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**SITE ASSESSMENT AND INTERMEDIATE  
CLEANUP**

**ENGINEERING REPORT**

1/2

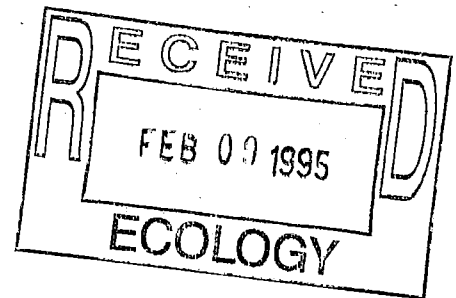
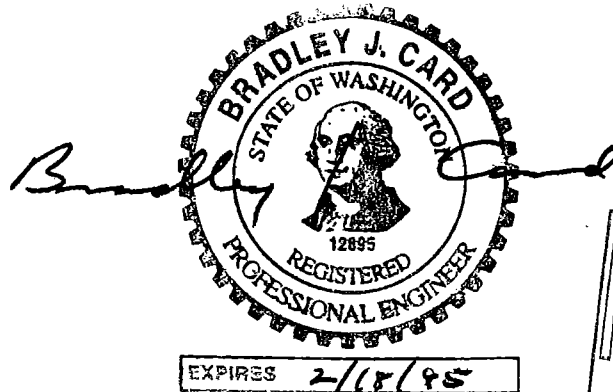
on

**UNDERGROUND STORAGE TANK REMOVAL**

for

**WASHINGTON BEEF**

West Ahtanum Road and Goodman Road  
Union Gap, Washington

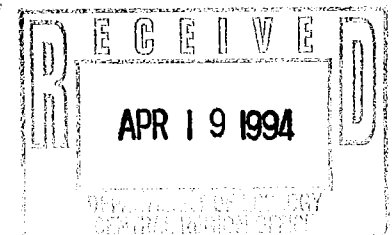
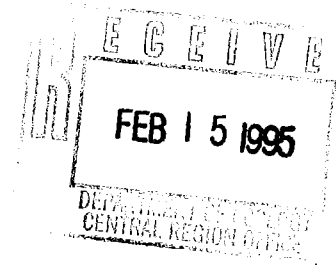


March 1994

Job No. 93361

Prepared by

PLSA ENGINEERING & SURVEYING  
WDOE LIC. No. S000210  
1120 West Lincoln Avenue  
Yakima, WA 98902  
(509) 575-6990



**SITE ASSESSMENT AND INTERMEDIATE CLEANUP ENGINEERING  
REPORT**

on

**UNDERGROUND STORAGE TANK REMOVAL**

for

**WASHINGTON BEEF**

**West Ahtanum Road and Goodman Road  
Union Gap, Washington**

**INTRODUCTION**

Washington Beef decided to remove two underground storage tanks (UST) from their premises at Lower Ahtanum Road and Goodman Road, Union Gap, Washington.

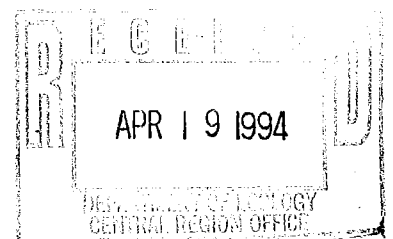
Both tanks were steel, had contained gasoline at last use, and were 1,000 gallons capacity each. After tank removal, petroleum was detected to have been released into the surrounding soil, but the tanks appeared to be in good condition. See Figure 1. The tanks were located in NW 1/4, SW 1/4, SEC 6, TWP 12N, R19-EWM.

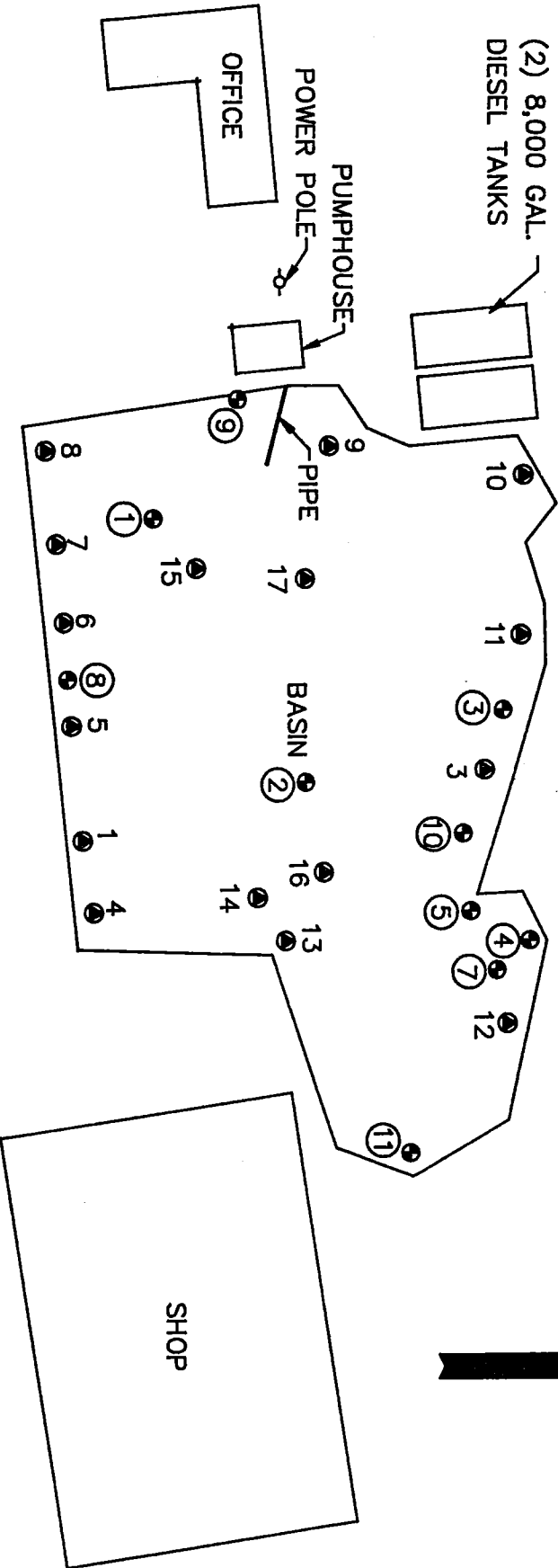
This report summarizes site conditions, describes remediation and disposal of petroleum contaminated soil (PCS), and describes intermediate site cleanup. Results of laboratory testing of representative soil samples for characterization of the spilled petroleum, and for presence of Total Petroleum Hydrocarbons (TPH) as determined by Washington State Department of Ecology (WDOE) test methods, and benzene, toluene, ethyl benzene, xylene (BTEX), and lead by United States Environmental Protection Agency (USEPA) test methods as appropriate are included.

An environmental engineer and a geological engineer from PLSA Engineering and Surveying experienced with local soil conditions monitored and provided technical assistance to Washington Beef.

~~UST and PCS removal and sampling were performed by Cayuse Environmental with Mr. Bryan Mull as project manager, a WDOE licensed tank decommissioning contractor. Ken's Construction provided excavation equipment, trucks, and tank cleaning. Ken Leingang Excavating, Inc. provided pumps and oil separator equipment for dewatering.~~

The owner's representative and contact person for this project is as follows:





**LEGEND**

- ⑩ - PLSA TEST PIT NUMBER AND LOCATION
- ⑨ - DENOTES CAYUSE ENVIRONMENTAL TEST PIT NUMBER AND LOCATION



**FIGURE 1**

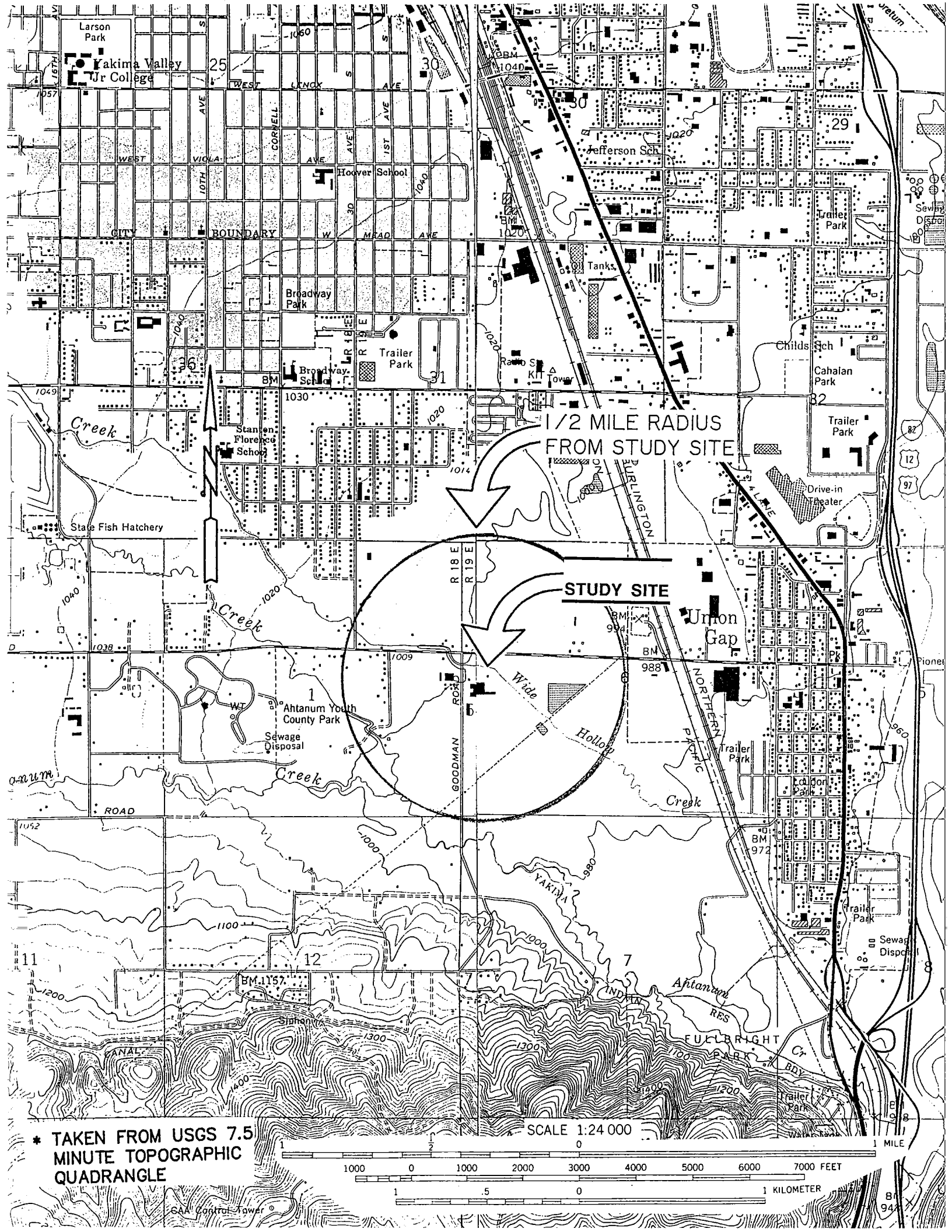
**PLSA**

ENGINEERING-SURVEYING-PLANNING  
YAKIMA, WASHINGTON  
(509) 575-8990

SITE MAP

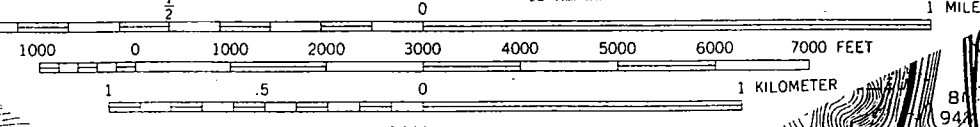
FOR  
**WASHINGTON BEEF, INC.**

DRAWN BY: CHUCK  
DATE: 2-10-84  
JOB NO. 83361



\* TAKEN FROM USGS 7.5  
MINUTE TOPOGRAPHIC  
QUADRANGLE

SCALE 1:24 000



CAA Control Tower

BR 94

Mr. Dave Stiner  
Washington Beef  
P.O. Box 9344  
Union Gap, Washington 98909  
phone (509) 248-3350

#### **SURFACE CONDITIONS**

A combination asphaltic concrete paved and graveled parking area covered the tank basins. Wide Hollow Creek is located approximately 100 feet north, and the meat packing facility borders the tank basin on the south. A retired former maintenance supervisor reported that the area has been used for various methods of motor fuel storage since circa 1950 and that he had observed improper handling of petroleum products including overfilling vehicle fuel tanks, and overfilling underground storage tanks.

The area was used as a cattle holding pen or feedlot prior to use as motor fuel storage.

#### **SUB-SURFACE CONDITIONS**

Sandy silt topsoil (Uniform Soil Classification System ML) overlies a deep stratum of cobbles, gravel, and sand (USCS classification GW). Ground water was encountered in the tank basin at approximately 9 feet below the surface.

Tanks were bedded in native soil. Petroleum contamination was found from the surface down in most locations. Prior use of the area for cattle holding pens resulted in nutrients and organic material from the cattle penetrating the soil. This resulted in darkened soil which appeared identical to that from staining by petroleum. Presence of nutrients in the soil and ground water and appearance of the soil was evidence that bioremediation had occurred.

From general topography, it appears that the groundwater hydraulic gradient is to the north toward the Wide Hollow Creek located approximately 100 feet north.

#### **SAMPLING PLAN**

Representative soil samples were collected from the tank basins and the stockpiled soil by Cayuse Environmental. Additional water and soil samples were collected by PLSA. Those samples collected by PLSA were in sample containers supplied by the analytical laboratory and were clean glass with Teflon lined, screwed caps. Sampling equipment was cleaned between samplings.

Cayuse Environmental samples were stored and shipped to Spectra Laboratories, Tacoma, Washington, WDOE Accreditation

Number C077, by overnight express in a refrigerated, insulated container.

Samples collected by PLSA were similarly collected, refrigerated and shipped to Sound Analytical Laboratory, Fife, Washington, WDOE Accreditation No. C027. One water sample collected by PLSA was received directly and analyzed for petroleum hydrocarbons by method EPA 418.1 by TR Applied Science of Yakima, Washington.

Sample locations are depicted on Figure 1. Laboratory analytical reports may be found in Appendix I.

#### **CONTAMINANT CHARACTERIZATION**

Samples from below the various tanks were collected and submitted to a laboratory for analysis for contaminant characterization by WDOE WTPH-G and WTPH-418.1 modified analyses. Characterization using these analyses found gasoline contamination in excess of 13,000 mg/kg and total petroleum hydrocarbon concentration at 24,000 mg/kg. Heavy oil in the waste oil tank basin was the only contaminant found to be in excess of WDOE Model Toxics Control Act (MTCA) WAC 173-340 cleanup regulations.

Gasoline release appeared to have originated from an improperly tightened fitting at a dispenser. Diesel contamination was from earlier releases from unknown sources and/or improper handling, such as overfilling.

A Photovac TIP I ultraviolet analyzer was used to scan the limits of the cleanup excavation for Volatile Organic Compounds (VOC's). No significant VOC indication was found in the gasoline tank basin. Petroleum odor indication was detected when soil in the tank basin was disturbed during the cleanup excavation. Petroleum odor in darkened soil diminished rapidly with distance from the tank basin. Soil odor changed to swampy. Sample jar head space odors were not typical of gasoline or diesel. It appeared that presence of nutrients had resulted in reduction of petroleum contamination by bioremediation.

#### **CLEANUP METHOD**

Locally available excavation equipment furnished by Ken's Construction was used for tank and PCS removal. Cleanup by excavation of PCS and immediate transport to Ron Anderson's Rocky Top Decontamination Site was necessary because the PCS was not allowed to be stored on site.

#### **CONTAMINANT REMOVAL AND PROPOSED INTERMEDIATE CLEANUP**

A Photovac TIP 1 photoanalyzer was used to detect VOC's, and a GASTECH 1314 SMPN combustible gas indicator (CGI) was used to detect combustible mixtures as contaminated soil was removed until significant readings were no longer obtained in the walls of the

excavation or until the excavation began to threaten buildings or other improvements. Representative soil samples were then collected and submitted for laboratory analysis to verify the TIP and CGI results. Results of the laboratory analysis may be found in Appendix I and summarized in Figure 1.

PCS extended downward to the bottom of the excavation, 10 feet below the surface, which was 2 feet below the free ground water surface. The excavation was dewatered using a pump discharging to an API oil separator followed by a coalescing plate oil separator. It appeared that petroleum contamination in soil decreased rapidly with distance from the location of the tank. Groundwater characterization contamination was only 2 mg/l which is 1 mg/l above MTCA method A cleanup level. Low groundwater petroleum concentration (TPH) may in part attributed to the presence of nutrients in the ground water making bioremediation possible. Ground water samples collected from the completed clean up analyzed less than 1 mg/l TPH which is within MTCA (WAC 173-340-740 Method A) cleanup levels.

