

# SITE HAZARD ASSESSMENT

## WORKSHEET 1

### Summary Score Sheet

#### **SITE INFORMATION:**

**Site Name: US West Communications**

Address: 102 E Alder Street, Walla Walla, WA

Ecology Facility Site ID No.: 777

Section/Township/Range: SE ¼, SW ¼, Section 20/Township 7 N/Range 36 E. W. M.

Latitude: 46.06639 Longitude: -118.33728

*Site scored/ranked for the August 2013 update*

*Today's date: June 12, 2013*

#### **SITE DESCRIPTION/BACKGROUND:**

The US West Communication (US West) Site is located in the City of Walla Walla, Walla Walla County Washington. US West is located on the southeast corner of South 1<sup>st</sup> Avenue and East Alder Street, (Figure 1 and 2). Historically the Site was the site of several commercial businesses which included a liquor store, wood working/upholstery shop, carpenter's shop, warehouse, and several storage sheds. Pacific Telephone and Telegraph Company constructed a three-story building with basement on the site in the 1940s and an addition was constructed in 1955. The building covers approximately 80 percent of the site. The remainder of the property is covered with concrete/asphaltic pavement.

#### **REMEDIAL INVESTIGATIONS AND REMEDIAL ACTIONS:**

Petroleum releases were detected associated with the Site as early as 1973, when petroleum was observed entering the wastewater treatment facility. The product was traced back to the sewer line located in the alley behind the Site. The release was thought to be associated with the underground storage tank system which probably impacted ground water beneath the Site, and ground water/petroleum product was drawn beneath the building to the sump pumps located in the basement. The sump-pumps in turn discharged the petroleum laden ground water to the City sewer system. US West decommissioned the underground storage tanks believed to be contributing to the petroleum product detected in the sewer system. The influx of petroleum to the sewer system stopped after the USTs were removed.

In latter part of 1991 US West was remodeling their building and installing an elevator. The elevator required excavation of an elevator shaft in the basement of the building. During the installation their contractor discovered petroleum contamination floating on the ground water in the basement excavation. Sample analytical results of the ground water in the elevator shaft excavation detected a mixture of #2 diesel fuel and bunker C oil.

US West hired Chen-Northern to investigate the petroleum contamination discovered in the basement elevator shaft excavation. Chen-Northern discovered there was a single underground storage tank

located below the basement floor near the elevator shaft. Chen-Northern surmised the tank was one of the possible sources of the release. Subsequent investigation by Chen-Northern and interviews of US West personnel found historically the site had at least five different underground storage tanks located on the property. The two tanks removed in 1973 were located on the southeast corner of the Site. Two additional tanks were noted on the building plans. The plans indicated the tanks were to be removed as part of the building expansion in the 1950s. Chen-Northern did not identify any other tanks or associated piping which could have been associated with these tanks during the onsite inspections and activities.

Ecology was notified of the discovery in early 1992. Ecology conducted a site visit at the time. US West continued investigations and activities to determine the extent of the contamination in soils and ground water. In 1993 Maxim (formerly Chen-Northern) evaluated the conditions of the underground storage tank located near the elevator shaft. The tank was located beneath a steel plate bolted to the basement floor. Soil was covering the top of the tank. Liquid hydrocarbons and ground water were present at approximately 1.5 feet below the basement floor. A pump was used to remove the water and route the discharge through an oil-water separator.

In November of 1994 the last operational underground storage tank was decommissioned. The tank was 1000-gallon diesel tank used to power the onsite emergency power generator. The tank was located in the parking area adjacent to South 1<sup>st</sup> Avenue (Figure 3). The tank was in good condition with minor staining near the fill pipe. A total of 15 cubic yards of petroleum contaminated soils (PCS) were removed from the excavation and disposed off-site. All samples collected from the excavation after the 15 yards of PCS was removed, were below the laboratory method detection levels.

No additional remedial actions have been conducted at the Site.

#### **GROUND WATER INVESTIGATION AND MONITORING:**

In 1992 Chen-Northern completed a limited Phase II Assessment at the Site to evaluate the extent of the contamination. Three monitoring wells (MW-1 through MW-3) were installed to evaluate ground water beneath the Site. Ground water samples collected from the newly installed monitoring wells only detected TPH concentrations in MW-2 at **120 milligrams per liter (mg/l)** and in the basement sump at **4.5 mg/l**. Method 'A' cleanup levels for petroleum in ground water at the time were 1 mg/l.

