intended.

Prepared and submitted by:

Paul Danielson R.G.

Reviewed by:

Gerald G. Harper
Division Manager

APPENDIX 1

Boring Logs

Huntingdon Engineering & Environmental, Inc.

LOG OF EXPLORATION BORING

PROJECT: Ryder
Yakima, Washington

JOB NO.: 194-2068

WELL NO. MW#1

SHEET 1 OF 1

LOCATION: 26 N., 30' W. of N.W. Corner Of Shop Building

DRILL TYPE: SOIL ODEX - Mobile B-61

ROCK

ELEVATION: TOP OF HOLE 999.36 (from TBM=1000)

DRILLED BY: Rod Gilseth (R&R Drilling)

GROUNDWATER 3.23

LOGGED BY: Paul Danielson

DATE: STARTED 9-1-94

REMARKS: Location From N.W. Corner Shop

COMPLETED 9-1-94

DEPTH (FT.)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERNAL	S.P.T. (N) (BLOWS /FT.)	LL%	PID (ppm)	WELL COMPLETION
0.0		Asphalt Pavement					FLUSHMOUNT
0.2		Gravel, Dense, Slightly Moist-Very Moist; Fine-Medium With Sand; Gray Black					CAP
							CONCRETE
			LSS	42		0.0	BENTONITE
2.0		Sand, Loose, Saturated; Fine-Medium with Silt, Brown					
3.23		W.T.					8-12 SILICA SAND
			LSS	9		0.4	2" SCH 40 PVC SCREEN
5							
7.0							
10							
13.2		Bottom of Hole					
15							
20							

Huntingdon Engineering & Environmental, Inc.

LOG OF EXPLORATION BORING

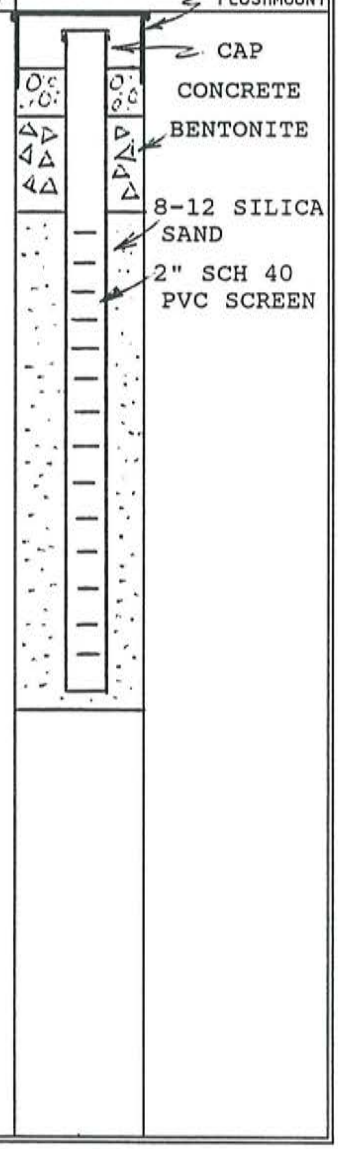
PROJECT: Ryder
Yakima, Washington
JOB NO.: 194-2068

DRILL TYPE: SOIL ODEX - Mobile B-61
ROCK
DRILLED BY: Rod Gilseth (R&R Drilling)
LOGGED BY: Paul Danielson
REMARKS: Location From N.W. Corner Shop

WELL NO. MW#2
SHEET 1 OF 1
LOCATION: 36 W., 83' S. of N.W. Corner Of

ELEVATION: TOP OF HOLE1000.28 (from TBM=1000)
GROUNDWATER 4.07
DATE: STARTED 9-1-94
COMPLETED 9-1-94

DEPTH (FT.)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERNAL	S.P.T. (N) (BLOWS /FT.)	LL%	PID (ppm)	WELL COMPLETION
0.0		Asphalt Pavement					FLUSHMOUNT
0.2		Gravel, Very Dense, Moist; Sandy Course-Fine, Gray Brown					CAP
			LSS	50+		0	CONCRETE
							BENTONITE
3.0		Gravel, Very Dense, Saturated; Course-Fine with Sand; Gray Brown					8-12 SILICA SAND
4.07		W.T.	LSS	84		0	2" SCH 40 PVC SCREEN
5							
7.0							
10							
13.2		Bottom of Hole					
15							
20							



Huntingdon Engineering & Environmental, Inc.

LOG OF EXPLORATION BORING

PROJECT: Ryder
Yakima, Washington

JOB NO.: 194-2068

DRILL TYPE: SOIL ODEX - Mobile B-61

ROCK

DRILLED BY: Rod Gilseth (R&R Drilling)