Analytical results of samples of both soil and ground water from the completed cleanup are all within the levels specified in WAC 173-340-740 Method A (MTCA) with the exception of one sample from the west side of the excavation at the footing of a small building. This sample contained 1,100 mg/kg aged gasoline, light diesel, or heavy oil concentration. Benzene and toluene were not detected in this sample and ethylbenzene, xylenes, and lead were below MTCA action values. No free product was observed and petroleum odor was slight at the sample location. Any further excavation at this location would jeopardize an adjacent small building.

It appears that passive bioremediation will eliminate the remaining petroleum contamination at about the same rate as would other in-situ methods, such as soil venting.

Intermediate cleanup is recommended with no further action necessary or recommended.

## **RISK ANALYSIS**

Final sampling found groundwater and all soil sample locations to be below MTCA action values except one soil sample on the west side of the excavation limit next to a building. There is ample evidence that passive bioremediation has and is taking place. This is possibly due to the nutrient content of the soil in the former feedlot. Domestic water for the area is supplied by the City of Union Gap.

Remaining contaminated soil is isolated from contact by humans or animals by approximately 9 feet of clean backfill and ground water is not contaminated. Benzene was not found. Remaining petroleum contamination is limited to the higher molecular weight fractions, which are of relatively low toxicity.

Passive bioremediation is expected to destroy the remaining petroleum contamination with time.

#### **DISPOSAL OF CONTAMINATED SOIL**

The excavated PCS was transported to Anderson's Rocky Top Decontamination Site for remediation by land farming.

#### **DISPOSAL OF TANKS AND PIPING**

Cayuse Environmental reported that tanks were inerted with dry ice, cut open, scraped and cleaned with solzall to remove remaining product. The cleaned tanks were then reported to have been delivered to Douglas Wrecking in Wapato, Washington for disposal. See letter Appendix IV.

#### **SITE CLOSURE**

The cleanup excavation will be backfilled with clean soil, and restored to the original use as a parking area.

#### **CONCLUSIONS**

All final soil and groundwater samples were within the levels specified in WAC 173-340-740 Method A with the exception of one soil sample from the west end of the excavation. Removal of this relatively low-toxicity residual contamination would jeopardize permanent improvements. Passive bioremediation appears to be occurring at the excavation limits, so no further action is recommended or necessary.

#### **LOCAL DOCUMENTED WATER WELLS**

Domestic water is supplied by the City of Union Gap water system for the area. Logs of documented domestic water wells within one half mile radius of the site may be found in Appendix III.


#### **CHECKLISTS**

Completed Site Assessment and Independent Remedial Action Report Summary checklists may be found in Appendices IV and V, respectively.



APPENDIX I

Analytical Results



# SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (206) 272-4850

November 30, 1993

Cayuse Environmental  
60 Olden Way  
Toppenish WA 98948

Attn: Bryan Mull

Project: Wash. Beef  
Sample Matrix: Soil  
Date Sampled: 11-15-93  
Date Received: 11-16-93  
Date Analyzed: 11-30-93  
Spectra Project: S311-104


<u>Spectra #</u>	<u>Sample ID:</u>	<u>WTPH-G, mg/Kg</u>	<u>Surrogate Recovery</u> <u>Trifluorotoluene</u>
6425	9323-01	13,269	8831%*
6426	9323-02	624	94%
6427	9323-03	2,792	67%
6428	9323-04	11,131	6061%*
6429	9323-05	<20	108%
6430	9323-06	1,491	64%
Method Blank		<20	108%

\*Out of limits due to sample matrix effects.

SPECTRA LABORATORIES, INC.



Steven G. Hibbs, Chemist



# SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (206) 272-4850

November 30, 1993

Cayuse Environmental  
60 Olden Way  
Toppenish WA 98948


Attn: Bryan Mull

P.O. #9323  
Project: Wash. Beef  
Sample Matrix: Soil  
Date Sampled: 11-15-93  
Date Received: 11-16-93  
Spectra Project: S311-104  
RUSH

<u>Spectra #</u>	<u>ID</u>	<u>Total Petroleum Hydrocarbons, mg/Kg</u>
6425	9323-01	14,000
6426	9323-02	9,500
6427	9323-03	24,000
6428	9323-04	10,000
6429	9323-05	210
6430	9323-06	550

Total Petroleum Hydrocarbons testing performed by WTPH-418.1 Modified

SPECTRA LABORATORIES, INC.



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Steven G. Hibbs, Chemist

APPENDIX II

Intermediate Analytical Results

# SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: PLSA Engineering

Date: December 16, 1993

Report On: Analysis of Soil

Lab No.: 36807

Page 1 of 2

IDENTIFICATION:

Samples received on 12-15-93

Project: 93361

-----  
ANALYSIS:

Lab Sample No. 36807-1

Client ID: 1

WTPH-D

Date Extracted: 12-15-93

Date Analyzed: 12-16-93

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	25	

SURROGATE RECOVERY, %

o-terphenyl	114
-------------	-----

ND - Not Detected

PQL - Practical Quantitation Limit

Continued . . . . .

# SOUND ANALYTICAL SERVICES, INC.

PLSA Engineering  
Project: 93361  
Lab No. 36807  
Page 2 of 2  
December 16, 1993

Lab Sample No. 36807-2

Client ID: 2

WTPH-D  
Date Extracted: 12-15-93  
Date Analyzed: 12-16-93

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	77	25	X1

SURROGATE RECOVERY, %

o-terphenyl 116

X1 - Aged or degraded diesel

Lab Sample No. 36807-3

Client ID: 3

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	25	

SURROGATE RECOVERY, %

o-terphenyl 115

ND - Not Detected

PQL - Practical Quantitation Limit

# SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: PLSA Engineering

Date: December 17, 1993

Report On: Analysis of Soil

Lab No.: 36842

Page 1 of 2

IDENTIFICATION:

Samples received on 12-16-93

Project: 93361

ANALYSIS:

Lab Sample No. 36842-1

Client ID: 4

WTPH-D

Date Extracted: 12-16-93

Date Analyzed: 12-17-93

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	33	

SURROGATE RECOVERY, %

o-terphenyl                      107

ND - Not Detected

PQL - Practical Quantitation Limit

Continued . . . . .

# SOUND ANALYTICAL SERVICES, INC.

PLSA Engineering  
 Project: 93361  
 Lab No. 36842  
 Page 2 of 2  
 December 17, 1993

Lab Sample No. 36842-2

Client ID: 5

WTPH-D

Date Extracted: 12-16-93

Date Analyzed: 12-17-93

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	36	
<u>SURROGATE RECOVERY, %</u>			
o-terphenyl	109		

Lab Sample No. 36842-3

Client ID: 6

WTPH-D

Date Extracted: 12-16-93

Date Analyzed: 12-17-93

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	33	
<u>SURROGATE RECOVERY, %</u>			
o-terphenyl	109		

ND - Not Detected

PQL - Practical Quantitation Limit



# SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: PLSA Engineering

Date: January 28, 1994

Report On: Analysis of Water

Lab No.: 37692

IDENTIFICATION:

Sample received on 01-27-94

Project: 93361

-----  
ANALYSIS:

Lab Sample No. 37692-1

Client ID: 7

WTPH-G with BTEX by EPA Method 8020

Date Analyzed: 1-28-94

<u>Parameter</u>	<u>Result, mg/L</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	ND	0.10	
Benzene	ND	0.001	
Toluene	ND	0.001	
Ethyl Benzene	0.001	0.001	
Xylenes	0.003	0.001	

SURROGATE RECOVERY, %

Trifluorotoluene 91

ICP Metals Per EPA Method 6010

Date Analyzed: 1-28-94

<u>Parameter</u>	<u>Result, mg/L</u>	<u>PQL</u>
Lead	ND	0.05

ND - Not Detected

PQL - Practical Quantitation Limit

# SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-3047

Report To: PLSA Engineering

Date: February 10, 1994

Report On: Analysis of Soil

Lab No.: 37955

IDENTIFICATION:

Samples received on 02-08-94

Project: 93361

ANALYSIS:

Lab Sample No. 37955-1

Client ID: 8

WTPH-G with BTEX by EPA Method 8020

Date Extracted: 2-8-94

Date Analyzed: 2-10-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	2.0	1.4	
Benzene	ND	0.07	
Toluene	0.19	0.07	
Ethyl Benzene	ND	0.07	
Xylenes	ND	0.07	

SURROGATE RECOVERY, %

Trifluorotoluene	69
------------------	----

ICP Metals Per EPA Method 6010

Date Analyzed: 2-9-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>
Lead	6.1	3.4

ND - Not Detected

PQL - Practical Quantitation Limit

# SOUND ANALYTICAL SERVICES, INC.

PLSA Engineering  
 Project: 93361  
 Lab No. 37955  
 February 10, 1994

Lab Sample No. 37955-2

Client ID: 9

WTPH-G with BTEX by EPA Method 8020

Date Extracted: 2-8-94

Date Analyzed: 2-10-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	1,100	13	X1
Benzene	ND	0.64	
Toluene	ND	0.64	
Ethyl Benzene	1.6	0.64	
Xylenes	4.8	0.64	

SURROGATE RECOVERY, %

Trifluorotoluene	NR		X8
------------------	----	--	----

X1 - Aged gas, light diesel or heavier oil

ICP Metals Per EPA Method 6010

Date Analyzed: 2-9-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>
Lead	7.4	3.0

NR - Not Reported

ND - Not Detected

PQL - Practical Quantitation Limit

# SOUND ANALYTICAL SERVICES, INC.

FLSA Engineering  
 Project: 93361  
 Lab No. 37955  
 February 10, 1994

Lab Sample No. 37955-3

Client ID: 10

WTPH-G with BTEX by EPA Method 8020

Date Extracted: 2-8-94

Date Analyzed: 2-10-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	3.9	1.4	
Benzene	ND	0.07	
Toluene	ND	0.07	
Ethyl Benzene	ND	0.07	
Xylenes	ND	0.07	

SURROGATE RECOVERY, %

Trifluorotoluene	71
------------------	----

ICP Metals Per EPA Method 6010

Date Analyzed: 2-9-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>
Lead	18	3.0

ND - Not Detected

PQL - Practical Quantitation Limit

# SOUND ANALYTICAL SERVICES, INC.

PLSA Engineering  
 Project: 93361  
 Lab No. 37955  
 February 10, 1994

Lab Sample No. 37955-4

Client ID: 11

WTPH-G with BTEX by EPA Method 8020

Date Extracted: 2-8-94

Date Analyzed: 2-10-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	1.8	1.3	
Benzene	ND	0.07	
Toluene	ND	0.07	
Ethyl Benzene	ND	0.07	
Xylenes	ND	0.07	

SURROGATE RECOVERY, %

Trifluorotoluene	74
------------------	----

ICP Metals Per EPA Method 6010

Date Analyzed: 2-9-94

<u>Parameter</u>	<u>Result, mg/kg</u>	<u>PQL</u>
Lead	6.9	3.1

ND - Not Detected

PQL - Practical Quantitation Limit



# APPLIED SCIENCE

1106 Ledwich Ave., Yakima, WA 98902 (509) 248-4695 FAX (509) 452-1265

Chemistry, Microbiology, and Technical Services

CLIENT : Cayuse Environmental

## Certificate of Analysis

Work Order # 13-12-112

### TESTS PERFORMED AND RESULTS:

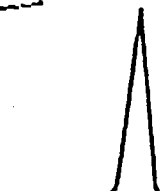
Analyte	Units	<u>Q1</u>
Total Solids in Soil	%	88.
WTPH-418.1	mg/kg DB	70.

A division of

# Laucks



This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

  
**SPECTRA Laboratories, Inc.**

2221 Ross Way • Tacoma, WA 98421 • (206) 272-4850

December 17, 1993

Cayuse Environmental  
60 Olden Way  
Toppenish, WA 98948

Attn: Gordon Mull

P.O. #9323

Sample Matrix: Water

Date Sampled: 12-14-93

Date Received: 12-16-93

Date Analyzed: 12-17-93


Spectra Project: S312-118

RUSH

<u>Spectra #</u>	<u>Sample ID:</u>	<u>WTPH-D. ug/L</u>	<u>Surrogate Recovery</u> <u>p-terphenyl</u>
8080	9323-002	740	53
8081	9323-003	902	67

SPECTRA LABORATORIES, INC.

  
Steven G. Hibbs, Chemist



# SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (206) 272-4850

December 17, 1993

Cayuse Environmental  
60 Olden Way  
Toppenish, WA 98948

Attn: Gordon Mull

P.O. #9323

Sample Matrix: Soil

Date Sampled: 12-14-93

Date Received: 12-16-93

Date Analyzed: 12-17-93

Spectra Project: S312-118

RUSH

<u>Spectra #</u>	<u>Sample ID:</u>	<u>WTPH-D. mg/Kg</u>	<u>Surrogate Recovery p-icrphenyl</u>
8082	9323-004	<25	76
8083	9323-005	<25	74
8084	9323-006	<25	39*
8085	9323-007	<25	101
8086	9323-008	<25	76
8087	9323-009	52	59
8088	9323-010	<25	26*
8089	9323-011	<25	78
8090	9323-012	<25	103
8091	9323-013	<25	31*
8092	9323-014	58	65
8093	9323-015	<25	76
8094	9323-016	<25	52
8095	9323-017	<25	73

\* Out of limits due to sample matrix effects.

SPECTRA LABORATORIES, INC.

  
Steven G. Hibbs, Chemist



APPENDIX III

Documented Well Logs



# WATER WELL REPORT

Application No. ....

STATE OF WASHINGTON

Permit No. ....

**(1) OWNER:** Name Raymond Andrews Address 2610 South 1st Avenue City  
**(2) LOCATION OF WELL:** County Yakima - NW 1/4 SE 1/4 Sec. 01 T. 12 N., R. 18 W.M.  
 and distance from section or subdivision corner

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

**(4) TYPE OF WORK:** Owner's number of well (if more than one) ... 1  
 New well  Method: Dug  Bored   
 Deepened  Cable  Driven   
 Reconditioned  Rotary  Jetted

**(5) DIMENSIONS:** Diameter of well 5 inches.  
 Drilled ..... ft. Depth of completed well 37 ft.

**(6) CONSTRUCTION DETAILS:**  
 Casing installed: 5" diam. from 0 ft. to 483/4 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.....  
 Type..... Model No.....  
 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? 18 ft.  
 Material used in seal Bentonite  
 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: ..... H.P. ....

**(8) WATER LEVELS:** Land-surface elevation 1009 ft.  
 Static level 4 ft 10 in. above mean sea level. Date 1-30-74  
 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: 20 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 .....  
 Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.  
 Artesian flow ..... g.p.m. Date.....  
 Temperature of water ..... 55 Was a chemical analysis made? Yes  No

**(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
Top Soil - Brown	0	12
Conglomerate & Loose Gravel Brown	12	16
Conglomerate - Very Hard Dark Brown	16	26
Sand With Conglomerate Light Brown	26	27
Conglomerate - Dark Brown	27	45 1/2
Conglomerate - Extra Hard Drilling Brown	45 1/2	48
Conglomerate - Light Brown	48	-

Work started 1/29, 19 74 Completed 1/30, 19 74

**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 Jensens Well Drilling & Driving  
 (Person, firm, or corporation) (Type or print)  
 Address 1603 South 10th Avenue  
 [Signed] Chris B. Jensen Sr.  
 (Well Driller)  
 License No. 0217 Date 2/6, 19 74

DW. 4 NW 1/4 Sec. 2 T12 R48

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

# WATER WELL REPORT

3957

Start Card No. 36648

STATE OF WASHINGTON

OWNER: Name GARY WILLOUGHBY

Water Right Permit No. B

LOCATION OF WELL: County YAKIMA

Address 715 MEADOWBROOK YAKIMA WA.

STREET ADDRESS OF WELL (or nearest address) 2406 S. 6th AVE, YAKIMA WA 98903  
NW 1/4 NE 1/4 Sec. 1 T. 12 N. R. 18 W.M.

PROPOSED USE:  Domestic  
 Irrigation  Industrial  
 DeWater  Test Well  Municipal  Other

## (10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

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

DIMENSIONS: Diameter of well 6 inches.  
Cased 120 feet. Depth of completed well 120 ft.