Soil samples collected from the borings at the time the monitoring wells were installed documented the presence of petroleum in soils ranging from 53 milligrams per kilogram (mg/kg) in boring MW-1 to **2,300 mg/kg** in boring MW-2.

In August 1993, four additional monitoring wells (MW-4 through MW-7) were added to the network to assess the ground water impact on and off Site. All seven monitoring wells were sampled and the results documented TPH at **2 mg/l** at MW-2 and **3.8 mg/l** in the basement sump. TPH content of the ground water decreased in the down gradient direction away from the building. Samples from off Site wells did not exceed the Method A cleanup levels.

Ground water monitoring data is attached.

**ECOLOGY FIVE YEAR REVIEW:**

In 2009 Ecology conducted a five year review of the cleanup action conducted at the Site. The review was based on the fact the Site had entered the Independent Remedial Action Program (IRAP), which allowed Ecology to review the work and make a determination if more remedial action work was necessary or the Site qualified for a No Further Action (NFA).

Based on the IRAP review in 1997, the cleanup actions conducted at the Site were sufficient and no additional work would be required; however an NFA would only be issued after recording a restrictive covenant for the property. The restrictive covenant would document presence of contamination remaining beneath the Site and restrict activities which would expose the contamination to the environment. The restrictive covenant was never recorded.

The conclusion of the five year review also was additional remediation was not necessary; but the actions to date do not meet the requirements of the Model Toxics Control Act. Additional actions were required in the five year review for the property owner to receive the NFA for the Site. It was also noted in the report that the property owner was responsible to continue to maintain the Site's integrity and protect the existing remedial actions completed at the Site.

To date the property owner has not recorded the restrictive covenant.

**SPECIAL CONSIDERATIONS:**

Residual soil contamination remains beneath the building and in the area of MW-2 and beneath the basement near the closed in-place underground storage tank. No other areas of the Site have documented the presence of TPH levels in soils above the Method A cleanup action levels. Ground water contamination is confined to the boundary of the Site. The site is covered by the building foot print and pavement reducing the risk of direct contact of contaminated soils. There are no natural areas on the site that would allow plants or fauna to come in contact with the contamination. The surface water route is not applicable for WARM ranking this site.

**ROUTE SCORES:**

Surface Water/Human Health: NS  
Air/Human Health: NS  
Groundwater/Human Health: 10.97

Surface Water/Environmental.: NS  
Air/Environmental: NS

**OVERALL RANK: 5**

WORKSHEET 2  
Route Documentation

1. **SURFACE WATER ROUTE** *NOT SCORED*

- a. List those substances to be considered for scoring: Source: NA
- b. Explain basis for choice of substance(s) to be used in scoring.
- c. List those management units to be considered for scoring: Source: NA
- d. Explain basis for choice of unit to be used in scoring:

2. **AIR ROUTE**

- a. List those substances to be considered for scoring: Source: NA  
TPH diesel
- b. Explain basis for choice of substance(s) to be used in scoring:  
TPH diesel was detected in soil and ground water from samples during the excavation of an elevator shaft in the basement of the building in 1991.
- c. List those management units to be considered for scoring: Source: NA  
Subsurface soils and groundwater.
- d. Explain basis for choice of unit to be used in scoring:  
TPH diesel was detected in subsurface soils and ground water in 1991 above the cleanup action levels for the time period. Therefore, TPH diesel will be used Site ranking.

3. **GROUNDWATER ROUTE**

- a. List those substances to be considered for scoring: Source: 1,2,3,4,5,6  
TPH diesel
- b. Explain basis for choice of substance(s) to be used in scoring:  
Diesel was detected in subsurface soils and ground water beneath the Site.
- c. List those management units to be considered for scoring: Source: 1,2,3,4,5,6  
Subsurface soils and ground water.
- d. Explain basis for choice of unit to be used in scoring:  
Diesel was detected in subsurface soils exceeding the cleanup action levels. Ground water samples collected also contained diesel product.