LOGGED BY: Paul Danielson

REMARKS: Location From N.W. Corner Shop

WELL NO. MW#3

SHEET 1 OF 1

LOCATION: 47' S., 32' W. From NW Corner Of Shop

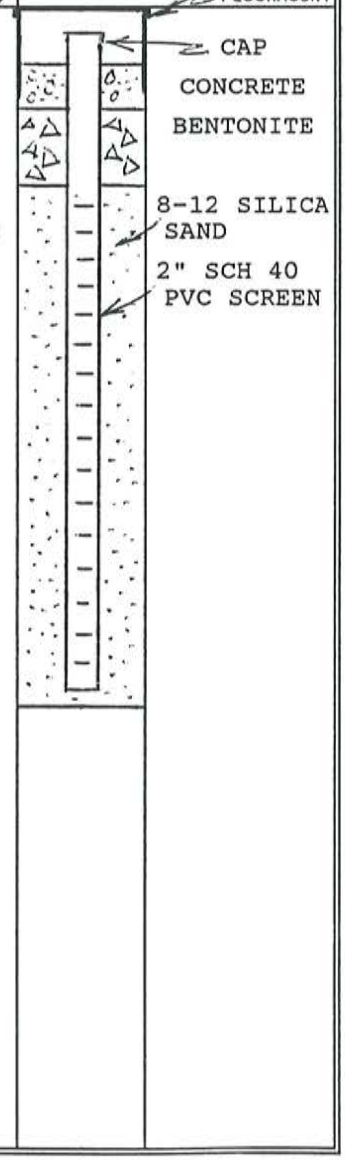
ELEVATION: TOP OF HOLE 999.70 (from TBM=1000)

GROUNDWATER 3.70

DATE: STARTED 9-2-94

COMPLETED 9-2-94

DEPTH (FT.)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERNAL	S.P.T. (N) (BLOWS /FT.)	LL%	PID (ppm)	WELL COMPLETION
0.0		Concrete Pavement					FLUSHMOUNT
0.5		Gravel, Dense, Moist; Fine-Course With Sand; Gray					CAP
1.5		Silty Sand, Medium Dense, Very Moist, Brown-Black					CONCRETE
							BENTONITE
3.70		W.T.	LSS	14		122	8-12 SILICA SAND
5							2" SCH 40 PVC SCREEN
10		Gravel, Dense, Saturated, Course-Fine, Brown-Black					
13.5		Bottom of Hole					
15							
20							



Huntingdon Engineering & Environmental, Inc.

LOG OF EXPLORATION BORING

PROJECT: Ryder
Yakima, Washington
JOB NO.: 194-2068
DRILL TYPE: SOIL ODEX - Mobile B-61
ROCK
DRILLED BY: Rod Gilseth (R&R Drilling)
LOGGED BY: Paul Danielson
REMARKS: Location From N.W. Corner Shop

WELL NO. MW#4
SHEET 1 OF 1
LOCATION: 112' S., 12' E. Of NW Corner Of Shop
ELEVATION: TOP OF HOLE 999.36 (from TBM=1000)
GROUNDWATER 3.42
DATE: STARTED 9-2-94
COMPLETED 9-2-94

DEPTH (FT.)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERNAL	S.P.T. (N) (BLOWS /FT.)	LL%	PID (ppm)	WELL COMPLETION
0.0		Asphalt Pavement					FLUSHMOUNT
0.2		Sandy Gravel, Dense, Moist; Course Fine; Gray					CAP
		Silt Firm, Moist, Low Plasticity; With Gravel and Sand; Gray	LSS	13	7.0		CONCRETE
							BENTONITE
3.42		W.T.					8-12 SILICA SAND
			LSS	10	6.1		2" SCH 40 PVC SCREEN
5							
8.0		Gravel, Dense, Saturated; Course - Fine, Sub-rounded; Gray					
10							
13.5		Bottom of Hole					
15							
20							

Huntingdon Engineering & Environmental, Inc.

LOG OF EXPLORATION BORING

PROJECT: Ryder
Yakima, Washington

JOB NO.: 194-2068

DRILL TYPE: SOIL ODEX - Mobile B-61

ROCK

DRILLED BY: Rod Gilseth (R&R Drilling)

LOGGED BY: Paul Danielson

REMARKS: Location From N.W. Corner Shop

WELL NO. MW#5

SHEET 1 OF 1

LOCATION: 28 N., 5' NE Corner of Shop

ELEVATION: TOP OF HOLE 998.72 (from TBM=1000)

GROUNDWATER 2.70

DATE: STARTED 9-2-94

COMPLETED 9-2-94

DEPTH (FT.)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERNAL	S.P.T. (N) (BLOWS /FT.)	LL%	PID (ppm)	WELL COMPLETION
0.0		Asphalt Pavement					FLUSHMOUNT
0.2		Sandy Gravel Dense					CAP
1.0		Moist-Very Moist; Couse Fine					CONCRETE
		Base Course above 1.0, Sub-Rounded	LSS	33		27.5	BENTONITE
2.70		Below; Gray W.T.					
			LSS	47		9.4	8-12 SILICA SAND
5							2" SCH 40 PVC SCREEN
10							
13.2		Bottom of Hole					
15							
20							

Huntingdon Engineering & Environmental, Inc.

LOG OF EXPLORATION BORING

PROJECT: Ryder
Yakima, Washington

JOB NO.: 194-2068

DRILL TYPE: SOIL Auger CME-75

ROCK

DRILLED BY: P. Danielson/G. Thurman

LOGGED BY: Paul Danielson

REMARKS:

WELL NO. MW#6

SHEET 1 OF 1

LOCATION: 55 S., 69° E From MW#4

ELEVATION: TOP OF HOLE 998.90 (from TBM=1000)

GROUNDWATER 3.09

DATE: STARTED 9-29-94

COMPLETED 9-29-94

DEPTH (FT.)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERNAL	S.P.T. (N) (BLOWS /FT.)	LL%	PID (ppm)	WELL COMPLETION
0.0		Pavement					FLUSHMOUNT
0.2		Gravel, Dense Moist; Fine - Medium With Sand, Sase Course; Gray					CAP
1.0		Silt, Soft, Moist - Saturated; Low plasticity; With Sand, Swampy Conditions; Gray	LSS	7		6.2	CONCRETE BENTONITE
3.09		W.T.					8-12 SILICA SAND
5							2" SCH 40 PVC SCREEN
10							
13.5		Gravel, Very dense, Saturated, Course - Fine With Sand, Sub-Rounded Gray					
14.0		Bottom of Hole					
15							
20							

APPENDIX 2

Laboratory Results

NATIONAL ENVIRONMENTAL TESTING, INC.