CONSTRUCTION DETAILS:  
Casing installed: 6 ft. Diam. from +2 ft. to 118 ft.  
Casing installed  ft. Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Casing installed  ft. Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

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

Gravel: Yes  No   
Manufacturer's Name \_\_\_\_\_  
Model No. \_\_\_\_\_  
Slot size \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Slot size \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Gravel packed: Yes  No   
Size of gravel \_\_\_\_\_  
Gravel placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Sealing: Yes  No  To what depth? 20 ft.  
Sealed in seal BENTONITE  
Strata contain unusable water? Yes  No   
Depth of strata \_\_\_\_\_  
Sealing strata off \_\_\_\_\_

MATERIAL	FROM	TO
TOP SOIL		
SANDY CLAY	5	0
GRAVEL COBBLES & SAND	5	2
GRAVEL COBBLES & CLAY	MH	7
SAND COBBLES & GRAVEL	MH	27
COBBLES GRAVEL WOOD CLAY SHALE	MH	27
GRAVEL CLAY	MH	33
GRAVEL SANDSTONE	MH	33
	MH	70
	MH	70
	MH	108
	MH	108
	MH	110
	MH	110
	MH	120

MANUFACTURER'S NAME \_\_\_\_\_ H.P. \_\_\_\_\_  
LAND SURFACE ELEVATION \_\_\_\_\_ ft. above mean sea level  
Static level \_\_\_\_\_ ft. below top of well Date 10-1-90  
Pressure \_\_\_\_\_ lbs. per square inch Date \_\_\_\_\_  
Artesian water is controlled by \_\_\_\_\_ (Cap, valve, etc.)

TESTS: Drawdown is amount water level is lowered below static level  
Pump test made? Yes  No  If yes, by whom? \_\_\_\_\_  
\_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
\_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.

Time taken as zero when pump turned off (water level measured top to water level)

Water Level	Time	Water Level	Time	Water Level

Flow rate of test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
\_\_\_\_\_ gal./min. with stem set at \_\_\_\_\_ ft. for \_\_\_\_\_ hrs.  
\_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
Type of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

Work started 9-28-90, 19. Completed 10-1-90, 19.

WELL CONSTRUCTOR CERTIFICATION:  
I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME RIEBE WELL DRILLING INC (PERSON, FIRM, OR CORPORATION)  
Address P.O. BOX 10866 YAK WA. (TYPE OR PRINT)  
(Signed) WENTZ License No. 1828  
Contractor's (WELL DRILLER)  
Registration No. 132 K1 Date 10-6-90, 19.

(USE ADDITIONAL SHEETS IF NECESSARY)



4754

# SOIL SAMPLING SERVICE, INC.

1415 MERIDIAN EAST, PUYALLUP, WA 98371-1399

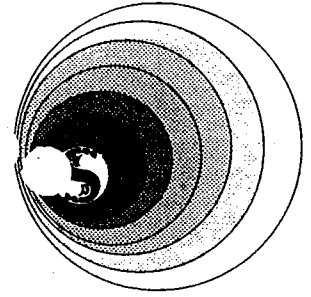
FEDERAL ID #: 91-0762274 WA CONT. #SOIL SS\*344LO

Geotechnical, Engineering & Mineral Exploration Drilling • Instrumentation • Horizontal Drains  
Ground Water Monitoring • Hazardous Waste Identification • Well Abandonments

(206) 927-3173

TELEX: 466762

FAX: (206) 927-3478



## RESOURCE PROTECTION WELL REPORT

A

PROJECT NAME: North West Truck  
 WELL IDENTIFICATION NO.: MW-1  
 DRILLING METHOD: Air Rotary  
 DRILLER: Harold Niswander  
 SIGNATURE: Harold Niswander  
 CONSULTING FIRM: SAIC  
 REPRESENTATIVE: Barbara Blackburn

JOB #: W29415 START CARD NO.: 062464  
 COUNTY: Yakima CITY: Union Gap  
 LOCATION: NE 1/4 NE 1/4 1/4 1/4  
 SEC.: 6 TOWN: 12N RANGE: 19E  
 DATUM: \_\_\_\_\_  
 WATER LEVEL ELEVATION: \_\_\_\_\_  
 INSTALLED: 4-15-91  
 DEVELOPED: \_\_\_\_\_

WELL DATA	AS BUILT	FORMATION DESCRIPTION
1' Flush monument concrete 3' Chips Colorado Sand	4" x 5" blank 4" x 10' x 10' Screen 5'	0' Sands + Gravels 15'
		<div data-bbox="1136 1627 1518 1879" style="border: 1px solid black; padding: 5px; text-align: center;"> <p>RECEIVED</p> <p>APR 26 1991</p> </div> <div data-bbox="690 1816 1047 1900" style="border: 1px solid black; padding: 5px; text-align: center; margin-top: 20px;"> <p>ENTERED</p> </div>

**WATER WELL REPORT**  
**STATE OF WASHINGTON**

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

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

(1) OWNER: Name Lucienne Eastley Address ~~44 Bk 4176~~ 4442

LOCATION OF WELL: County KALAMIA NW<sub>1</sub> NW<sub>1</sub> Sec 6 T. 12 N. R. 19 W. M.

Bearing and distance from section or subdivision corner \_\_\_\_\_

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

(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 80 ft. Depth of completed well 80 ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 6" Diam. from 71 ft. to 76 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 \_\_\_\_\_  
Type \_\_\_\_\_ Model No. \_\_\_\_\_  
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? 18 ft.  
Material used in seal Bent in ite  
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: \_\_\_\_\_ H.P.

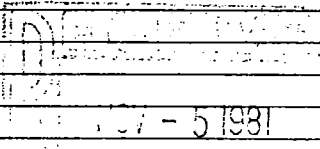
(8) WATER LEVELS: Land-surface elevation \_\_\_\_\_ ft.  
Static level 13 ft. below top of well Date \_\_\_\_\_  
Artesian pressure \_\_\_\_\_ lbs. per square inch Date \_\_\_\_\_  
Artesian water is controlled by \_\_\_\_\_ (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level  
Was a pump test made? Yes  No  If yes, by whom? AIR LIFT  
Yield: 15 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 \_\_\_\_\_  
Ballor test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

(10) WELL LOG: D  
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
TOP SOIL Brown	0	16
SAND & GRAVEL	16	47
CLAY LT Brown	47	76
WB CLAY Broken	76	80

  
 DEPARTMENT OF ECOLOGY  
 STATE OF WASHINGTON  
 1987-5 1981

Work started 9/29 1981 Completed 9/30 1981

**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 Popl. Drilling (Person, firm, or corporation) (Type or print)  
Address RT 3 BX 3356  
[Signed] Rich Young (Well Driller)  
License No. 942 Date 9/30 1981

# WATER WELL REPORT

## STATE OF WASHINGTON

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

(1) OWNER: Name Marvin Yancy Address Motel Ltr  
 (2) LOCATION OF WELL: County Yakima SE 1/4 SW 1/4 Sec 6 T. 12 N. R. 19 W.M.  
 Bearing and distance from section or subdivision corner \_\_\_\_\_

PROPOSED USE: Domestic  Industrial  Municipal   
 Irrigation  Test Well  Other

(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 96 ft. Depth of completed well 96 ft.

(6) CONSTRUCTION DETAILS:  
 Casing installed: 6" Diam. from 0 ft. to 54 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 \_\_\_\_\_  
 Type \_\_\_\_\_ Model No. \_\_\_\_\_  
 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? 52 ft.  
 Material used in seal Bentonite  
 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: \_\_\_\_\_ H.P. \_\_\_\_\_

(8) WATER LEVELS: Land-surface elevation above mean sea level \_\_\_\_\_ ft.  
 Static level 14 ft. below top of well Date 8-27-76  
 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: 50 gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
 " Pumped with air " " " "

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 \_\_\_\_\_  
 \_\_\_\_\_ test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
 \_\_\_\_\_ an flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
 \_\_\_\_\_ temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

(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
Clay	0	6
Black Mud	6	35
Sandstone + Rock layers	35	50
Gumbo Clay	50	65
Sandstone layers + water	65	90
Gravel + water	90	96

RECEIVED

OCT 15 1976

DEPARTMENT OF ECOLOGY  
 CENTRAL REGIONAL OFFICE

Work started 8-27, 1976. Completed 8-27, 1976

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 Eastwood Drilling Inc  
 (Person, firm, or corporation) (Type or print)  
 Address 2202 River Rd Yakima W.  
 [Signed] Chester A Eastwood  
 (Well Driller)  
 License No. 0112 Date 8-28, 1976



1693

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

# WATER WELL REPORT

Start Card No. 25601

STATE OF WASHINGTON

Water Right Permit No. \_\_\_\_\_

(1) OWNER: Name United Builders Address PO BOX 9488 YAK 98909

(2) LOCATION OF WELL: County YAKIMA NE 1/4 SE 1/4 Sec 6 T. 12 N. R. 19 W.M.

(2a) STREET ADDRESS OF WELL (or nearest address) BEENA KATEG NAH Way UNION GAP

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

### (10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
TOP SOIL GRAVEL	m 0	4
SAND GRAVEL	mH 4	9
SILT SAND GRAVEL COBBLES, TRACE	H 9	28
SILT SAND GRAVEL COBBLES - TRACE	28	58

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

(5) DIMENSIONS: Diameter of well 6 inches.  
Drilled 6 feet. Depth of completed well 58 ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 6" Diam. from +3 ft. to 57 ft.  
Welded  Liner installed  Threaded

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 \_\_\_\_\_  
Type \_\_\_\_\_ Model No. \_\_\_\_\_  
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? \_\_\_\_\_ ft.  
Material used in seal BENTONITE  
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: \_\_\_\_\_ H.P. \_\_\_\_\_

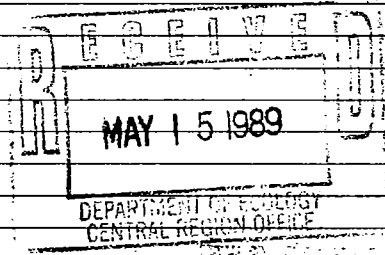
(8) WATER LEVELS: Land-surface elevation above mean sea level \_\_\_\_\_ ft.  
Static level 8'6" ft. below top of well Date 5  
Artesian pressure \_\_\_\_\_ lbs. per square inch Date \_\_\_\_\_  
Artesian water is controlled by \_\_\_\_\_ (Cap, valve, etc.)

(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 \_\_\_\_\_  
Bailer test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Airstest \_\_\_\_\_ gal./min. with stem set at \_\_\_\_\_ ft. for \_\_\_\_\_ hrs.  
Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

42-54 GPM



Work started 5-9-89, 19. Completed 5-10-89, 19.

WELL CONSTRUCTOR CERTIFICATION:  
I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME RIEBE Well Drilling Inc  
(PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)  
Address PO. BOX 10866 YAKIMA WA 98909  
(Signed) Steve Mills License No. 1335  
(WELL DRILLER)  
Contractor's Registration 132K1 Date 5-10-89, 19

(USE ADDITIONAL SHEETS IF NECESSARY)

# WATER WELL REPORT

STATE OF WASHINGTON

Application No. ....

Permit No. ....

(1) OWNER: Name Dan Mittelieder Address 3405 3rd St., Union Gap

(2) LOCATION OF WELL: County Yakima - SW 1/4 SW 1/4 Sec 6 T 12 N. R 19 W.M.  
ing and distance from section or subdivision corner

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

(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 43 ft. Depth of completed well 43 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from ±1 ft. to 41 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.....  
Type..... Model No.....  
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? 18 ft.  
Material used in seal: BENTONITE  
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 ..... ft.  
above mean sea level.....  
Static level 14 ft. below top of well Date 3-20-88  
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)

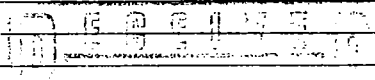
Time	Water Level	Time	Water Level	Time	Water Level

Date of test .....  
Pump test 42 gal./min. with ..... ft. drawdown after ..... hrs.  
Artesian flow ..... g.p.m. Date.....  
Temperature of water..... Was a chemical analysis made? Yes  No

(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
<u>Topsoil</u>	<u>0</u>	<u>3</u>
<u>SMALL GRAVEL &amp; LARGE GRAVEL</u>	<u>3</u>	<u>23</u>
<u>↑ OVER BURDEN &amp; SAND</u>		
<u>SMALL GRAVEL &amp; LARGE GRAVEL</u>	<u>23</u>	<u>43</u>
<u>&amp; SAND &amp; WATER</u>		



MAY 25 1988

Work started 3-20, 1988. Completed 3-20, 1988

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 Water Wells Drilling (Person, firm, or corporation) (Type or print)  
Address 5503 Antanum Rd.  
[Signed] Jerry G. Reek (Well Driller)  
License No. 1435 Date 3-21, 1988

WATER WELL REPORT  
STATE OF WASHINGTON

Application No.         

Permit No. 64-298721

**(1) OWNER:** Name Union Gap West Mobile Ct. Address 408 W. Pine, Union Gap, Wa.

**LOCATION OF WELL:** County Yakima - SE 1/4 SE 1/4 Sec. 6 T. 12 N., R. 19 W.M.

Bearing and distance from section or subdivision corner

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

**(10) WELL LOG:**

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

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	8
Soil, silt, lg. Gravel	8	28
Brown clay & gravel	28	58
Sand, gravel, & water	58	80

**(5) DIMENSIONS:** Diameter of well 8 inches.  
Drilled 80 ft. Depth of completed well 80 ft.

**(6) CONSTRUCTION DETAILS:**  
Casing installed: 8" Diam. from 41 ft. to 76 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 .....  
Type ..... Model No. ....  
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.

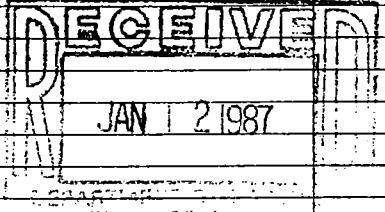
Surface seal: Yes  No  To what depth? 20 ft.  
Material used in seal Bentonite  
Did any strata contain unusable water? Yes  No   
Type of water? ..... Depth of strata .....  
Method of sealing strata off .....

**(7) PUMP:** Manufacturer's Name .....  
Type: ..... H.P. ....

**(8) WATER LEVELS:** Land-surface elevation above mean sea level ..... ft.  
Static level 17 ft. below top of well Date 11/15/86  
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 .....  
Bailer test 200 gal./min. with ..... ft. drawdown after ..... hrs.  
Artesian flow ..... g.p.m. Date .....  
Temperature of water ..... Was a chemical analysis made? Yes  No



Work started 11/12/86 19..... Completed 11/15/86 19.....

**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 Vernon L. Rank (Person, firm, or corporation) (Type or print)  
Address 5503 Ahtanum Rd. Yakima, Wa. 98903  
[Signed] Vernon L. Rank (Well Driller)  
License No. 0854 Date 11/16/86 19.....



# WATER WELL REPORT

STATE OF WASHINGTON

Water Right Permit No.

Start Card No. 25607

KI 1851  
QR

OWNER: Name LONGVIEW FIBER Address LONG FIBER RD - PO BOX 9069, YAK. 98403

LOCATION OF WELL: County YAKIMA Sec 31 T. 13 N., R. 19 W.M.

(2a) STREET ADDRESS OF WELL (or nearest address)

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

## (10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
SILTY SOIL	0	5
GRAVEL COBBLES SAND	5	10

(4) TYPE OF WORK: Owner's number of well (if more than one) 3  
Abandoned  New well  Deepened  Reconditioned  Method: Dug  Bored   
Cable  Driven  Rotary  Jetted

(5) DIMENSIONS: Diameter of well 2 inches.  
Drilled 10 feet. Depth of completed well 10 feet.

## (6) CONSTRUCTION DETAILS:

Casing installed: 6 \* Diam. from +2 ft. to -4 ft.  
Welded  \* Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Liner installed  \* Diam. from 2 \* Diam. from +1 ft. to 5 ft.  
Threaded

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 TRI LOCK  
Type PVC Model No. \_\_\_\_\_  
Diam. \_\_\_\_\_ Slot size \_\_\_\_\_ from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Diam. 2 Slot size 20 from 5 ft. to 10 ft.

Gravel packed: Yes  No  Size of gravel 10-20 COARSE  
Gravel placed from 4 ft. to 10 ft.

Surface seal: Yes  No  To what depth? 7 ft.  
Material used in seal BENTONITE, CEMENT TO SURFACE  
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: \_\_\_\_\_ H.P. \_\_\_\_\_

(8) WATER LEVELS: Land-surface elevation \_\_\_\_\_ ft.  
Static level \_\_\_\_\_ ft. below top of well Date 5-10-89  
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 \_\_\_\_\_

Bailer test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Airtest \_\_\_\_\_ gal./min. with stem set at \_\_\_\_\_ ft. for \_\_\_\_\_ hrs.  
Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

Work started 5-10-89, 19. Completed 5-10-89, 19

**WELL CONSTRUCTOR CERTIFICATION:**  
I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME RIEBE WELL DRILLING INC.  
(PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)  
Address PO BOX 10866 YAKINIA WA.  
(Signed) John Riebe License No. 0422  
(WELL DRILLER)  
Contractor's Registration No. 132KI Date 5-10-89, 19

(USE ADDITIONAL SHEETS IF NECESSARY)

# WATER WELL REPORT

STATE OF WASHINGTON

1850

Start Card No. 25607

Water Right Permit No.

OWNER: Name LONGVIEW FIBER

Address PO BOX 9069 YAKIMA WA 98909

LOCATION OF WELL: County YAKIMA T. 56 Sec. 31 T. 13 N., R. 19 W.M.