WORKSHEET 6  
 Groundwater Route

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity										
Substance	Drinking Water Standard (µg/L)	Value	Acute Toxicity (mg/ kg-bw)	Value	Chronic Toxicity (mg/kg/day)	Value	Carcinogenicity		Value	
							WOE	PF*		
1	TPH-Diesel	20	6	490	5	0.004	3	-	-	ND
2										
3										
4										
5										
6										

\* Potency Factor

Source: 1,2,3,4,7  
**Highest Value: 6**  
 (Max = 10)  
**Plus 2 Bonus Points?**  
**Final Toxicity Value: 6**  
 (Max = 12)

1.2 Mobility (use numbers to refer to above listed substances)	
Cations/Anions [Coefficient of Aqueous Migration (K)]	OR Solubility (mg/L)
1= TPH diesel	1= 3.0E+01
2=	2=
3=	3=
4=	4=
5=	5=
6=	6=

Source: 1,2,3,4,7,8  
**Value: 1**  
 (Max = 3)

<b>1.3 Substance Quantity:</b>	
Explain basis: Unknown, use default = 1	Source: 1,2,3,4,5,6,8 <b>Value: 1</b> (Max=10)

**2.0 MIGRATION POTENTIAL**

		Source	Value
2.1	<b>Containment (explain basis):</b> The contaminated soil area is covered by the existing building and paved parking lot; thus scoring as a landfill: No liner = 3; Maintained cover with no ponding = 0; On-site sumps discharge through oil water separator in unknown condition = 1	1,2,3,4,5,6,7	<u>4</u> (Max = 10)
2.2	<b>Net precipitation:</b> 13.92" minus .13" (evapotranspiration) = 13.79	10	<u>2</u> (Max = 5)
2.3	<b>Subsurface hydraulic conductivity:</b> gravelly silt loam	1,2,3,4	<u>3</u> (Max = 4)
2.4	<b>Vertical depth to groundwater:</b> 10' – 11'	1,2,3,4	<u>8</u> (Max = 8)

**1.0 TARGETS**

		Source	Value
3.1	<b>Groundwater usage:</b> Ground water not used, but usable	8, 9, 11, 12	<u>2</u> (Max = 10)
3.2	<b>Distance to nearest drinking water well:</b> none – A well is located within ½ mile of the site. The well was drilled to 185 feet before encountering water. A 4 foot clay layer was located at 114 feet, which would separate any shallower water bearing zones. Therefore no shallow water wells exist close to the subject property. (see well log)	9, 11	<u>0</u> (Max = 5)
3.3	<b>Population served within 2 miles:</b> 3 private wells not transitory population	9, 11	<u>3</u> (Max = 100)
3.4	<b>Area irrigated by (groundwater) wells within 2 miles:</b> (0.75)*√ 169.8 = 9.77	9, 11	<u>10</u> (Max = 50)

**2.0 RELEASE**

		Source	Value
	<b>Explain basis for scoring a release to groundwater:</b> Ground water samples from monitoring wells do not exceed cleanup action levels established under MTCA, however water samples collected from the sumps beneath the building have exceeded cleanup action levels. The basis for scoring the release to ground water is based on samples from the sumps.	1,2,3,4	<u>5</u> (Max = 5)

## SOURCES USED IN SCORING

1. Initial Investigation Report, Dave George, WA Ecology, January 15, 1992
2. Phase II Environmental Site Assessment, Detailed Hydrocarbon Investigation, Huntingdon Engineering & Environmental, Inc., December 1993
3. Independent Remedial Action Report, Maxim Technologies, Inc, August 15, 1996
4. Underground Storage Tank Site Assessment, Huntingdon Engineering & Environmental, Inc. November 18, 1994
5. Memorandum, Patti Carter, WA Ecology, January 24, 1997
6. Periodic Review, WA Ecology, December 2009
7. Washington State Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992
8. Washington State Department of Ecology, WARM Scoring Manual, April 1992
9. City of Walla Walla Census (2010) Demographic GIS Interactive Map
10. [www.weather.com](http://www.weather.com) Walla Walla WA Monthly Averages
11. Washington Department of Ecology, Water Rights Application System (WRATS) printout for two-mile radius of Site.
12. Washington Department of Health, Sentry Internet Database printout for public water supplies.
13. U.S.G.S. Topographic map for Walla Walla, WA area.

The Department of Ecology does NOT Warranty the Data and/or the information on this Well Report.