Portland Division
17400 SW Upper Boones Ferry Rd.
Suite #260
Portland, OR 97224
Tel: (503) 624-5449
Fax: (503) 639-6889

George Lousteri
Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

Date: 09/15/1994
NET Account No.: 21600
NET Job Number: 94.02295

Project: Tri-Cities, WA
Location: 194-2068

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
29354	MW#1, 3.5-5.0	SOIL	09/01/1994	09/07/1994
29355	MW#2, 1.5-1.9	SOIL	09/01/1994	09/07/1994
29356	MW#3, 3.0-4.5	SOIL	09/02/1994	09/07/1994
29357	MW#4, 3.0-4.5	SOIL	09/02/1994	09/07/1994
29358	MW#5, 1.5-3.0	SOIL	09/02/1994	09/07/1994
29359	MW#5, 3.0-4.5	SOIL	09/02/1994	09/07/1994

Approved by:

Robert Gschwend for Marty French

Marty French
NET, INC. Division Manager

OCEAN GROUP

ANALYTICAL REPORT

George Lousteri
Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

09/15/1994
Job No.: 94.02295

Project Name: Tri-Cities, WA
Date Received: 09/07/1994

Sample Number 29354
Sample Description MW#1, 3.5-5.0

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
EPA 418.1M (S) PREP	EPA 418.1M	-			09/14/1994	
EPA 418.1M (S)	418.1M	ND	1.0	mg/Kg	09/14/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		09/14/1994	
WTPH-Diesel (S) Diesel	WTPH-D	ND	10	mg/Kg	09/14/1994	

Sample Number 29355
Sample Description MW#2, 1.5-1.9

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
EPA 418.1M (S) PREP	EPA 418.1M	-			09/14/1994	
EPA 418.1M (S)	418.1M	1,030	1.0	mg/Kg	09/14/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		09/14/1994	
WTPH-Diesel (S) Diesel	WTPH-D	97	10	mg/Kg	09/14/1994	F

Sample Number 29356
Sample Description MW#3, 3.0-4.5

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Solids, Total	160.3	76	0.01	%	09/12/1994	
EPA 418.1M (S) PREP	EPA 418.1M	-			09/14/1994	
EPA 418.1M (S)	418.1M	1,100	1.3	mg/kg d	09/14/1994	
WTPH-HCID (S) PREP		-	-		09/08/1994	
WTPH-HCID (S) Dilution Factor		1	-		09/08/1994	
Gasoline	WTPH-HCID	ND	13.	mg/kg d	09/08/1994	
Diesel	WTPH-HCID	Diesel	33.	mg/kg d	09/08/1994	
Heavy Oils	WTPH-HCID	ND	66.	mg/kg d	09/08/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		09/14/1994	
WTPH-Diesel (S) Diesel	WTPH-D	950	13.	mg/kg d	09/14/1994	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

ANALYTICAL REPORT

George Lousteri
Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

09/15/1994
Job No.: 94.02295

Project Name: Tri-Cities, WA
Date Received: 09/07/1994

Sample Number 29357 — Sample Description: MW#4, 3.0-4.5

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
EPA 418.1M (S) PREP	EPA 418.1M	-			09/14/1994	
EPA 418.1M (S)	418.1M	11.8	1.0	mg/Kg	09/14/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		09/14/1994	
WTPH-Diesel (S) Diesel	WTPH-D	ND	10	mg/Kg	09/14/1994	

Sample Number 29358 — Sample Description: MW#5, 1.5-3.0

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
EPA 418.1M (S) PREP	EPA 418.1M	-			09/14/1994	
EPA 418.1M (S)	418.1M	8,630	1.0	mg/Kg	09/14/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		09/14/1994	
WTPH-Diesel (S) Diesel	WTPH-D	2,260	10	mg/Kg	09/14/1994	

Sample Number 29359 — Sample Description: MW#5, 3.0-4.5

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
EPA 418.1M (S) PREP	EPA 418.1M	-			09/14/1994	
EPA 418.1M (S)	418.1M	1,380	1.0	mg/Kg	09/14/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		09/14/1994	
WTPH-Diesel (S) Diesel	WTPH-D	198	10	mg/Kg	09/14/1994	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

SURROGATE REPORT

George Lousteri
Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

09/15/1994
Job No.: 94.02295

Project Name: Tri-Cities, WA
Date Received: 09/07/1994

SURROGATES	METHODS	RESULTS		DATE ANALYZED	FLAG
Sample Number 29354	**Sample Description** MW#1, 3.5-5.0				
o-Terphenyl (Surr.)	WTPH-D	93	%	09/14/1994	
Sample Number 29355	**Sample Description** MW#2, 1.5-1.9				
o-Terphenyl (Surr.)	WTPH-D	92	%	09/14/1994	
Sample Number 29356	**Sample Description** MW#3, 3.0-4.5				
o-Terphenyl (Surr.)	WTPH-HCID	79	%	09/08/1994	
o-Terphenyl (Surr.)	WTPH-D	73	%	09/14/1994	
Sample Number 29357	**Sample Description** MW#4, 3.0-4.5				
o-Terphenyl (Surr.)	WTPH-D	88	%	09/14/1994	
Sample Number 29358	**Sample Description** MW#5, 1.5-3.0				
o-Terphenyl (Surr.)	WTPH-D	96	%	09/14/1994	
Sample Number 29359	**Sample Description** MW#5, 3.0-4.5				
o-Terphenyl (Surr.)	WTPH-D	71	%	09/14/1994	