STREET ADDRESS OF WELL (or nearest address) LONG FIBER ROAD

PROPOSED USE:  Domestic  Industrial  Municipal  Irrigation  Test Well  Other  DeWater

### (10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
<u>COBBLES, SANDY SILT</u>	<u>10</u>	<u>10.6'</u>

TYPE OF WORK: Owner's number of well (if more than one) 3  
Abandoned  New well  Deepened  Reconditioned  Method: Dug  Cable  Rotary  Bored  Driven  Jetted  Test Well  Other

DIMENSIONS: Diameter of well 2 inches. Drilled 10'6" feet. Depth of completed well 10'6" ft.

CONSTRUCTION DETAILS: Casing installed: 6 ft. Diam. from 4 ft. to 4 ft. Welded  Liner installed  Threaded  2 ft. Diam. from 4 ft. to 5 ft.

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

Screens: Yes  No  Manufacturer's Name TRILOCK Type PVC Model No. \_\_\_\_\_ Diam. 2 Slot size 20 from 5 ft. to 10 ft.

Gravel packed: Yes  No  Size of gravel 10-20 COLORED Gravel placed from 4 ft. to 10 ft.

Surface seal: Yes  No  To what depth? \_\_\_\_\_ ft. Material used in seal BENTONITE 3'-4' CEMENT TO SURFACE Did any strata contain unusable water? Yes  No  Type of water? \_\_\_\_\_ Depth of strata \_\_\_\_\_ Method of sealing strata off \_\_\_\_\_

PUMP: Manufacturer's Name \_\_\_\_\_ Type: \_\_\_\_\_ H.P. \_\_\_\_\_

WATER LEVELS: Land-surface elevation above mean sea level \_\_\_\_\_ ft. Static level \_\_\_\_\_ ft. below top of well Date 5-10-89 Artesian pressure \_\_\_\_\_ lbs. per square inch Date \_\_\_\_\_ Artesian water is controlled by \_\_\_\_\_ (Cap. valve, etc.)

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 \_\_\_\_\_ Bailer test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs. Airtest \_\_\_\_\_ gal./min. with stem set at \_\_\_\_\_ ft. for \_\_\_\_\_ hrs. Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_ Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

Work started 5-10-89, 19. Completed 5-10-89, 19.

### WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME RIEBE WELL DRILLING INC. (PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)

Address PO BOX 10866 YAKIMA WA 98909

(Signed) [Signature] License No. 0422 (WELLS DRILLER)

Contractor's Registration No. 132K1 Date 5-10-89, 19

(USE ADDITIONAL SHEETS IF NECESSARY)



# WATER WELL REPORT

## STATE OF WASHINGTON

Application No. 011506  
Permit No. ....

(1) OWNER: Name AL FRANK Address DAMES + MOORE P.O.# SA4405  
(2) LOCATION OF WELL: County YAKIMA - 1/4 SE 1/4 Sec. 31 T. 13N. R. 19 W.M.  
bearing and distance from section or subdivision corner

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

(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 2 inches.  
Drilled 20 ft. Depth of completed well 20'6" ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 6" Diam. from +2 ft. to 20 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 Hydrophilic  
Type PVC Model No .....  
Diam. 2 Slot size 0.10 from 7 ft. to 17 ft.  
Diam. 2 Slot size 0 from 12 ft. to 7 ft.

Gravel packed: Yes  No  Size of gravel: # 8  
Gravel placed from 5 ft. to 20 ft.

Surface seal: Yes  No  To what depth? ..... ft.  
Material used in seal BENTONITE + CEMENT  
Did any strata contain unusable water? Yes  No   
Type of water? N/A Depth of strata .....  
Method of sealing strata off .....

(7) PUMP: Manufacturer's Name .....  
Type: ..... HP

(8) WATER LEVELS: Land-surface elevation above mean sea level ..... ft.  
Static level 9' ft. below top of well Date 3/18/88  
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.  
" " N/A " " " " " "

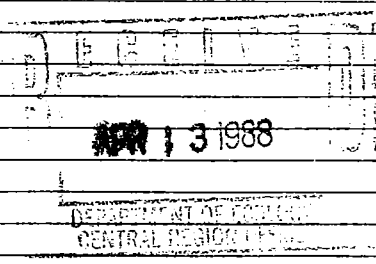
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test .....  
pump test ..... gal./min. with ..... ft. drawdown after ..... hrs.  
Artesian flow ..... g.p.m. Date .....  
Temperature of water ..... Was a chemical analysis made? Yes  No

(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
SANDY CLAY SOIL GRAVEL	0	1
GRAVEL SAND	1	2
COBBLES GRAVEL SAND	2	5
SAND GRAVEL	5	7
GRAVEL LITTLE SAND	7	9
GRAVEL SAND SIFT	9	11
GRAVEL SAND PACK SIFT	11	14
SIFT SAND GRAVEL	14	15'6"
SILTY GRAVEL COBBLES	15'6"	18
GRAVEL SAND SIFT	18	19
GRAVEL SAND SIFT	19	19'16"
GRAVEL SAND	19'6"	20'6"
GRAVEL SAND	20'	



Work started 3/18, 19 88 Completed 3/18, 19 88

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 RIEBE WELL DRILLING INC  
(Person, firm, or corporation) (Type or print)  
Address P.O. Box 10866, YAKIMA 98909-1866  
[Signed] John A. Riebe  
(Well Driller)  
License No. 0422 Date 3/18, 19 88



### WATER WELL REPORT

STATE OF WASHINGTON

Application No 011506

Permit No.

(1) OWNER: Name AL FRANK Address DAMES + Moore PO#SA4405  
(2) LOCATION OF WELL: County YAKIMA - 1/4 SE 1/4 Sec. 31 T. 13. N., R. 19. W.M.  
bearing and distance from section or subdivision corner

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

(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 2 inches.  
Drilled 20 ft. Depth of completed well 17 ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 2" diam. from +3 ft. to 20 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 HYDROPHILLIC  
Type PVC Model No .....  
Diam. 2 Slot size 0.10 from 7 ft. to 17 ft.  
Diam. 2 Slot size 0 from +2 ft. to 7 ft.

Gravel packed: Yes  No  Size of gravel: 8  
Gravel placed from -5 ft. to -20 ft.

Surface seal: Yes  No  To what depth? ..... ft.  
Material used in seal BENTONITE CEMENT  
Did any strata contain unusable water? Yes  No   
Type of water? N/A Depth of strata .....  
Method of sealing strata off.....

(7) PUMP: Manufacturer's Name.....  
Type: ..... H.P. ....

(8) WATER LEVELS: Land-surface elevation above mean sea level ..... ft.  
Static level 8'6" ft. below top of well Date 3/12/88  
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.  
" " N/A " " " " "  
" " " " " " "

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 .....  
ailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.  
Artesian flow ..... g.p.m. Date.....  
Temperature of water ..... Was a chemical analysis made? Yes  No

### (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
TOP SOIL	0	1
GRAVEL SAND RIVER ROCK	1	2
SAND CLAY GRAVEL (BRN)	2	4
GRAVEL SAND (BLK)	4	6
SLIT SAND GRAVEL	6	9
SLIT SAND GRAVEL	9	15
GRAVEL	15	19
GRAVEL SAND BUILDER	19	20'5"

APR 13 1988

Work started 3/17 1988 Completed 3/17 1988

### 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 RIEBE Well Drilling INC (Person, firm, or corporation) (Type or print)

Address P.O. Box 10866 YAKIMA 98909-1810

[Signed] John A. Riese (Well Driller)

License No. 0422 Date 3/18 1988

Please fill in Red X's & hand in

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 DR. A.D.KINZEL Address 1412 WEST YAKIMA, AVE.98902

LOCATION OF WELL: County YAKIMA (Property tax) NW 1/4 of SW 1/4 of Sec. 31 TWP-I3-RN W.M. Bearing and distance from section or subdivision corner Range - I9 EWM Road

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

(4) TYPE OF WORK: Owner's number of well (if more than one) 2 New well [X] Method: Dug [ ] Bored [ ] Deepened [ ] Cable [ ] Driven [ ] Reconditioned [ ] Rotary [X] Jetted [ ]

ABANDONED OLD WELL

(5) DIMENSIONS: Diameter of well 6 inches. Drilled 1.30 ft. Depth of completed well 1.30 ft.

(6) CONSTRUCTION DETAILS: Casing installed: 6" Diam. from +/-1 ft. to 1.20 ft. Threaded [ ] Welded [X]

Perforations: Yes [ ] No [X] Type of perforator used SIZE of perforations in. by perforations from ft. to ft.

Screens: Yes [ ] No [X] Manufacturer's Name Type Model No. Diam. Slot size from ft. to ft.

Gravel packed: Yes [ ] No [X] Size of gravel: Gravel placed from ft. to ft.

Surface seal: Yes [X] No [ ] To what depth? 30 ft. Material used in seal BENTONITE & CEMENT Did any strata contain unusable water? Yes [X] No [ ] Type of water? POLLUTED Depth of strata 30-45 ft. Method of sealing strata SEALED & CASD

(7) PUMP: Manufacturer's Name Red Jacket SP4-I0 Type: Grundfos Submersible H.P. I

(8) WATER LEVELS: Land-surface elevation above mean sea level 1030 ft. Static level 1.5 ft. below top of well Date 1/20/83 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 [X] if yes, by whom? Yield: gal./min. with ft. drawdown after hrs. 50 G.P.M.

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 Bailer test gal./min. with ft. drawdown after hrs. Artesian flow g.p.m. Date Temperature of water Was a chemical analysis made? Yes [ ] No [X]

(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.

Table with 3 columns: MATERIAL, FROM, TO. Entries include TOP SOIL, SAND, GRAVEL & BOULDERS (WATER), CEMENTED GRAVEL & BOULDERS, DECOMPOSED ROCK SMALL AMT WTR, SAND, GRAVEL & BOULDERS & WATER.

Work started 1/14/83 19 Completed 1/18/83 19

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 RIEBE WELL DRILLING (TAYLOR & TATE) (Person, firm, or corporation) (Type or print) 1503 E. NOB HILL BLVD. YAKIMA, WA. 98901 Address

[Signed] John C. Riebe (Well Driller) License No. 421 Date 1/30/83 19

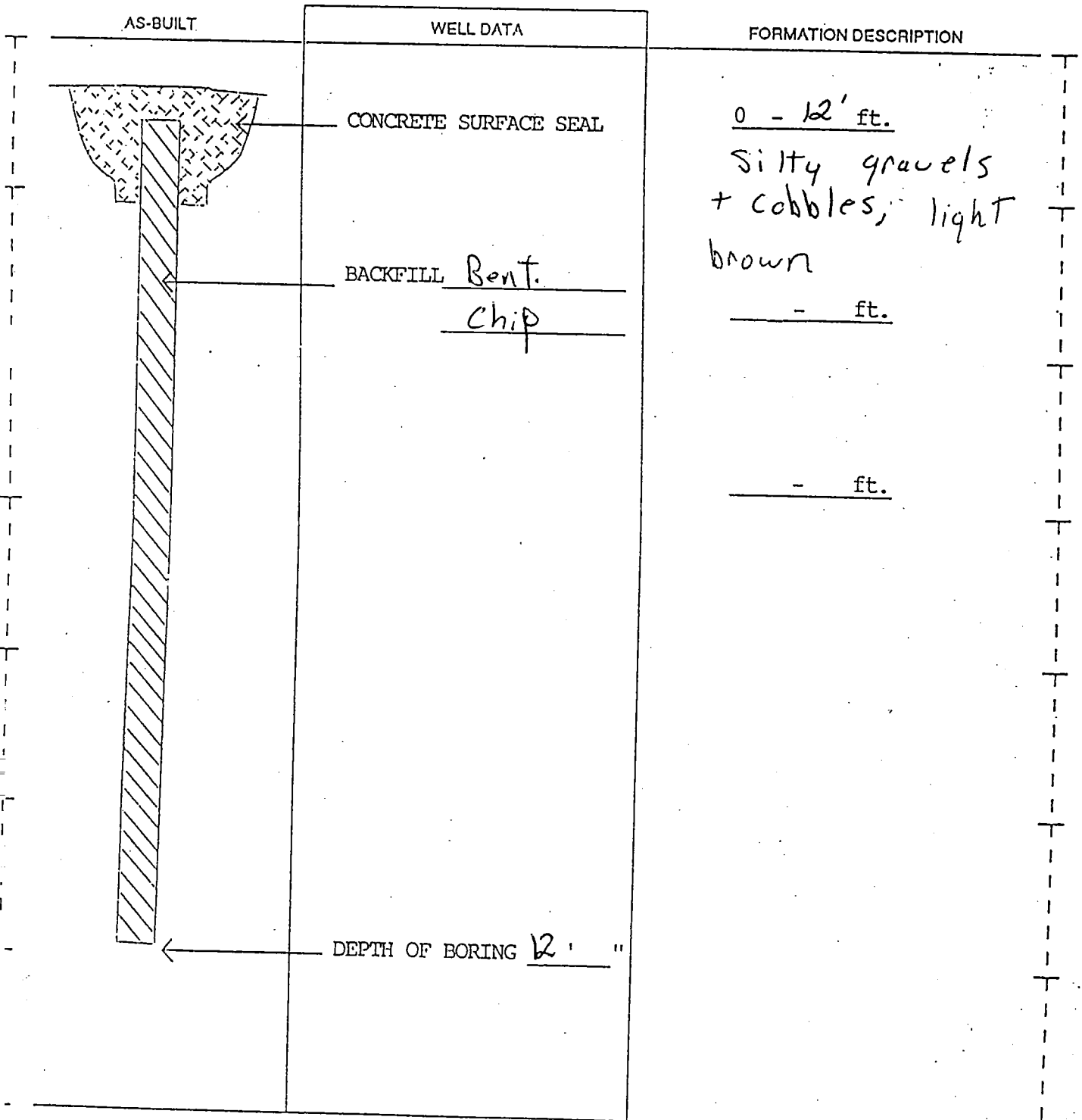
(USE ADDITIONAL SHEETS IF NECESSARY)

2125 Total 5

# RESOURCE PROTECTION WELL REPORT

PROJECT NAME: Yakima Ryder Rent  
 WELL IDENTIFICATION NO. BORING  
 DRILLING METHOD: HSA  
 DRILLER: Scott  
 FIRM: Cascade Drilling, Inc.  
 SIGNATURE: Scott Kueper  
 CONSULTING FIRM: HYDRO ENVIRON.  
 REPRESENTATIVE: BRIAN GWINN

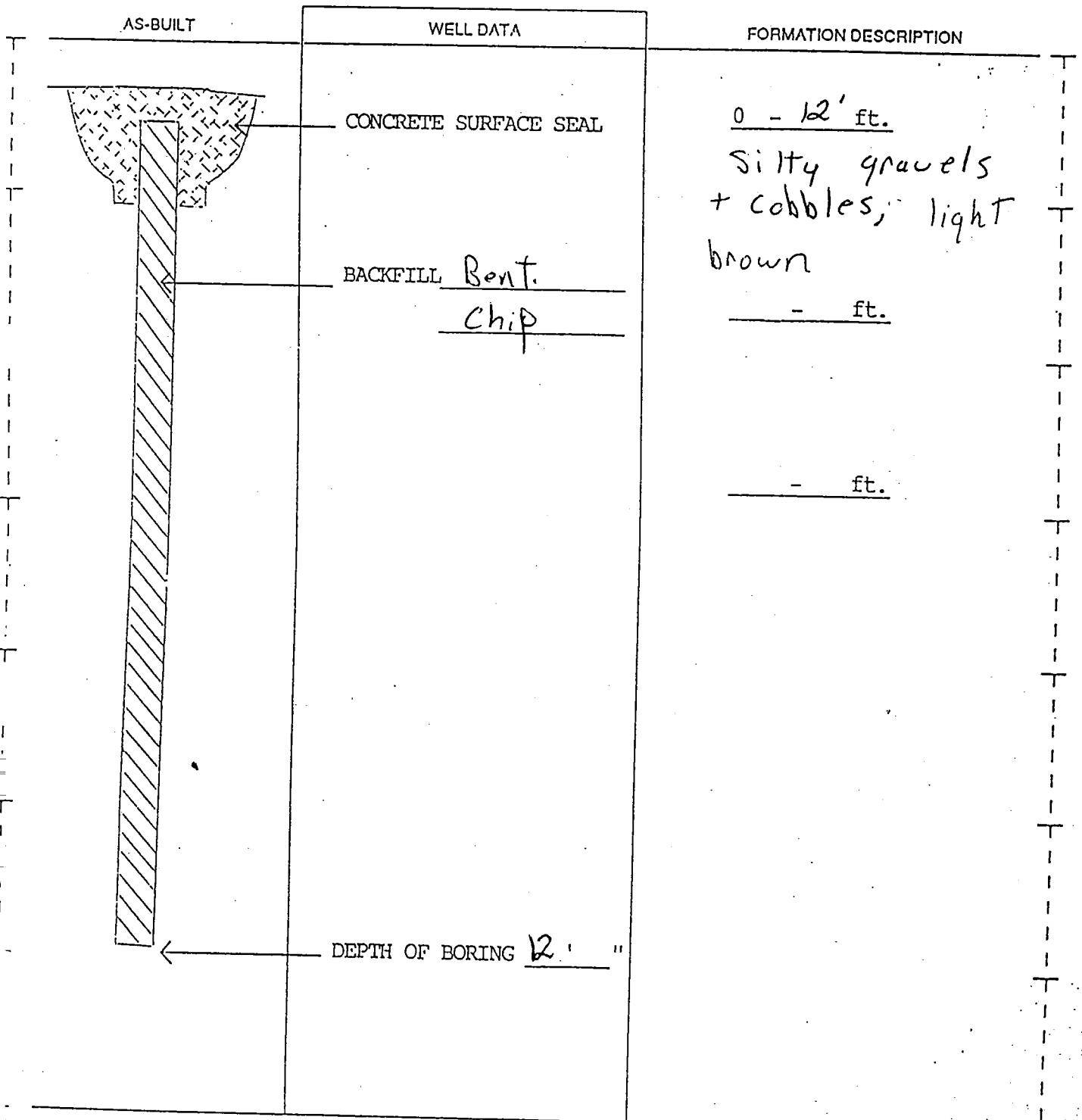
START CARD NO. 208508  
 COUNTY: YAKIMA  
 LOCATION: NE 1/4 SW 1/4 Sec 31 Twp 13N R 19E  
 STREET ADDRESS OF WELL: 19 W. WASHINGTON AVE  
 WATER LEVEL ELEVATION: N/A  
 GROUND SURFACE ELEVATION: N/A  
 INSTALLED: 1-14-93  
 DEVELOPED: \_\_\_\_\_