File Original and First Copy with  
 Department of Ecology  
 Second Copy — Owner's Copy  
 Third Copy — Driller's Copy

### WATER WELL REPORT

STATE OF WASHINGTON

Application No. \_\_\_\_\_  
 Permit No. \_\_\_\_\_

(1) OWNER: Name Daniel Duane Meinhart Address 1231 Boyer W.W.  
 (2) LOCATION OF WELL: County WALLA WALLA SE 1/4 Sec 20 T. 7 N. R. 36 W.M.  
 bearing and distance from section or subdivision corner 220 NW. from SE corner of lot 6 of WSPA 14444855

(3) PROPOSED USE: Domestic  Industrial  Municipal   
 Irrigation  Test Well  Other

**(10) WELL LOG:**

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
Topsoil	0	32
Clay & Gravel	32	60
Gravel	60	62
Sand	62	83
Clay Gravel	83	114
Clay	114	118
Clay & Gravel	118	185
Gravel - water bearing	185	230

(4) TYPE OF WORK: Owner's number of well (if more than one) \_\_\_\_\_  
 New well  Method: Dug  Bored   
 Deepened  Cable  Driven   
 Reconditioned  Rotary  Jetted

(5) DIMENSIONS: Diameter of well 6 inches.  
 Drilled 230 ft. Depth of completed well 230 ft.

**(6) CONSTRUCTION DETAILS:**

Casing installed: 6" diam. from 0" ft. to 153 ft.  
 Threaded  diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Welded  diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Perforations: Yes  No   
 Type of perforator used \_\_\_\_\_  
 SIZE of perforations \_\_\_\_\_ in. by \_\_\_\_\_ in.  
 \_\_\_\_\_ perforations from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 \_\_\_\_\_ perforations from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 \_\_\_\_\_ perforations from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Screens: Yes  No   
 Manufacturer's Name \_\_\_\_\_ Model No. \_\_\_\_\_  
 Type \_\_\_\_\_ Diam. \_\_\_\_\_ Slot size \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Diam. \_\_\_\_\_ Slot size \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Gravel packed: Yes  No  Size of gravel: \_\_\_\_\_  
 Gravel placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Surface seal: Yes  No  To what depth? 32 ft.  
 Material used in seal: Drilling Cuttings  
 Did any strata contain unusable water? Yes  No   
 Type of water? \_\_\_\_\_ Depth of strata \_\_\_\_\_  
 Method of sealing strata off \_\_\_\_\_

(7) PUMP: Manufacturer's Name \_\_\_\_\_  
 Type: \_\_\_\_\_ HP \_\_\_\_\_

(8) WATER LEVELS: Land-surface elevation 990 ft. above mean sea level.  
 Static level 47 ft. below top of well Date 10/26/75  
 Artesian pressure \_\_\_\_\_ lbs. per square inch Date \_\_\_\_\_  
 Artesian water is controlled by \_\_\_\_\_ (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level.  
 Was a pump test made? Yes  No  If yes, by whom? \_\_\_\_\_  
 Yield: \_\_\_\_\_ gal/min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test \_\_\_\_\_  
 after test 40 gal/min. with 12 ft. drawdown after 1 hrs.  
 Artesian flow \_\_\_\_\_ g.p.m. Date 10/26/75  
 Temperature of water 52. Was a chemical analysis made? Yes  No

Work started OCT. 13, 1975. Completed OCT 26, 1975.