NET®

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

Date: 09/15/1994

NET Job Number: 94.02295

Contact: George Lousteri
Project: Tri-Cities, WA

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
EPA 418.1M (S)	44.1	45.5	103.2	09/14/1994
EPA 418.1M (S)	44.1	44.7	101.4	09/14/1994
WTPH-Diesel (S) Diesel	871	896	102.9	09/14/1994
WTPH-Diesel (S) Diesel	871	876	100.6	09/14/1994
WTPH-Diesel (S) Diesel	871	916	105.2	09/14/1994
WTPH-Diesel (S) Diesel	871	926	106.3	09/14/1994

CCV - Continuing Calibration Verification

Note: Recovery limits for 8240, 8260, 8270, 8010, 8020, 624, 625 specified in method.
Gasoline, Diesel, 418.1, 418.1M limits 80-120%. Metals recovery limits 80-120%.

NET®

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

Date: 09/15/1994

NET Job Number: 94.02295

Contact: George Lousteri
Project: Tri-Cities, WA

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Date Analyzed
EPA 418.1M (S)	94.0	137	145.7	09/08/1994
EPA 418.1M (S)	94.0	137	145.7	09/08/1994
WTPH-Diesel (S) Diesel	50	52.3	104.6	09/06/1994
WTPH-Diesel (S) Diesel	50	53.1	106.2	09/06/1994

LCS - Laboratory Control Standard

Note: Recovery limits for fuels 80-120%. 8010, 8020, 8240, 8260, 8270, 624, 625 specified in method. Recovery limits for metals analyses 80-120%. 418.1 limits are 90-140%.

QUALITY CONTROL REPORT
BLANKS

Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

Date: 09/15/1994

NET Job Number: 94.02295

Contact: George Lousteri
Project: Tri-Cities, WA
Location: 194-2068

Analyte	Blank Analysis	MDL	Units	Date Analyzed
EPA 418.1M (S)	ND	1.0	mg/Kg	09/08/1994
EPA 418.1M (S)	ND	1.0	mg/Kg	09/14/1994
WTPH-HCID (S)				
Gasoline	ND	10	mg/Kg	09/08/1994
Diesel	ND	25	mg/Kg	09/08/1994
Heavy Oils	ND	50	mg/Kg	09/08/1994
o-Terphenyl (Surr.)	94	-	%	09/08/1994
WTPH-Diesel (S)				
Diesel	ND	10	mg/Kg	09/06/1994
o-Terphenyl (Surr.)	89	-	%	09/06/1994
WTPH-Diesel (S)				
Diesel	ND	10	mg/Kg	09/14/1994
o-Terphenyl (Surr.)	90	-	%	09/14/1994

Advisory Control Limits for Blanks:
Metals/Wet Chemistry/ Conventionals/GC - all compounds should be less than the Reporting Limit.
GC/MS - Semi-Volatiles - all compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the reporting limit.

NET®

QUALITY CONTROL REPORT
DUPLICATES

Ryder Truck Rentals
5884 131st Street Circle
Savage, MN 55378

Date: 09/15/1994

Job Number: 94.02295

Contact: George Lousteri
Project: Tri-Cities, WA

Analyte	Original Analysis	Duplicate Analysis	Units	RPD	Date Analyzed	Flag
EPA 418.1M (S)	1,020	1,030	mg/Kg	1.0	09/08/1994	
EPA 418.1M (S)	1,030	1,100	mg/Kg	6.6	09/14/1994	
WTPH-HCID (S)						
Gasoline	ND	ND	mg/kg		09/08/1994	
Diesel	ND	ND	mg/kg		09/08/1994	
Heavy Oils	ND	ND	mg/kg		09/08/1994	
WTPH-Diesel (S)						
Diesel	ND	ND	mg/kg		09/06/1994	
WTPH-Diesel (S)						
Diesel	ND	ND	mg/Kg		09/14/1994	

NOTE: Duplicates may not be samples from this job.

RPD - Relative Percent Difference

Explanation of Data Flags

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	The blank exhibited a positive result greater than the reporting limit for this compound.
C	The sample appears to contain a lighter hydrocarbon than gasoline.
D	The sample appears to extend to a heavier hydrocarbon range than gasoline.
E	The sample appears to extend to a lighter hydrocarbon range than diesel.
F	The sample appears to extend to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
H	The gasoline elution pattern for the sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
M	MS and/or MSD percent recovery exceeds control limits.
MR	The MS/MSD RPD is greater than 20%. The sample was re-extracted and re-analyzed with similar results. This is due to a matrix interference, likely a non-homogeneity of the sample.
P	A post digestion spike was analyzed, and recoveries are within control limits.
Q	Detection limits elevated due to sample matrix.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
W	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.