# RESOURCE PROTECTION WELL REPORT

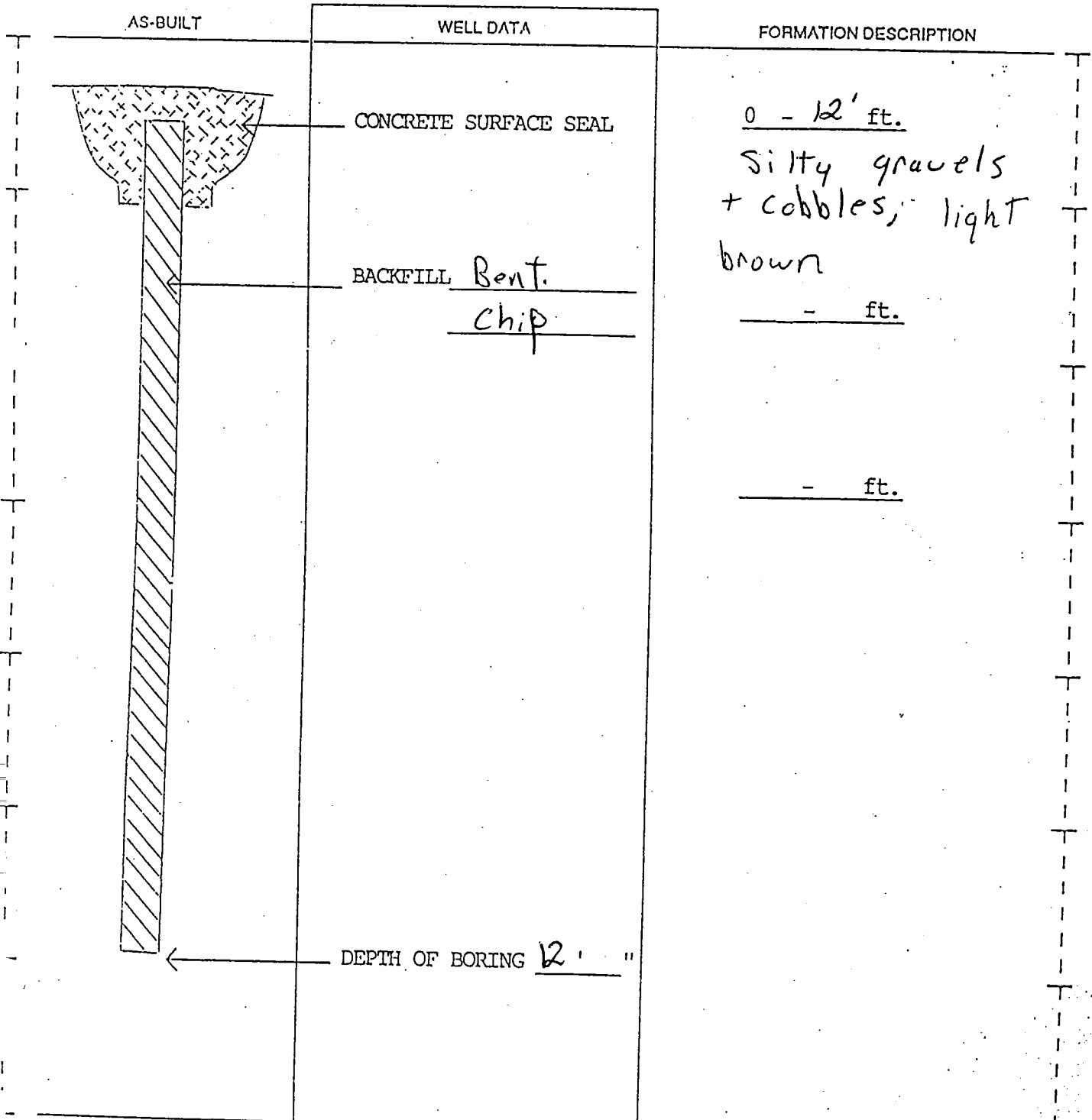
PROJECT NAME: Yakima Ryder Rent  
 WELL IDENTIFICATION NO. BORING  
 DRILLING METHOD: HSA  
 DRILLER: Scott  
 FIRM: Cascade Drilling, Inc.  
 SIGNATURE: Scott Kueper  
 CONSULTING FIRM: HYDRO ENVIRON.  
 REPRESENTATIVE: BRIAN GWINN

START CARD NO. 208508  
 COUNTY: YAKIMA  
 LOCATION: NE 1/4 SW 1/4 Sec 31 Twn 13N R 19E  
 STREET ADDRESS OF WELL: 19 W. WASHINGTON AVE  
 WATER LEVEL ELEVATION: N/A  
 GROUND SURFACE ELEVATION: N/A  
 INSTALLED: 1-14-93  
 DEVELOPED: \_\_\_\_\_



# RESOURCE PROTECTION WELL REPORT

PROJECT NAME: Yakima Ryder Plant AN 2 COR  
 COUNTY: YAKIMA  
 START CARD NO. 208508  
 WELL IDENTIFICATION NO. BORING  
 LOCATION: NE 1/4 SW 1/4 Sec 31 Twn 13N R 19E  
 DRILLING METHOD: HSA  
 STREET ADDRESS OF WELL: 19 W. WASHINGTON AVE  
 DRILLER: Scott  
 FIRM: Cascade Drilling, Inc.  
 WATER LEVEL ELEVATION: N/A  
 SIGNATURE: [Signature]  
 GROUND SURFACE ELEVATION: N/A  
 CONSULTING FIRM: HYDRO ENVIRON.  
 INSTALLED: 1-14-93  
 REPRESENTATIVE: BRIAN GWINN  
 DEVELOPED: \_\_\_\_\_

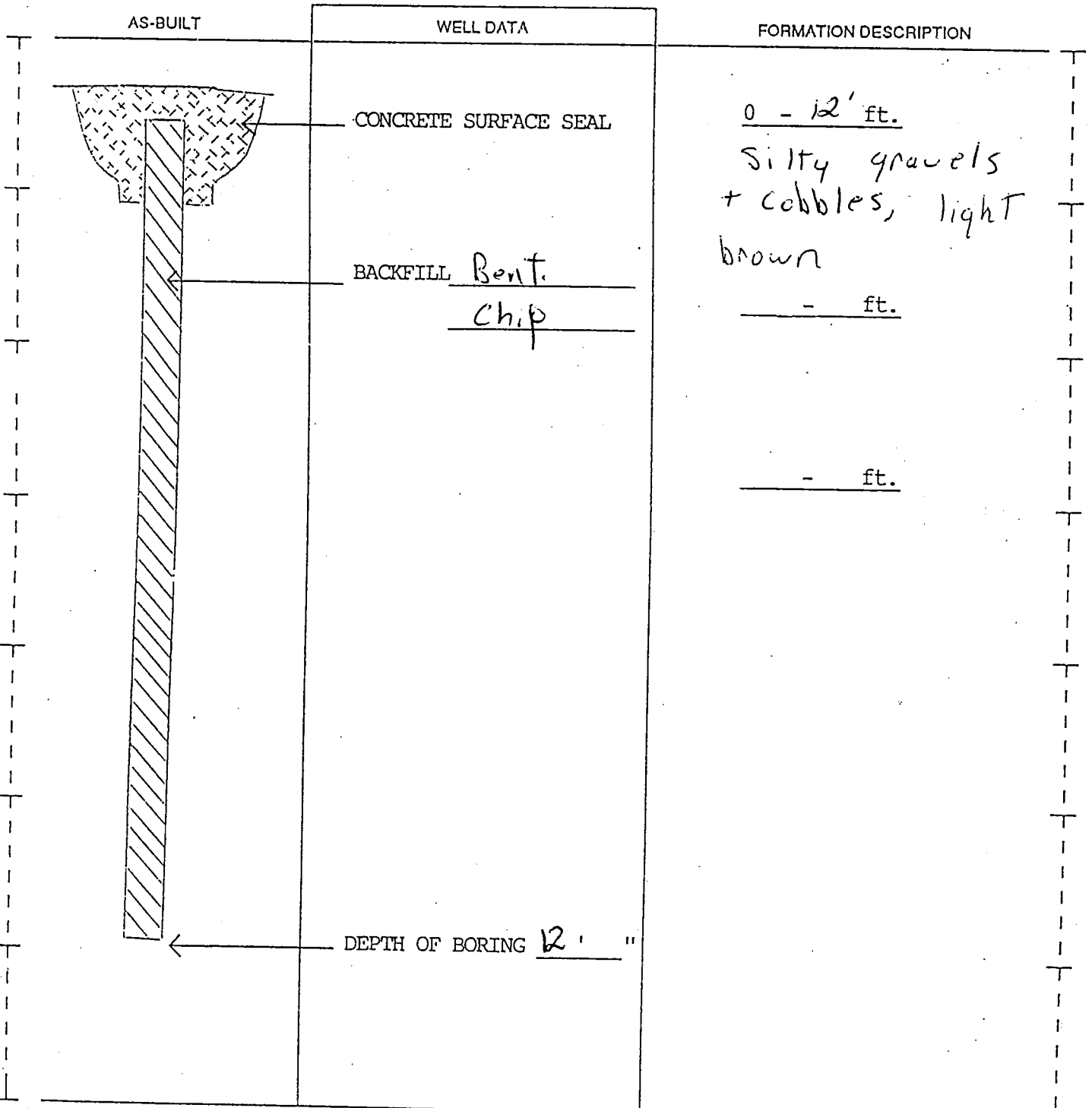


# RESOURCE PROTECTION WELL REPORT

START CARD NO. 208508

PROJECT NAME: Yakima Ryder Pond  
 WELL IDENTIFICATION NO. BORING  
 DRILLING METHOD: HSA  
 DRILLER: Scott  
 FIRM: Cascade Drilling, Inc.  
 SIGNATURE: [Signature]  
 CONSULTING FIRM: HYDRO ENVIRON.  
 REPRESENTATIVE: BRIAN GWINN

COUNTY: YAKIMA  
 LOCATION: NE 1/4 SW 1/4 Sec 31 Twn 13N R 19E  
 STREET ADDRESS OF WELL: 19 W. WASHINGTON AVE  
 WATER LEVEL ELEVATION: N/A  
 GROUND SURFACE ELEVATION: N/A  
 INSTALLED: 1-14-93  
 DEVELOPED: \_\_\_\_\_

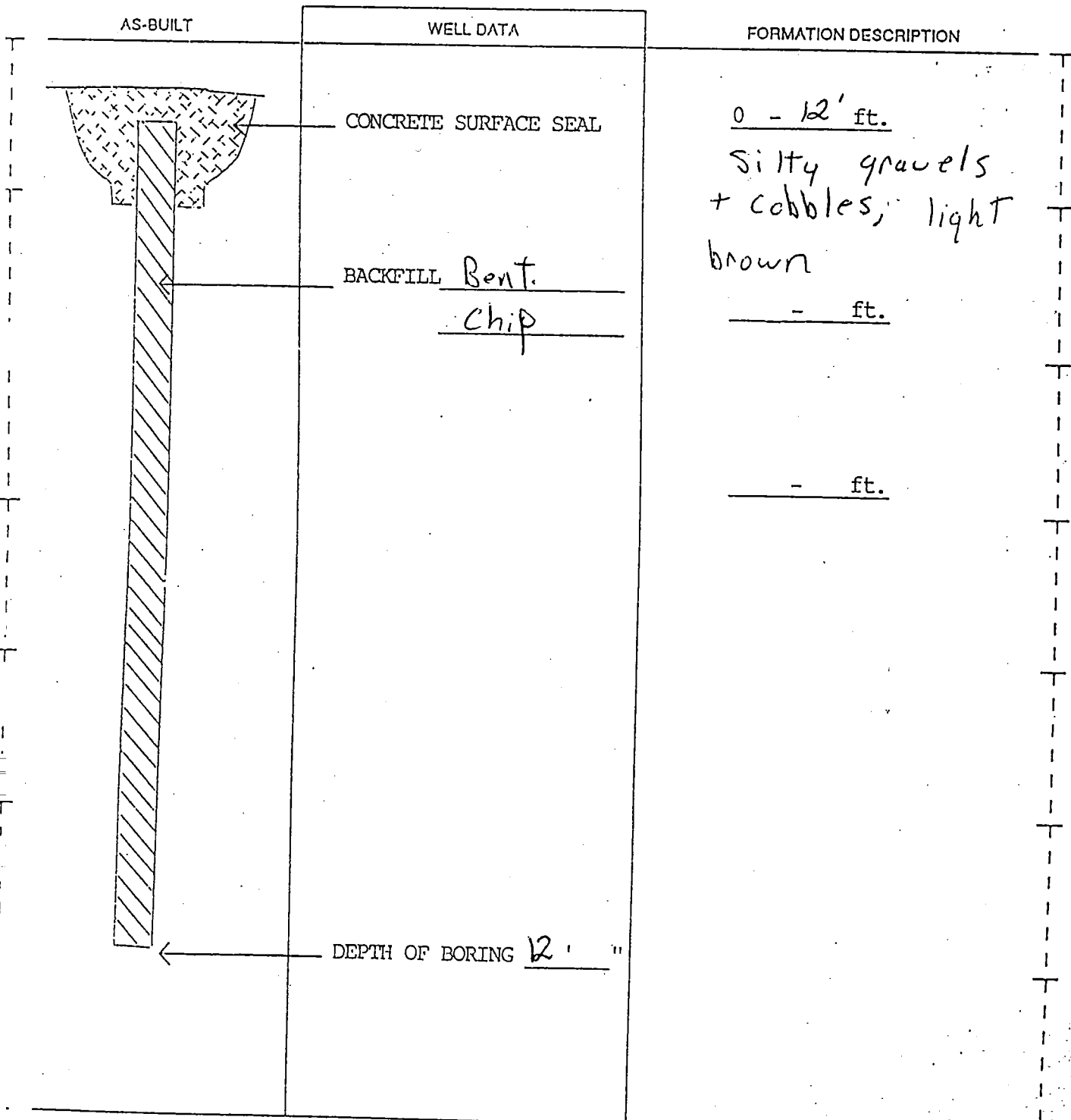


# RESOURCE PROTECTION WELL REPORT

START CARD NO. 208508

PROJECT NAME: Yakima Ryder Rent  
 WELL IDENTIFICATION NO. BORING  
 DRILLING METHOD: HSA  
 DRILLER: Scott  
 FIRM: Cascade Drilling, Inc.  
 SIGNATURE: Scott Kueper  
 CONSULTING FIRM: HYDRO ENVIRON.  
 REPRESENTATIVE: BRIAN GWINN

COUNTY: YAKIMA  
 LOCATION: NE 1/4 SW 1/4 Sec 31 Twn 13N R 19E  
 STREET ADDRESS OF WELL: 19 W. WASHINGTON AVE  
 WATER LEVEL ELEVATION: N/A  
 GROUND SURFACE ELEVATION: N/A  
 INSTALLED: 1-14-93  
 DEVELOPED: \_\_\_\_\_



# WATER WELL REPORT

STATE OF WASHINGTON

Application No. ....

Permit No. ....