**WELL DRILLER'S STATEMENT:**

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

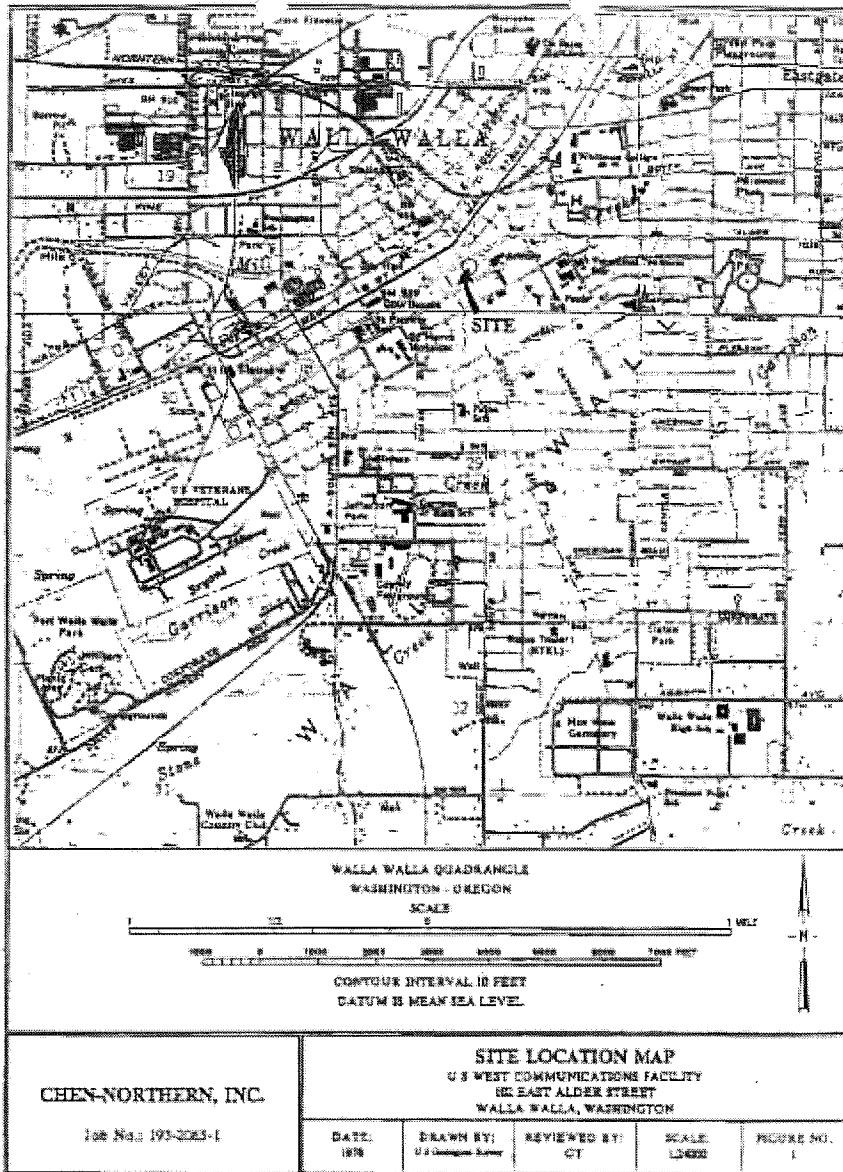
NAME HARDING DRILLING Co.  
 (Person, firm, or corporation) (Type or print)

Address Rt 3 So 3rd Walla Walla Wash

[Signed] Mike Harding  
 (Well Driller)