CHAIN OF CUSTODY RECORD

Huntingdon
Consulting Engineers Environmental Scientists

Ryder Yakima
Project or Site Name

194-2068
Project Number

Paul Davidson
Sampler Name (Printed)

- [x] Chen-Northern, Inc., Division
- [ ] Thomas-Hartig & Associates, Inc., Division
- [ ] Schaefer Dixon Associates, Inc., Division
- [ ] Herzog Associates, Inc., Division

Paul Davidson
Contact or Report to

Tri-Cities WA
Contact Address or Location (509) 547-1671

Sampler Signature

DATE COLLECTED	TIME COLLECTED	SAMPLE LOCATION OR DESCRIPTION	COMP OR GRAB	SAMPLE MATRIX	NO. OF CONTAINERS	ANALYSIS REQUIRED: WTPH HCID	NOTES	LAB NUMBER
9-1-94	5:00	MW#1, 3.5-5.0	G	Soil	2			
9-1-94	6:00	MW#2, 1.5-1.9	G	Soil	2			
9-2-94	8:00 AM	MW#3 3.0-4.5	G	Soil	3	X		
9-2-94	9:00	MW#4 3.0-4.5	G	Soil	3			
9-2-94	11:00	MW#5 1.5-3.0	G	Soil	1			
9-2-94	11:00	MW#5 3.0-4.5	G	Soil	1			

	Date	Time	Received by:
Relinquished by:	9-6-94	11:00	
Relinquished by:	9-7-94	10:00	Cindy Richardson
Relinquished by:			Received by:
Relinquished by:			Received by:

Remarks:
Please turn around TPH-HCID call me and help decide what to run the remainder of samples for. Note Holding Time

Thanks

NATIONAL ENVIRONMENTAL TESTING, INC.

Portland Division
17400 SW Upper Boones Ferry Rd.
Suite #260
Portland, OR 97224
Tel: (503) 624-5449
Fax: (503) 639-6889

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

Date: 09/19/1994
NET Account No.: 21600
NET Job Number: 94.02383

Project: Tri-Cities, WA
Location: Location #0904

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
29703	MW #1	GROUND WATER	09/12/1994	09/14/1994
29704	MW #2	GROUND WATER	09/12/1994	09/14/1994
29705	MW #3	GROUND WATER	09/12/1994	09/14/1994
29706	MW #4	GROUND WATER	09/12/1994	09/14/1994
29707	MW #5	GROUND WATER	09/12/1994	09/14/1994

Approved by:

Marty French
NET, INC. Division Manager

NET®

ANALYTICAL REPORT

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

09/19/1994
Job No.: 94.02383

Project Name: Tri-Cities, WA
Date Received: 09/14/1994

Sample Number 29703 — Sample Description: MW #1

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
WTPH-Diesel (W) PREP	WTPH-D	-	-		09/15/1994	
WTPH-Diesel (W)						
Dilution Factor		1	-	ug/L	09/16/1994	
Diesel	WTPH-D	ND	250	ug/L	09/16/1994	
WTPH-418.1M (W) PREP		-	-		09/16/1994	
WTPH-418.1M (W)	WTPH-418.1	ND	1.0	mg/L	09/16/1994	

Sample Number 29704 — Sample Description: MW #2

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
WTPH-Diesel (W) PREP	WTPH-D	-	-		09/15/1994	
WTPH-Diesel (W)						
Dilution Factor		1	-	ug/L	09/16/1994	
Diesel	WTPH-D	281	250	ug/L	09/16/1994	F,W
WTPH-418.1M (W) PREP		-	-		09/16/1994	
WTPH-418.1M (W)	WTPH-418.1	ND	1.0	mg/L	09/16/1994	

Sample Number 29705 — Sample Description: MW #3

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
WTPH-Diesel (W) PREP	WTPH-D	-	-		09/15/1994	
WTPH-Diesel (W)						
Dilution Factor		1	-	ug/L	09/16/1994	
Diesel	WTPH-D	126,000	250	ug/L	09/16/1994	
WTPH-418.1M (W) PREP		-	-		09/16/1994	
WTPH-418.1M (W)	WTPH-418.1	154	1.0	mg/L	09/16/1994	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

NET®

ANALYTICAL REPORT

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

09/19/1994
Job No.: 94.02383

Project Name: Tri-Cities, WA
Date Received: 09/14/1994

Sample Number 29706 — Sample Description: MW #4

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
WTPH-Diesel (W) PREP	WTPH-D	-	-		09/15/1994	
WTPH-Diesel (W)						
Dilution Factor		1	-	ug/L	09/16/1994	
Diesel	WTPH-D	4,410	250	ug/L	09/16/1994	
WTPH-418.1M (W) PREP		-	-		09/16/1994	
WTPH-418.1M (W)	WTPH-418.1	3.68	1.0	mg/L	09/16/1994	

Sample Number 29707 — Sample Description: MW #5

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
WTPH-Diesel (W) PREP	WTPH-D	-	-		09/15/1994	
WTPH-Diesel (W)						
Dilution Factor		1	-	ug/L	09/16/1994	
Diesel	WTPH-D	ND	250	ug/L	09/16/1994	
WTPH-418.1M (W) PREP		-	-		09/16/1994	
WTPH-418.1M (W)	WTPH-418.1	ND	1.0	mg/L	09/16/1994	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

NET®

SURROGATE REPORT

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

09/19/1994
Job No.: 94.02383

Project Name: Tri-Cities, WA
Date Received: 09/14/1994

SURROGATES	METHODS	RESULTS		DATE ANALYZED	FLAG
Sample Number 29703	Sample Description MW #1				
o-Terphenyl (Surr.)	WTPH-D	79	ug/L	09/16/1994	
Sample Number 29704	Sample Description MW #2				
o-Terphenyl (Surr.)	WTPH-D	93	ug/L	09/16/1994	
Sample Number 29705	Sample Description MW #3				
o-Terphenyl (Surr.)	WTPH-D	Dil.	ug/L	09/16/1994	
Sample Number 29706	Sample Description MW #4				
o-Terphenyl (Surr.)	WTPH-D	94	ug/L	09/16/1994	
Sample Number 29707	Sample Description MW #5				
o-Terphenyl (Surr.)	WTPH-D	92	ug/L	09/16/1994	