**OWNER:** Name Broadmoor Mobile Home Park Address 55 W. Washington Ave

**LOCATION OF WELL:** County Yakima NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  Sec. 31 T. 13 N., R. 19 W.M.  
 Bearing and distance from section or subdivision corner Next to U.S. Post Office

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

**(4) TYPE OF WORK:** Owner's number of well (if more than one) 1  
 New well  Method: Dug  Bored   
 Deepened  Cable  Driven   
 Reconditioned  Rotary  Jetted

**(5) DIMENSIONS:** Diameter of well 8 inches.  
 Drilled 90 ft. Depth of completed well ..... ft.

**(6) CONSTRUCTION DETAILS:**  
 Casing installed: 7" Diam. from 0 ft. to 85 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 UOP Johnson  
 Type 3/8 telescopic size Model No.....  
 Diam. 6 Slot size 35 from 80 ft. to 84 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? 18 ft.  
 Material used in seal.....  
 Did any strata contain unusable water? Yes  No   
 Type of water?..... Depth of strata.....  
 Method of sealing strata off Seal already there

**(7) PUMP:** Manufacturer's Name.....  
 Type: ..... HP

**(8) WATER LEVELS:** Land-surface elevation above mean sea level.....ft.  
 Static level .....ft. below top of well Date.....  
 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: 150 gal./min. with 20 ft. drawdown after 1 hrs.  
 " ACULUND " " " " " " "

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 .....

Bailer test.....gal./min. with.....ft. drawdown after.....hrs.  
 Artesian flow.....g.p.m. Date.....  
 Temperature of water..... Was a chemical analysis made? Yes  No

**(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
Ran tools in to hole, hole was	80	ft.
Tried to drill on but hole was caving.		
Sandstone gry	S 80	85
Sandstone, gravel, boulders	85	90
caving back to 80 ft.		
Well fluctuates from 100 to 125 gpm		
Figure 90 to 100 gpm.		
Set 90'8" of 7inch pipe and #35 slot screen. Drilled and sand pumped hole.		
Sand gravel and boulders	80	83
Boulders and round cobbles		
and silt brn	83	84
Bottom of 7 inch pipe at <u>79'</u> <u>10"</u>		
5 ft of 35 slot screen <u>79'</u> <u>84"</u>		

Work started 7/10/85, 19..... Completed 7/15/85, 19.....

**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 RIEBE WELL DRILLING  
 (Person, firm, or corporation) (Type or print)  
 Address 1503 E. Nob Hill Blvd.  
 [Signed] John A. Riebe  
 (Well Driller)  
 License No. 0422 Date 7/16/85, 19.....



**WATER WELL REPORT**  
STATE OF WASHINGTON

Application No. ....  
Permit No. ....

(1) **OWNER:** Name Bert W. Suty Address 2016 1st Ave. Yakima, Wash.  
**LOCATION OF WELL:** County Yakima - N.W. 1/4 SW 1/4 Sec. 31 T. 13 N. R. 19 W.M.  
bearing and distance from section or subdivision corner

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

(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 2 inches.  
Drilled ..... ft. Depth of completed well 23' 6" ft.

(6) **CONSTRUCTION DETAILS:**  
Casing installed: 2" Diam. from 0 ft. to 23' 6" 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? 6 ft.  
Material used in seal Bentonite + Cement  
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: ..... H.P. ....

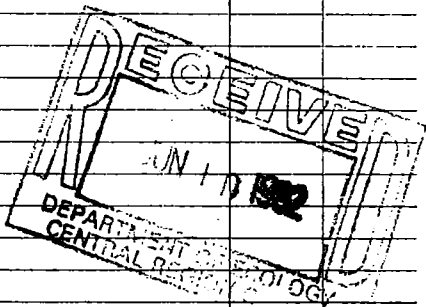
(8) **WATER LEVELS:** Land-surface elevation: 1020 ft.  
above mean sea level. Date 5-17-82  
Static level 7 ft. below top of well Date .....  
Artesian pressure ..... lbs. per square inch Date .....  
Artesian water is controlled by ..... (Cap, valve, etc.)

(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: 10 gal./min. with ..... ft. drawdown after ..... hrs.  
" With pitcher pump " " " " " "  
" " " " " " " " " " " "  
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 .....  
Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.  
Artesian flow ..... g.p.m. Date .....  
Temperature of water 53 Was a chemical analysis made? Yes  No

(10) **WELL LOG:** M  
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
<u>Top Soil - Dark Brown</u>	<u>0</u>	<u>6' 6"</u>
<u>Conglomerate - Dark Brown Finner Well</u>	<u>6' 6"</u>	<u>28' 6"</u>
<u>F</u>		
<u>2016 1st Ave</u>		
<u>WELL</u>		
<u>S</u>		
<u>50.3 x 2.0</u>		
<u>W</u>		



Work started 5-17, 1982 Completed 5-17, 1982

**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 JENSEN'S WELL DRILLING & DRIVING, INC.  
(Person, firm, or corporation) (Type or print)  
Address 1603 1st Ave. Yakima, Wash. 98902  
[Signed] Chris B. Jensen Jr.  
(Well Driller)  
License No. 0217 Date 6-9, 1982



# WATER WELL REPORT

2772  
Start Card No. 036402

STATE OF WASHINGTON

Water Right Permit No.

*M*

OWNER: Name Lela Rants Address 2014 S. 2<sup>nd</sup> Ave., Yakima

(2) LOCATION OF WELL: County Yakima NW 1/4 SW 31 T. 13 N. R. 19 W.M.

(2a) STREET ADDRESS OF WELL (or nearest address): 2014 S. 2nd Ave., Yakima

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

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

(5) DIMENSIONS: Diameter of well 6 inches.  
Drilled 50 feet. Depth of completed well 50 ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 6 " Diam. from +1 ft. to 49 ft.  
Welded  \_\_\_\_\_ " Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Liner installed  \_\_\_\_\_ " Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Threaded  \_\_\_\_\_ " 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 \_\_\_\_\_  
Type \_\_\_\_\_ Model No. \_\_\_\_\_  
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? 20 ft.  
Material used in seal Bentonite  
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: \_\_\_\_\_ H.P. \_\_\_\_\_

(8) WATER LEVELS: Land-surface elevation  
above mean sea level \_\_\_\_\_ ft.  
Static level 12 ft. below top of well Date 1-8-90  
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  
\_\_\_\_\_  
Date of test \_\_\_\_\_

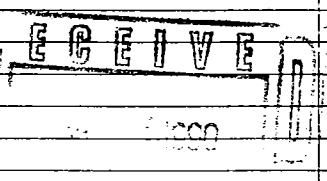
Bailer test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Airtest 25 gal./min. with stem set at 50 ft. for 1 hrs.  
Artesian flow \_\_\_\_\_ g.p.m. Date 1-8-90  
Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes  No

## (10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
Topsoil	0	3
Br. Clay	3	10
Br. Clay & Small Gravel	10	17
Br. Clay & Small Gravel	17	20
& Water & Sand		
Consaladated Rock	20	28
Br. Clay & Small Gravel	28	50
& Sand & Water		

Abandoned Well  
Keep casing full of bentonite  
as the casing was pulled out  
of the ground.  
Bentonite 50 9  
Cement Plug 9 3  
Soil 3 0



Work started 1-4-90 19. Completed 1-8- 1990

**WELL CONSTRUCTOR CERTIFICATION:**  
I constructed and/or accept responsibility for construction of this well,  
and its compliance with all Washington well construction standards.  
Materials used and the information reported above are true to my best  
knowledge and belief.

NAME Water Wells Drilling INC.  
(PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)  
Address 5503 Ahtanum Rd., Yakima 98903  
(Signed) *Jerry J. Rank* License No. 1435  
Contractor's (WELL DRILLER)  
Registration No. WATER WD112QB Date 1-11- 1990

(USE ADDITIONAL SHEETS IF NECESSARY)

# WATER WELL REPORT

STATE OF WASHINGTON

Application No. ....

Permit No. ....

(1) OWNER: Name ELDON F. BILLS Address 2003 SO. 3RD AVE.  
 LOCATION OF WELL: County YAKIMA NW ¼ SW ¼ Sec. 31 T. 13 N., R. 19 W.M.  
 ..ing and distance from section or subdivision corner

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

(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 2" inches.  
 Drilled ..... ft. Depth of completed well 30' ft.

(6) CONSTRUCTION DETAILS:  
 Casing installed: 2" Diam. from 0 ft. to 30' 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 .....  
 Type ..... Model No. ....  
 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? 6 ft.  
 Material used in seal DENTONITE & CEMENT GROUT  
 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: ..... H.P.

(8) WATER LEVELS: Land-surface elevation APP 1025 ft.  
 Static level 9' ft. below top of well Date 4-14-77  
 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: 10 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)

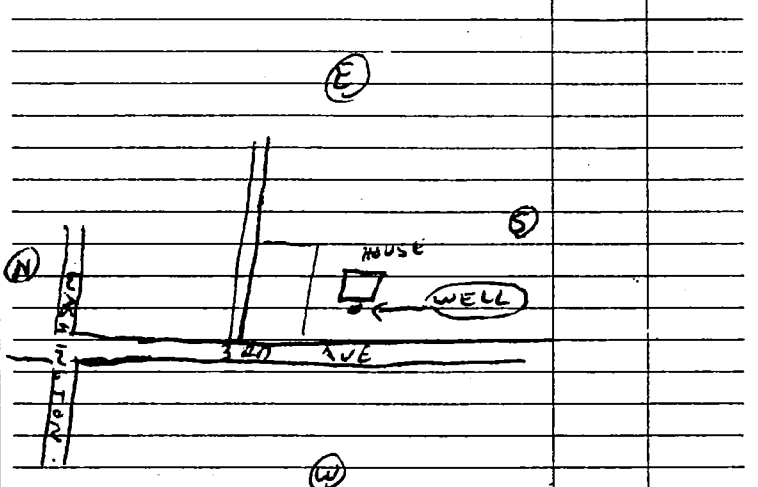
Time	Water Level	Time	Water Level	Time	Water Level

Date of test .....  
 Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.  
 Artesian flow ..... g.p.m. Date .....  
 Temperature of water 58° Was a chemical analysis made? Yes  No

(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
TOP SOIL	0	8
COM GLOMERATE	8	30



RECEIVED

MAY 3 1977

DEPARTMENT OF ECOLOGY  
CENTRAL REGIONAL OFFICE

Work started 4-14, 1977. Completed 4-14, 1977

**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 JENSEN'S WELL DRILLING & DRIVING  
 (Person, firm, or corporation) (Type or print)

Address 1603 SO. 10TH AVE.

[Signed] Dorance Jensen  
 (Well Driller)

License No. 0218 Date 4-18, 1977

# WATER WELL REPORT

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

STATE OF WASHINGTON

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

(1) **OWNER:** Name Darlene Hale Address 113 Whitcomb Ave, Yakima, Wash.  
**LOCATION OF WELL:** County Yakima NW 1/4 Sec. 31 T. 13 N. R. 19 W.M.  
 and distance from section or subdivision corner

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

(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 2 inches.  
 Drilled \_\_\_\_\_ ft. Depth of completed well 30 ft.

(6) **CONSTRUCTION DETAILS:**  
 Casing installed: 2" Diam. from 0 ft. to 30' 10" 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? 6 ft.  
 Material used in seal Bentonite + Cement  
 Did any strata contain unusable water? Yes  No   
 Type of water? \_\_\_\_\_ Depth of strata \_\_\_\_\_  
 Method of sealing strata off \_\_\_\_\_

(7) **PUMP:** Manufacturer's Name \_\_\_\_\_ H.P. \_\_\_\_\_  
 Type: \_\_\_\_\_

(8) **WATER LEVELS:** Land-surface elevation 1020 ft.  
 Static level 4' 5" ft. below top of well Date 12-1-82  
 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: 10 gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
 "With pitcher pump" " " " "

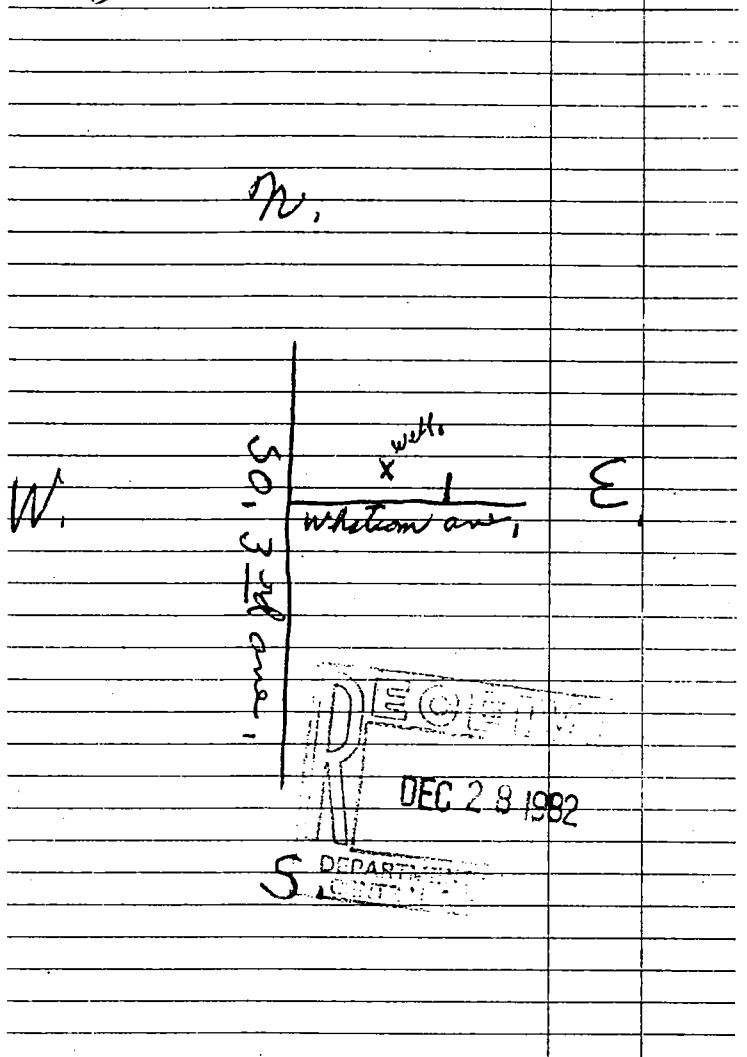
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test \_\_\_\_\_  
 Bailer test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
 Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
 Temperature of water 56 Was a chemical analysis made? Yes  No

(10) **WELL LOG:** M  
 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
<u>Trap Soil, Dark Brown</u>	<u>0</u>	<u>8</u>
<u>Conglomerate, Light</u>	<u>8</u>	<u>30</u>



Work started 12-1-82 Completed 12-1-82

**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 JENSEN'S WELL DRILLING + DRIVING.  
 (Person, firm, or corporation) (Type or print)  
 Address 1603 So. 10th Ave, Yakima, Wash 98902  
 [Signed] Chris B. Jensen Sr.  
 (Well Driller)  
 License No. 0217 Date 12-27-82

1678

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

# WATER WELL REPORT

Start Card No. 026066

STATE OF WASHINGTON

Water Right Permit No. \_\_\_\_\_

OWNER: Name STEVE Nunley Address Rt. 4 Box 4289, Wapato

LOCATION OF WELL: County YAKIMA SW 1/4 SW 1/4 Sec. 31 T. 13 N., R. 19 W.M.