License No. 173 Date 10/28, 1975

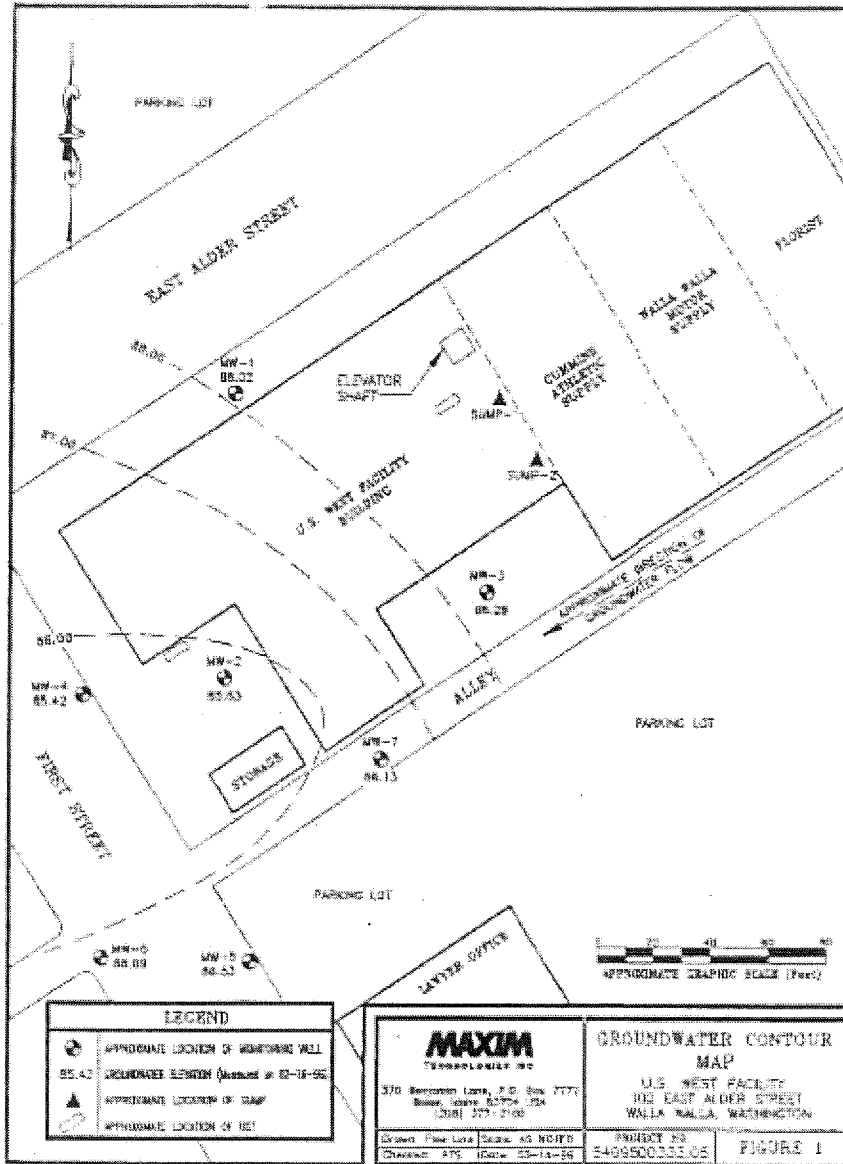
6.1 Vicinity Map



Periodic Review  
 September 2009

US West Communications  
 Page 10

6.2 Site Plan



6.3 Groundwater Monitoring Data

TABLE I  
 Summary of Groundwater Monitoring Data  
 U.S. West Facility  
 Walla Walla, Washington

Well ID/ Elevation (ft.) (TOC)	Date	TPH-D (µg/l)	TPH-G (µg/l)	DTW (ft.)	WTE (ft.)
MW-1/ 97.98	1/17/95	ND	NA	10.00	87.98
	5/26/95	ND	ND	10.49	87.49
	8/30/95	ND	NA	10.65	87.33
	11/28/95	ND	NA	10.17	87.81
	2/26/96	ND	NA	9.96	88.02
MW-2/ 97.86	1/17/95	190	NA	10.43	86.64
	5/26/95	ND	ND	11.73	85.33
	8/30/95	ND	NA	11.84	85.22
	11/28/95	ND	NA	11.43	85.63
	2/26/96	ND	NA	11.43	85.63
MW-3/ 98.37	1/17/95	NS	NS	NM	NM
	5/26/95	NS	NS	10.25	88.12
	8/30/95	NS	NS	10.35	88.02
	11/28/95	NS	NS	10.16	88.21
	2/26/96	NS	NS	10.09	88.28
MW-4/ 96.81	1/17/95	100	NA	11.33	85.48
	5/26/95	ND	ND	NM	NM
	8/30/95	ND	NA	11.95	84.86
	11/28/95	ND	NA	11.47	85.34
	2/26/96	ND	NA	11.39	85.42
MW-5/ 96.55	1/17/95	ND	NA	11.25	85.30
	5/26/95	ND	ND	11.70	84.85
	8/30/95	ND	NA	10.49	86.06
	11/28/95	ND	NA	10.13	86.42
	2/26/96	ND	NA	10.02	86.53
MW-6/ 96.03	1/17/95	120	NA	9.61	86.40
	5/26/95	ND	ND	NM	NM
	8/30/95	ND	NA	10.22	85.81
	11/28/95	ND	NA	9.98	86.05
	2/26/96	ND	NA	9.94	86.09
MW-7 97.56	11/28/95	NS	NS	11.51	86.05
	2/26/96	NS	NS	11.43	86.13
Sump in Basement	1/17/95	ND	NA	3.14	NM
	5/26/95	ND	ND	NM	NM
	8/30/95	ND	NA	NM	NM
	11/28/95	ND	NA	NM	NM
	2/26/96	ND	NA	NM	NM
Duplicate MW-1	2/26/96	ND	NA		

EXPLANATION

Well locations shown in Figure 1  
 TOC - Top of Casing  
 ppb - Parts per billion, equivalent to micrograms per liter  
 TPH-G - Total Petroleum Hydrocarbons as Gasoline, Washington DOE Method  
 TPH-D - Total Petroleum Hydrocarbons as Diesel Extended, Washington DOE Method  
 DTW - Depth to Groundwater  
 WTE - Groundwater Table Elevation  
 ND - Not Detected  
 NA - Not Analyzed  
 NM - Not Measured

D:\K\9\09\5400\0011-4