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

Date: 09/19/1994

NET Job Number: 94.02383

Contact: George Lousteri
Project: Tri-Cities, WA

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
WTPH-Diesel (W) Diesel	871	889	102.1	09/16/1994
WTPH-Diesel (W) Diesel	871	812	93.2	09/16/1994
WTPH-Diesel (W) Diesel	871	857	98.4	09/16/1994
WTPH-Diesel (W) Diesel	871	878	100.8	09/16/1994
WTPH-418.1M (W)	44.1	43.9	99.5	09/16/1994
WTPH-418.1M (W)	44.1	43.8	99.3	09/16/1994

CCV - Continuing Calibration Verification

Note: Recovery limits for 8240, 8260, 8270, 8010, 8020, 624, 625 specified in method. Gasoline, Diesel, 418.1, 418.1M limits 80-120%. Metals recovery limits 80-120%.

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

Date: 09/19/1994

NET Job Number: 94.02383

Contact: George Lousteri
Project: Tri-Cities, WA

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Date Analyzed
WTPH-Diesel (W)				
Diesel	3,000	2,820	94.0	09/16/1994
WTPH-Diesel (W)				
Diesel	3,000	2,730	91.0	09/16/1994
WTPH-418.1M (W)	1.88	2.48	131.9	09/16/1994
WTPH-418.1M (W)	1.88	2.48	131.9	09/16/1994

LCS - Laboratory Control Standard

Note: Recovery limits for fuels 80-120%. 8010, 8020, 8240, 8260, 8270, 624, 625 specified in method. Recovery limits for metals analyses 80-120%. 418.1 limits are 90-140%.

QUALITY CONTROL REPORT
BLANKS

Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

Date: 09/19/1994

NET Job Number: 94.02383

Contact: George Lousteri
Project: Tri-Cities, WA
Location: Location #0904

Analyte	Blank Analysis	MDL	Units	Date Analyzed
WTPH-Diesel (W)				
Diesel	ND	250	ug/L	09/16/1994
o-Terphenyl (Surr.)	-	-	ug/L	09/16/1994
WTPH-Diesel (W)				
Diesel	ND	250	ug/L	09/16/1994
o-Terphenyl (Surr.)	89	-	ug/L	09/16/1994
WTPH-Diesel (W)				
WTPH-418.1M (W)	ND	1.0	mg/L	09/16/1994

Advisory Control Limits for Blanks:
Metals/Wet Chemistry/ Conventionals/GC - all compounds should be less than the Reporting Limit.
GC/MS - Semi-Volatiles - all compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the reporting limit.

NET®

QUALITY CONTROL REPORT
DUPLICATES

Ryder Truck Rental
250 Prairie Center Drive
Eden Prairie, MN 55344

Date: 09/19/1994

Job Number: 94.02383

Contact: George Lousteri
Project: Tri-Cities, WA

Analyte	Original Analysis	Duplicate Analysis	Units	RPD	Date Analyzed	Flag
WTPH-Diesel (W)						
Diesel	281	383	ug/L	30.7	09/16/1994	F,W
WTPH-Diesel (W)						
WTPH-418.1M (W)	ND	ND	mg/L		09/16/1994	

NOTE: Duplicates may not be samples from this job.

RPD - Relative Percent Difference

Explanation of Data Flags

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	The blank exhibited a positive result greater than the reporting limit for this compound.
C	The sample appears to contain a lighter hydrocarbon than gasoline.
D	The sample appears to extend to a heavier hydrocarbon range than gasoline.
E	The sample appears to extend to a lighter hydrocarbon range than diesel.
F	The sample appears to extend to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
H	The gasoline elution pattern for the sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
M	MS and/or MSD percent recovery exceeds control limits.
MR	The MS/MSD RPD is greater than 20%. The sample was re-extracted and re-analyzed with similar results. This is due to a matrix interference, likely a non-homogeneity of the sample.
P	A post digestion spike was analyzed, and recoveries are within control limits.
Q	Detection limits elevated due to sample matrix.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
W	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.

CHAIN OF CUSTODY RECORD

Huntingdon
Consulting Engineers Environmental Scientists

- Chen-Northern, Inc., Division
- Thomas-Hartig & Associates, Inc., Division
- Schaefer Dixon Associates, Inc., Division
- Herzog Associates, Inc., Division

Ryder
Project or Site Name

1-101-2065
Project Number

Paul Davidson
Sampler Name (Printed)

Paul Davidson
Contact or Report to

Tri-cities WA
Contact Address or Location

Paul Davidson
Sampler Signature

DATE COLLECTED	TIME COLLECTED	SAMPLE LOCATION OR DESCRIPTION	COMP OR GRAB	SAMPLE MATRIX	NO. OF CONTAINERS	ANALYSIS REQUIRED: TPH-D (418.1)	ANALYSIS REQUIRED: TPH-G (WA-1)	NOTES	LAB NUMBER
9-12-94	1:30	MW#1	G	water	2	X	X		
		MW#2				X	X		
		MW#3				X	X		
		MW#4				X	X		
		MW#5				X	X		

	Date	Time	Received by:	Remarks:
Relinquished by:	9-13-94	8:00	C Richardson 9/14/94 10:10	Please Fax results Ryder location Code No#. 0904
Relinquished by:	Date	Time	Received by:	
Relinquished by:	Date	Time	Received by:	
Relinquished by:	Date	Time	Received by:	

NATIONAL ENVIRONMENTAL TESTING, INC.