(2a) STREET ADDRESS OF WELL (or nearest address) 2106 S. 2nd. AVE., YAKIMA

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

### (10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
Topsoil	0	8
BA. Clay & GRAVEL	8	18
BA. Clay & GRAVEL & SAND & WATER	18	32
CEMENTED GRAVEL	32	50
GRAVEL & SAND & WATER	50	56
BA. Clay & GRAVEL	56	65
CEMENTED GRAVEL & SAND	65	68

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

(5) DIMENSIONS: Diameter of well 6 inches.  
Drilled 68 feet. Depth of completed well 68 ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 6" Diam. from +1 ft. to 55 ft.  
Welded  Liner installed  Threaded

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

Screens: Yes  No   
Manufacturer's Name \_\_\_\_\_  
Type \_\_\_\_\_ Model No. \_\_\_\_\_  
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? 20 ft.  
Material used in seal BENTONITE  
Did any strata contain unusable water? Yes  No

(7) PUMP: Manufacturer's Name \_\_\_\_\_  
Type: \_\_\_\_\_ H.P. \_\_\_\_\_

(8) WATER LEVELS: Land-surface elevation above mean sea level \_\_\_\_\_ ft.  
Static level 12 ft. below top of well Date 5-2-89  
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 \_\_\_\_\_  
Bailer test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Airtest 22 gal./min. with stem set at 66 ft. for 1 hrs.  
Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
Temperature of water 60. Was a chemical analysis made? Yes  No

Work started 5-1, 1989 completed 5-2 or 5-2, 1989

WELL CONSTRUCTOR CERTIFICATION:  
I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME Water Wells Drilling  
(PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)  
Address 5503 Antanum Rd.  
(Signed) [Signature] License No. 1435  
(WELL DRILLER)  
Contractor's Registration No. WATER W 131N8 Date 5-2, 1989

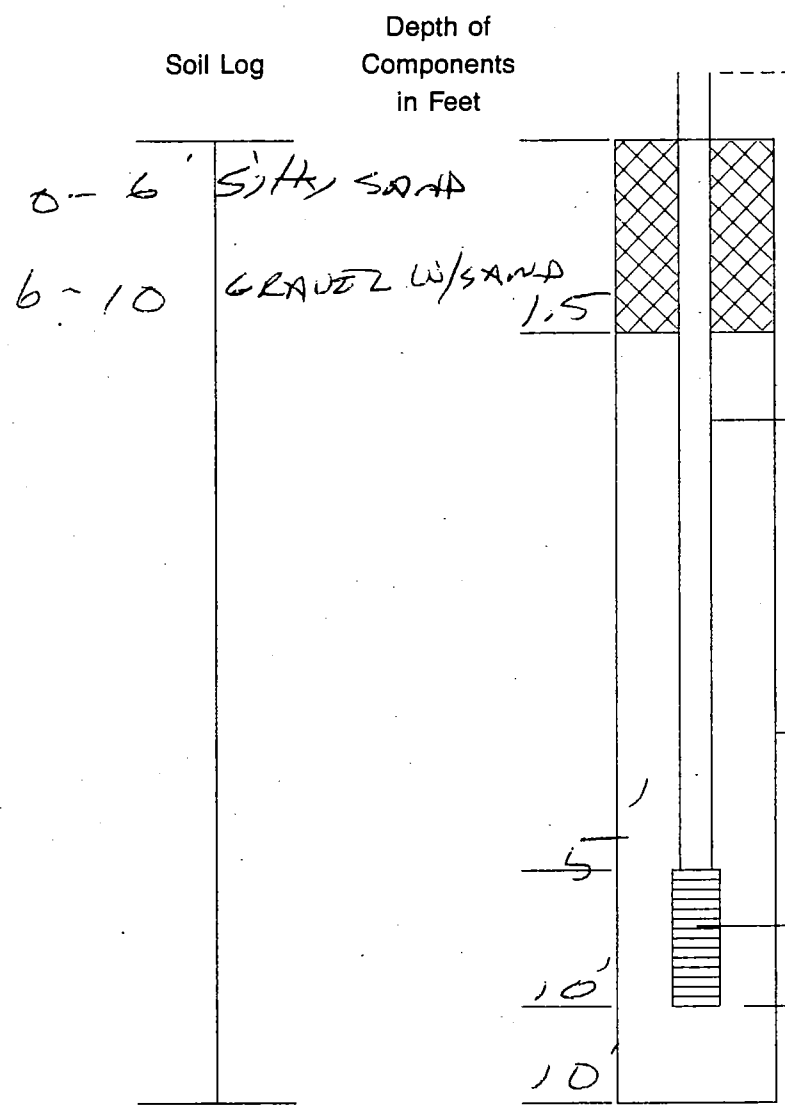
(USE ADDITIONAL SHEETS IF NECESSARY)

3404

# HOLT DRILLING, INC.

## Resource Protection Well Report

Project Name UNION GAP WATER SYSTEM EXPANSION Date 3-8-73  
 Well Identification # MW-W4 County WAKARUSA SW 1/4 SW 1/4  
 Drilling Method HSA Section 31 T. 13N R. 19E  
 Driller STEVEN NUMAN Start Card 213490  
 License # 14878 Consulting Firm HONG WEST



Stick up Ø on Monument Casing

Type of Surface Seal CEMENT  
 Amount Ø 1.5

ID of Riser Pipe 2"  
 Type of Riser Pipe PVC  
 Amount 5'

Type of Connection THREAD

Type of Backfill around Riser Bentonite  
 Amount 2.5

Diameter of Borehole 8"

Screen Size or Type .020

Type of Filter Material 10/30 SAND  
 Amount 6

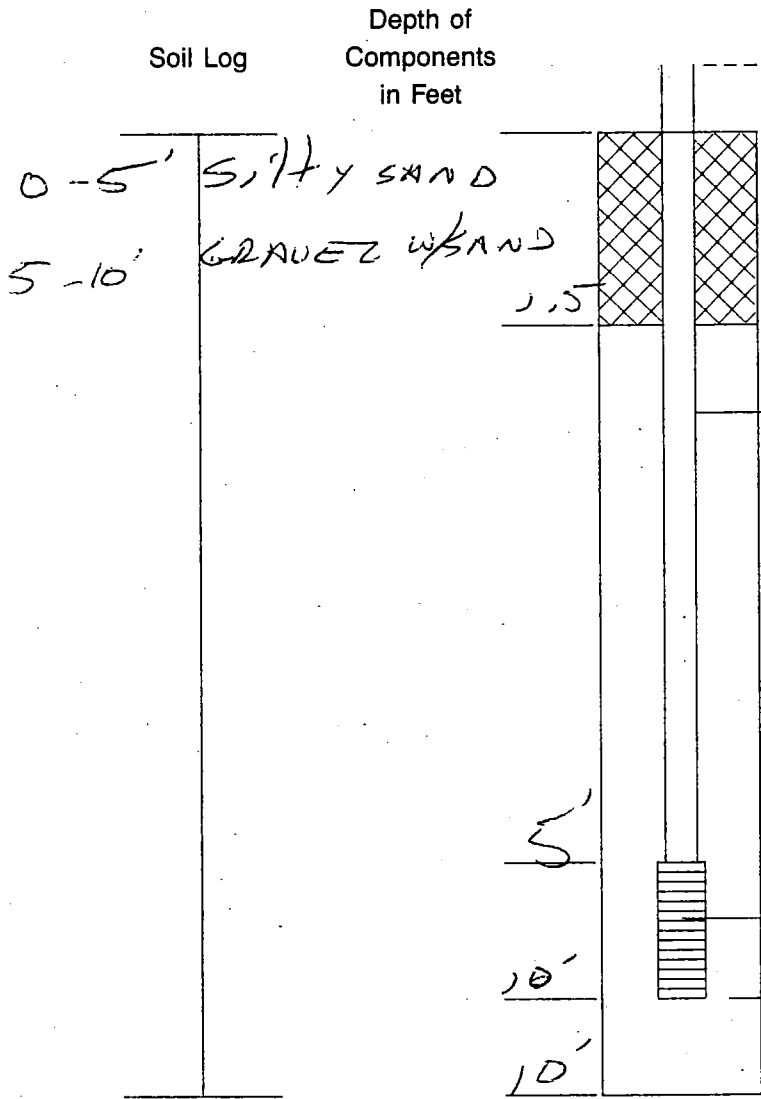
Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature Steven Numan

3405  
**HOLT DRILLING, INC.**

**Resource Protection Well Report**

Project Name LINCOLN GAP WATER SYSTEM EXPANSION Date 3-8-93  
Well Identification # MW - W3 County YAKIMA, SW 1/4 SW 1/4 N  
Drilling Method HSA Section 31 T. 13 N R. 19 E  
Driller STEVE HAUMAN Start Card 213490  
License # 1888 Consulting Firm HANO WEST



Stick up Ø on Monument Casing  
Type of Surface Seal CEMENT  
Amount 1.5  
ID of Riser Pipe 3"  
Type of Riser Pipe PVC  
Amount 5'  
Type of Connection THREAD  
Type of Backfill around Riser Bentonite  
Amount 2.5  
Diameter of Borehole 8"  
Screen Size or Type .020  
Type of Filter Material 10/60 SAND  
Amount 6'

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature Steve Hauman



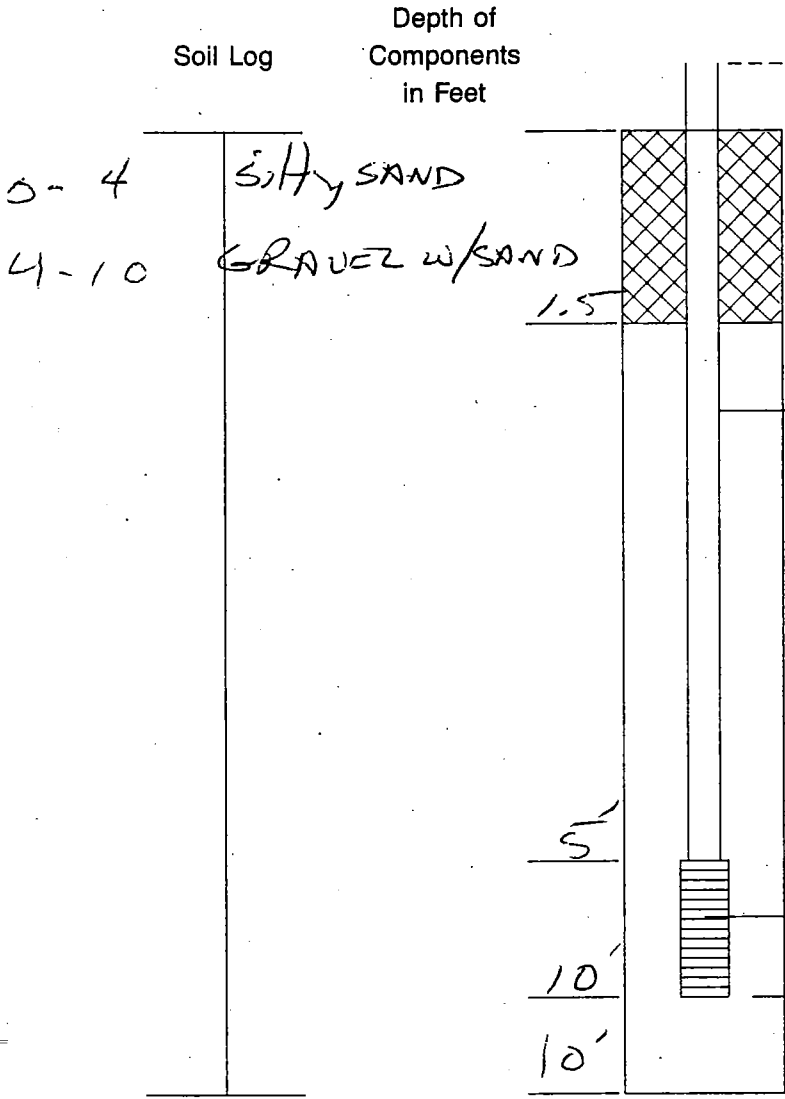
# HOLT DRILLING, INC.

20-00

## Resource Protection Well Report

DEPARTMENT OF ECOLOGY  
CENTRAL REGION OFFICE

Project Name UNION GAP WATER SYSTEM EXPANSION Date 3-8-93  
 Well Identification # MLW - 002 County YAKIMA, SW 1/4 SW 1/4  
 Drilling Method HSA Section 31 T. 13N R. 19E  
 Driller STEVE HAUMAN Start Card \_\_\_\_\_  
 License # 1848 Consulting Firm HONG WEST



Stick up 0 on Monument Casing

Type of Surface Seal CEMENT  
Amount 1.5

ID of Riser Pipe 2"  
Type of Riser Pipe PVC  
Amount 5

Type of Connection THREAD

Type of Backfill around Riser Perlite  
Amount 2.5

Diameter of Borehole 8"

Screen Size or Type 60

Type of Filter Material 10/20 SAND  
Amount 6'

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

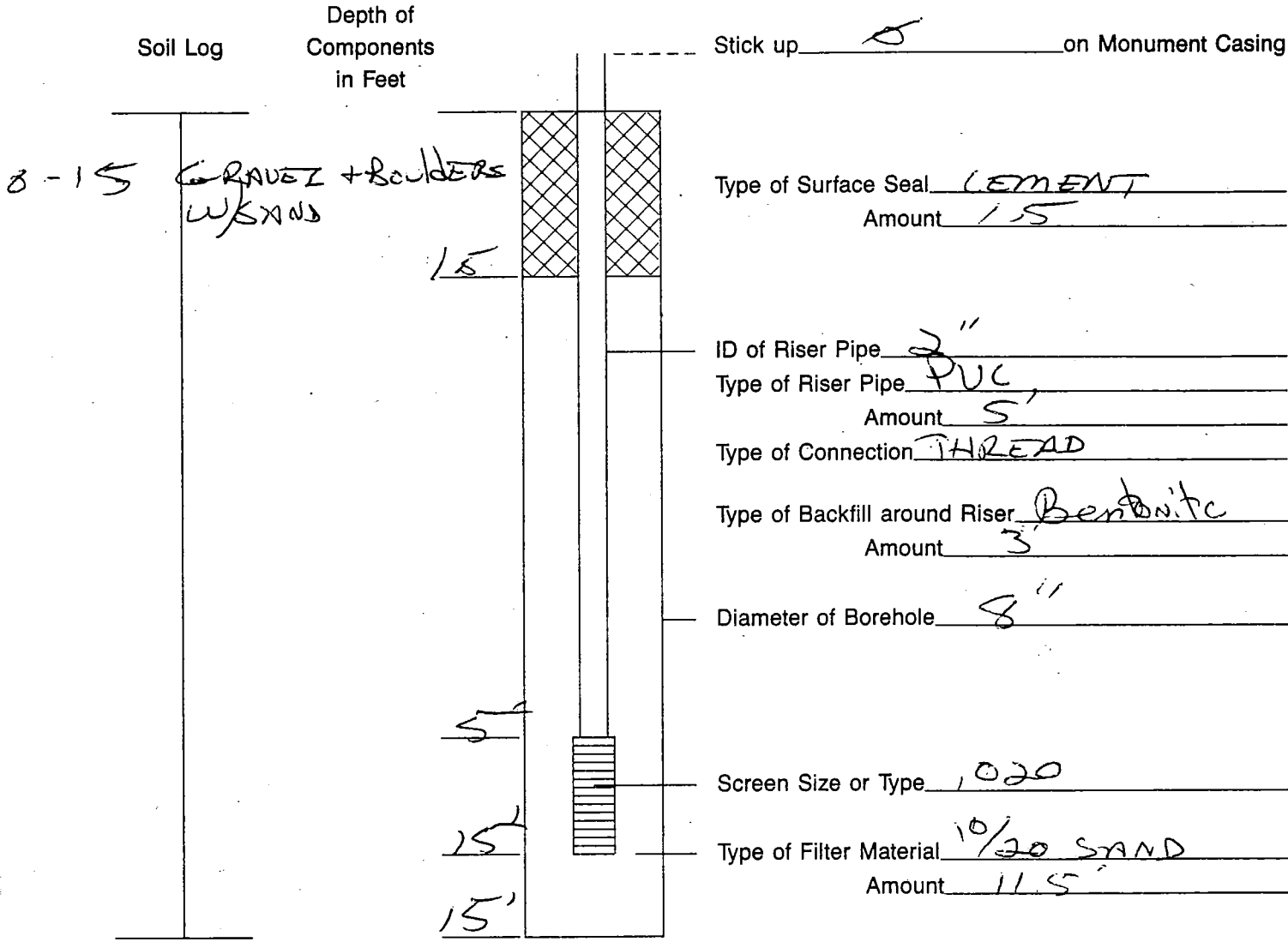
Signature Steve Hauman

# HOLT DRILLING, INC.

28

## Resource Protection Well Report

Project Name UNION GAP WATER SYSTEM EXPANSION Date 3-5-93  
Well Identification # MW-W1 County YAKIMA, Sid 1/4 SW 1/4  
Drilling Method NSA Section 31 T. 13N R. 19E  
Driller STEVE HAUMAN Start Card 213490  
License # 1888 Consulting Firm HONG WEST



Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature Steve Hauman

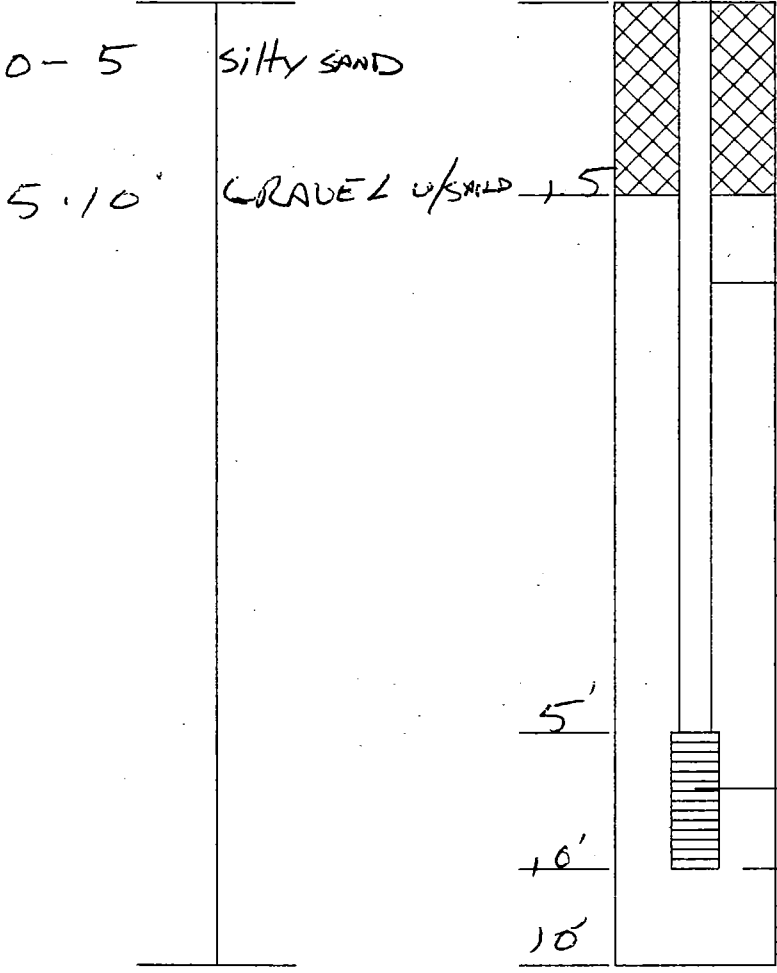
# HOLT DRILLING, INC.