Portland Division
17400 SW Upper Boones Ferry Rd.
Suite #260
Portland, OR 97224
Tel: (503) 624-5449
Fax: (503) 639-6889

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

Date: 10/10/1994
NET Account No.: 21600
NET Job Number: 94.02570

Project: Ryder Yakima
Location: Facility #0904

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
30583	MW#6 1.5-3.5	SOIL	09/29/1994	10/03/1994
30584	MW#6	GROUND WATER	09/29/1994	10/03/1994

Approved by:

Marty French
NET, INC. Division Manager

ANALYTICAL REPORT

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

10/10/1994
Job No.: 94.02570

Project Name: Ryder Yakima
Date Received: 10/03/1994

Sample Number 30583 — Sample Description: MW#6 1.5-3.5

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Solids, Total	160.3	80	0.01	%	10/04/1994	
WTPH-Diesel (S) PREP	WTPH-D	-	-		10/07/1994	
WTPH-Diesel (S)						
Diesel	WTPH-D	ND	12.	mg/kg d	10/10/1994	
WTPH-418.1M (S) PREP		-	-		10/04/1994	
WTPH-418.1M (S)	WTPH-418.1	ND	62.	mg/kg d	10/04/1994	

Sample Number 30584 — Sample Description: MW#6

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
WTPH-Diesel (W) PREP	WTPH-D	-	-		10/07/1994	
WTPH-Diesel (W)						
Dilution Factor		1	-	ug/L	10/10/1994	
Diesel	WTPH-D	ND	250	ug/L	10/10/1994	
WTPH-418.1M (W) PREP		-	-		10/05/1994	
WTPH-418.1M (W)	WTPH-418.1	ND	1.0	mg/L	10/05/1994	

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

SURROGATE REPORT

George Lousteri
Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

10/10/1994
Job No.: 94.02570

Project Name: Ryder Yakima
Date Received: 10/03/1994

SURROGATES	METHODS	RESULTS		DATE ANALYZED	FLAG
Sample Number 30583	Sample Description MW#6 1.5-3.5				
o-Terphenyl (Surr.)	WTPH-D	88	%	10/10/1994	
Sample Number 30584	Sample Description MW#6				
o-Terphenyl (Surr.)	WTPH-D	97	%	10/10/1994	

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

Date: 10/10/1994

NET Job Number: 94.02570

Contact: George Lousteri
Project: Ryder Yakima

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
WTPH-Diesel (S) Diesel	871	907	104.1	10/10/1994
WTPH-Diesel (S) Diesel	871	947	108.7	10/10/1994
WTPH-Diesel (S) Diesel	871	853	97.9	10/10/1994
WTPH-Diesel (S) Diesel	871	845	97.0	10/10/1994
WTPH-Diesel (W) Diesel	871	907	104.1	10/10/1994
WTPH-Diesel (W) Diesel	871	947	108.7	10/10/1994
WTPH-Diesel (W) Diesel	871	853	97.9	10/10/1994
WTPH-Diesel (W) Diesel	871	845	97.0	10/10/1994
WTPH-418.1M (S)	44.1	44.7	101.4	10/04/1994
WTPH-418.1M (S)	44.1	46.3	105.0	10/04/1994
WTPH-418.1M (W)	44.1	45.1	102.3	10/05/1994
WTPH-418.1M (W)	44.1	44.1	100.0	10/05/1994

CCV - Continuing Calibration Verification

Note: Recovery limits for 8240, 8260, 8270, 8010, 8020, 624, 625 specified in method. Gasoline, Diesel, 418.1, 418.1M limits 80-120%. Metals recovery limits 80-120%.

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

Date: 10/10/1994

NET Job Number: 94.02570

Contact: George Lousteri
Project: Ryder Yakima

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Date Analyzed
WTPH-Diesel (S)				
Diesel	60	67	111.7	10/10/1994
WTPH-Diesel (S)				
Diesel	60	67	111.7	10/10/1994
WTPH-418.1M (W)	1.88	2.4	127.7	10/05/1994
WTPH-418.1M (W)	1.88	2.6	138.3	10/05/1994

LCS - Laboratory Control Standard

Note: Recovery limits for fuels 80-120%. 8010, 8020, 8240, 8260, 8270, 624, 625 specified in method.
Recovery limits for metals analyses 80-120%. 418.1 limits are 90-140%.

QUALITY CONTROL REPORT
BLANKS

Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

Date: 10/10/1994

NET Job Number: 94.02570

Contact: George Lousteri
Project: Ryder Yakima
Location: Facility #0904

Analyte	Blank Analysis	MDL	Units	Date Analyzed
WTPH-Diesel (S)				
Diesel	ND	10	mg/Kg	10/10/1994
o-Terphenyl (Surr.)	99	-	%	10/10/1994
WTPH-Diesel (W)				
Diesel	ND	250	ug/L	10/10/1994
o-Terphenyl (Surr.)	85	-	%	10/10/1994
WTPH-418.1M (S)	ND	50	mg/Kg	10/04/1994
WTPH-418.1M (W)	ND	1.0	mg/L	10/05/1994

Advisory Control Limits for Blanks:
Metals/Wet Chemistry/ Conventionals/GC - all compounds should be less than the Reporting Limit.
GC/MS - Semi-Volatiles - all compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the reporting limit.

NET®

QUALITY CONTROL REPORT
DUPLICATES

Ryder Truck Rental
250 Prairie Center Drive
Suite 125
Eden Prairie, MN 55344

Date: 10/10/1994

NET Job Number: 94.02570

Contact: George Lousteri
Project: Ryder Yakima

Analyte	Original Analysis	Duplicate Analysis	Units	RPD	Date Analyzed	Flag
WTPH-Diesel (S)						
Diesel	ND	ND	mg/kg		10/10/1994	

NOTE: Duplicates may not be samples from this job.

RPD - Relative Percent Difference

Explanation of Data Flags

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
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D	The sample appears to extend to a heavier hydrocarbon range than gasoline.
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M	MS and/or MSD percent recovery exceeds control limits.
MR	The MS/MSD RPD is greater than 20%. The sample was re-extracted and re-analyzed with similar results. This is due to a matrix interference, likely a non-homogeneity of the sample.
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Q	Detection limits elevated due to sample matrix.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
W	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.

NATIONAL ENVIRONMENTAL TESTING, INC.

17400 SW Upper Boones Ferry Rd.
Suite # 260
Portland, OR 97224
PH: (503) 624-5449 FAX: (503) 639-6889

CHAIN OF CUSTODY RECORD

COMPANY Huntingdon
ADDRESS 2214 N. 4th Ave Pasco WA 99301
PHONE (509) 547-1671 FAX (509) 547-1673
PROJECT NAME/LOCATION Ryder Yakima
PROJECT NUMBER 194-2068 / 0904
PROJECT MANAGER George Loustani

REPORT TO: George Loustani / Paul Daniels
INVOICE TO: Ryder
P.O. NO.
NET QUOTE NO. 94.0250

SAMPLED BY
Paul Daniels (PRINT NAME)
SIGNATURE

(PRINT NAME)
SIGNATURE

					# and Type of Containers	ANALYSES: TPH 418.1	ANALYSES: TPH-D	COMMENTS
9/29	3:00	MW #6 1'-3'	Soil	✓		X	X	
"	4:00	MW #6	H2O	✓		X	X	

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO
VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT:
Bottles supplied by NET? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS DATE

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED FOR NET BY:
Paul Daniels	9/30			10/1 9:30	Tamara Dewker

METHOD OF SHIPMENT: Fed Ex

REMARKS:

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

APPENDIX 3

Washington State Department of Ecology Action Levels

Washington Department of Ecology
Action Levels for Petroleum Releases*

Constituent	CAS No.	Groundwater	Soil
Benzene	71-43-2	1.0 ug/L	0.5 mg/kg
Toluene	108-88-3	40.0 ug/L	40.0 mg/kg
Ethylbenzene	100-41-4	30.0 ug/L	20.0 mg/kg
Xylenes	1330-20-7	20.0 ug/L	20.0 mg/kg
TPH (gasoline)	--	1000.0 ug/L	100.0 mg/kg
TPH (other)	--	1000.0 ug/L	200.0 mg/kg
Lead	7439-92-1	5.0 ug/L	250.0 mg/kg

* Adapted from Guidance for Remediation of Releases from Underground Storage Tanks, Washington State Department of Ecology, Toxics Cleanup Program, p.74

APPENDIX 4

PHOTOGRAPHS

PHOTOGRAPHER: Paul Danielson

DATE: 9/1/94

VIEW: Drilling MW #1

DIRECTION: Looking East

PHOTOGRAPHER: Paul Danielson

DATE: 9/1/94

VIEW: Drilling MW #1

DIRECTION: Looking South

HUNTINGDON, INC. Job No.: 194-2068	PHOTOGRAPHIC RECORDS RYDER TRUCK RENTALS, INC. 19 WEST WASHINGTON STREET YAKIMA, WASHINGTON			
	DATE: 10/23/94	MOUNTED BY: PD	REVIEWED BY: GT	EXHIBIT NO.

PHOTOGRAPHER: Paul Danielson

DATE: 9/2/94

VIEW: Drilling MW #4

DIRECTION: Looking North

PHOTOGRAPHER: Paul Danielson

DATE: 9/2/94

VIEW: Drilling MW #4

DIRECTION: Looking Northwest

HUNTINGDON, INC. Job No.: 194-2068	PHOTOGRAPHIC RECORDS RYDER TRUCK RENTALS, INC. 19 WEST WASHINGTON AVENUE YAKIMA, WASHINGTON			
	DATE: 10/24/94	MOUNTED BY: PD	REVIEWED BY: GT	EXHIBIT NO.

REFERENCES:

Alt, D. D., & Hyndman, D. W. (1984). Roadside Geology of Washington. Missoula, Montana: Mountain Press Publishing Co.

Department of Ecology (1991, February), The Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC. Toxics Cleanup Program. Olympia, Washington: State document.

Department of Ecology (1991, April), Dangerous Waste Regulations, Chapter 173-303 WAC. Toxics Cleanup Program. Olympia, Washington: State document.

Department of Ecology (1991, July), Guidance for Remediation of Releases from Underground Storage Tanks. Toxics Cleanup Program. Olympia, Washington: State document.

Department of Ecology (1991, October), Underground Storage Tank Regulations, Chapter 173-360 WAC. Underground Storage Tank Program. Olympia, Washington: State document.