20

## Resource Protection Well Report

Project Name UNION GAP WATER SYSTEM EXPANSION Date 3-3-93  
Well Identification # MW-51 County YAKIMA, SW 1/4 SW 1/4  
Drilling Method HSA Section 31 T. 13N R. 19E  
Driller STEVE LAUMAN Start Card 213490  
License # 1888 Consulting Firm HONG WEST

Soil Log  
Depth of Components in Feet



Stick up 3' on Monument Casing

Type of Surface Seal CEMENT  
Amount 1.5

ID of Riser Pipe 2"  
Type of Riser Pipe PVC  
Amount 5'  
Type of Connection THREAD

Type of Backfill around Riser BENTONITE  
Amount 3.5'

Diameter of Borehole 8"

Screen Size or Type .020  
Type of Filter Material 10/20 SAND  
Amount 6

Remarks:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

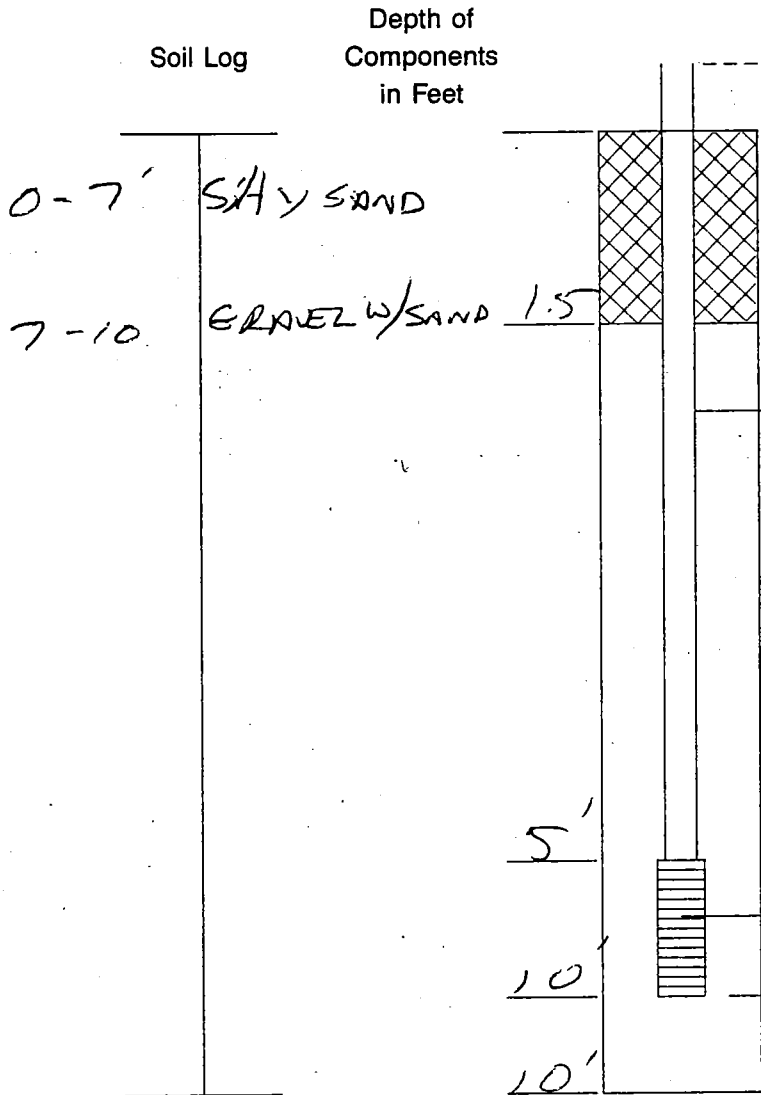
Signature Steve Lauman

8409

# HOLT DRILLING, INC.

## Resource Protection Well Report

Project Name UNION GAP WATER SYSTEM EXPANSION Date 3-3-93  
 Well Identification # MW-52 County YAKIMA, SW 1/4 SW 1/4  
 Drilling Method HSA Section 31 T. 12N R. 19E  
 Driller STEVE HAUMANN Start Card 213490  
 License # 1888 Consulting Firm HONG WEST



Stick up 3 on Monument Casing

Type of Surface Seal CEMENT  
Amount 1.5'

ID of Riser Pipe 2"  
Type of Riser Pipe PVC  
Amount 5' 7"

Type of Connection THREAD

Type of Backfill around Riser Bentonite  
Amount 3.5

Diameter of Borehole 8"

Screen Size or Type .020

Type of Filter Material 10/20 SAND  
Amount 6

Remarks:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature Steve Haumann



# WATER WELL REPORT

STATE OF WASHINGTON

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

(1) OWNER: Name O. M. Mortimore Address 2008 So. 1<sup>st</sup> Ave; Yakima, Wash. 98903  
(2) LOCATION OF WELL: County Yakima - SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  Sec 31 T. 13 N., R. 19 W.M.  
Bearing and distance from section or subdivision corner \_\_\_\_\_

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

(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 5 inches.  
Drilled \_\_\_\_\_ ft. Depth of completed well 50 ft.

(6) CONSTRUCTION DETAILS:  
Casing installed: 5" Diam. from 0 ft. to 48' 2 1/2" 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 \_\_\_\_\_  
Type \_\_\_\_\_ Model No \_\_\_\_\_  
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? 18 ft.  
Material used in seal Bentonite  
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: \_\_\_\_\_ H.P. \_\_\_\_\_

(8) WATER LEVELS: Land-surface elevation 1020 ft. above mean sea level  
Static level 8' 6" ft. below top of well Date 8-9-83  
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: 10 gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
" With draw " " " "

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 \_\_\_\_\_  
Baller test \_\_\_\_\_ gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Artesian flow \_\_\_\_\_ g.p.m. Date \_\_\_\_\_  
Temperature of water 60 Was a chemical analysis made? Yes  No

## (10) WELL LOG: N

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
<u>Top Soil - Light Brown</u>	<u>0</u>	<u>8</u>
<u>Conglomerate - " "</u>	<u>8</u>	<u>32</u>
<u>Clay with little sand - " "</u>	<u>32</u>	<u>34</u>
<u>Conglomerate - " "</u>	<u>34</u>	<u>50</u>

2008 So. 1<sup>st</sup> Ave  
Yakima

Work started 8-8, 1983 Completed 8-9, 1983

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 JENSEN'S WELL DRILLING & DRIVING Co.  
(Person, firm, or corporation) (Type or print)  
Address 1603 So. 10<sup>th</sup> Ave; Yakima, Wash. 98901  
[Signed] Chris B. Jensen dr.  
(Well Driller)  
License No. 0217 Date 8-9-83, 1983







APPENDIX IV

SITE ASSESSMENT CHECKLIST

CAYUSE ENVIRONMENTAL  
60 Olden Way  
Toppenish, WA 98948  
(509) 865-5086

April 8, 1994

Post-It™ brand fax transmittal memo 7671		# of pages ▶
To: BRAD CALO	From: DAVE STINER	
Co:	Co.	
Dest: WILL THIS SUFFICE	Phone #	AS A
Subject: MANIFEST	Fax #	

Mr. Dave Stiner  
Washington Beef  
Goodman Rd.  
Union Gap, WA 98903

Dear Mr. Stiner:

In answer to your questions concerning the two 1,000 gallon tanks removed from Washington Beef on Ahtanum Road, I provide you the following explanation:

First, the product remaining in the tanks was removed with a Vacu-Max, then dry-iced, cut open and scrapped and cleaned with solzall to remove all remaining product. This product was then removed with the Vacu-Max again.

Next, the tanks were taken to Douglas Wrecking (which is a licensed facility) in Wapato, Washington for disposal.

The tanks were removed from the property in November, 1993.

If you have any further questions, please don't hesitate to contact me.

Sincerely,

CAYUSE ENVIRONMENTAL

Bryan Mull  
Project Manager  
BM:BC/rh



**UNDERGROUND STORAGE TANK  
Site Check/Site Assessment Checklist**

For Office Use Only  
 Owner # 40008744  
 Site # 002577

**INSTRUCTIONS:**

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person registered with Ecology. 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 ASSESSMENT:** 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  
 P. O. Box 47655  
 Olympia, WA 98504-7655

**SITE INFORMATION**

Site ID Number (on invoice or available from Ecology if the tanks are registered): 002577

Site/Business Name: Washington Beef

Site Address: 2709 Goodman Road Telephone: (509) 248-3350

Street

Union Gap WA 98903

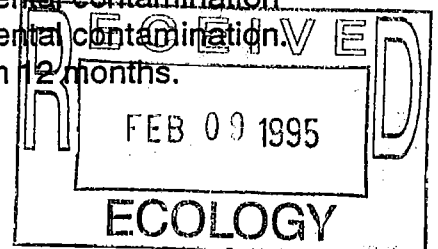
City State ZIP-Code

**TANK INFORMATION**

Tank ID No.	Tank Capacity	Substance Stored
<u>1</u>	<u>1,000 gallon</u>	<u>Unleaded gasoline</u>
<u>2</u>	<u>1,000 gallon</u>	<u>Unleaded gasoline</u>

**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-place.
  - 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 initiated 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 checked="" type="checkbox"/>	<input 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 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 checked="" type="checkbox"/>	<input type="checkbox"/>
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has <b>not</b> occurred.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SITE ASSESSOR INFORMATION**

Douglas P. D'Hondt

PLSA Engineering & Surveying

Person registered with Ecology

Firm Affiliated with

Business Address: 1120 West Lincoln Avenue

Telephone: (509) 575-6990

Street  
Yakima

WA

98902

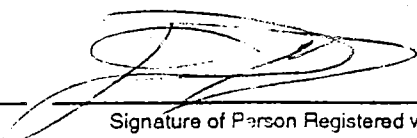
City

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.

2/1/94



Date

Signature of Person Registered with Ecology

APPENDIX V

INDEPENDENT REMEDIAL ACTION REPORT SUMMARY



# Independent Remedial Action Report Summary

This report summary is an important part of the Independent Remedial Action Report. Please complete the summary and submit it with your Independent Remedial Action Report. If this document does not accompany your cleanup report, or if it is not fully completed, your report cannot enter the review process necessary for Ecology to provide you with a "no further action" determination, or to remove your site from the hazardous sites lists.

FOR ECOLOGY USE ONLY			
ERTS No.	TCP I.D. No.	Date Received	<input type="checkbox"/> NFA
			<input type="checkbox"/> SHA Referral
Reviewed by		Initial Investigation (Date)	<input type="checkbox"/> Interim Action
			<input type="checkbox"/> Emergency Action

PLEASE PRINT CLEARLY OR TYPE

Complete all of the following:

### GENERAL INFORMATION

Name of Site Owner Washington Beef	Phone 509-248-3350
Address 2709 Goodman Road, Union Gap, WA 98903	
Authorized Contact Dave Stiner	Phone same
Name of Facility Operator	Phone
Address	
Authorized Contact	Phone
Name of Consultant Bradley J. Card	Phone 509-575-6990
Name of Firm PLSA Engineering & Surveying	
Address 1120 West Lincoln Avenue, Yakima, WA 98902	
Please indicate which of the above persons completed this report. If the report was completed by someone other than listed above, please provide their name, address, and a daytime phone.	
<u>Douglas P. D'Hondt</u> ^ 509-575-6990 <u>PLSA Engineering &amp; Surveying</u> <u>1120 West Lincoln Avenue, Yakima, WA 98902</u>	

### REPORT INFORMATION

Type of Report (check one)  <input type="checkbox"/> Combined release and independent remedial action report <input type="checkbox"/> Independent remedial action report <input checked="" type="checkbox"/> Interim Action Report <input type="checkbox"/> Final Cleanup Action Report	Is this a Leaking Underground Storage Tank (LUST) report?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  Date release was reported to Ecology  Date cleanup was completed to be completed
--	---

**FACILITY INFORMATION**

Site Name Washington Beef																																																			
Other Names (the site may be known as) NA																																																			
Site Contact Person If Other Than Owner/Operator (This must be a person who is on-site during normal working hours and is authorized and qualified to answer questions about the site, or a person who is available during normal business hours and has knowledge about the site and the remediation.) Name Dave Stiner Phone _____																																																			
Site Mailing Address (or site contact mailing address) Same																																																			
Site Location Address (including zip code)																																																			
Closest City Union Gap, WA		County (where site is located) Yakima																																																	
Township _____	Range _____	Section _____	Quarter-Quarter _____ Meridian _____																																																
Longitude: _____	Degree _____	Minute _____	Second _____																																																
Latitude: _____	Degree _____	Minute _____	Second _____																																																
<p><b>Ownership and Operator Type</b> Complete the table below by checking the appropriate box to identify the type of owner and operator for the facility. (For example, if the property owner is a port district and the operator a private individual, then check the boxes under owner identification column in the municipal, code #2 row, and under the operator identification column in the private party, code #1 row.)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:45%;">Ownership/Operator Type</th> <th style="width:10%;">Code #</th> <th style="width:25%;">Owner Identification</th> <th style="width:20%;">Operator Identification</th> </tr> </thead> <tbody> <tr> <td>Private Party</td> <td>1</td> <td style="text-align:center">X</td> <td style="text-align:center">X</td> </tr> <tr> <td>Municipal (Public)</td> <td>2</td> <td></td> <td></td> </tr> <tr> <td>County</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>Federal</td> <td>4</td> <td></td> <td></td> </tr> <tr> <td>State</td> <td>5</td> <td></td> <td></td> </tr> <tr> <td>Tribal</td> <td>6</td> <td></td> <td></td> </tr> <tr> <td>Mixed</td> <td>7</td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>8</td> <td></td> <td></td> </tr> <tr> <td>Unknown</td> <td>9</td> <td></td> <td></td> </tr> <tr> <td>Public Entity Acquisition through Bankruptcy</td> <td>10</td> <td></td> <td></td> </tr> <tr> <td>Financial Institution Acquisition through Bankruptcy</td> <td>11</td> <td></td> <td></td> </tr> </tbody> </table>				Ownership/Operator Type	Code #	Owner Identification	Operator Identification	Private Party	1	X	X	Municipal (Public)	2			County	3			Federal	4			State	5			Tribal	6			Mixed	7			Other	8			Unknown	9			Public Entity Acquisition through Bankruptcy	10			Financial Institution Acquisition through Bankruptcy	11		
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<p><b>Standard Industrial Classification (SIC) Codes.</b> List all that apply. If none apply, or if you don't know your SIC code, list activities conducted at the site, e.g., automotive repair and maintenance, construction equipment storage, etc.</p> <p>_____</p> <p>_____</p>																																																			
<p><b>Hazardous Substance Management Practice(s).</b> The hazardous substance(s) cleaned up from the site was the result of which of the following sources, activities, or actions? Please circle all that apply to the facility.</p> <table style="width:100%;"> <tr> <td>1 = Drug Lab</td> <td>5 = Landfill</td> <td>9 = A Spill</td> </tr> <tr> <td>2 = Drum</td> <td>6 = Land application</td> <td>10 = Storm Drain</td> </tr> <tr> <td>3 = A Leaking Impoundment</td> <td>7 = Pesticide application</td> <td>11 = Leaking Tank:</td> </tr> <tr> <td>4 = Improper Handling</td> <td>8 = Pesticide Disposal</td> <td style="padding-left: 20px;">a - below ground; b - above ground</td> </tr> <tr> <td></td> <td></td> <td>12 = Unknown</td> </tr> </table>				1 = Drug Lab	5 = Landfill	9 = A Spill	2 = Drum	6 = Land application	10 = Storm Drain	3 = A Leaking Impoundment	7 = Pesticide application	11 = Leaking Tank:	4 = Improper Handling	8 = Pesticide Disposal	a - below ground; b - above ground			12 = Unknown																																	
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**RELEASE INFORMATION**

Date of Release (if known) <i>Unknown</i>	Date of Discovery <i>11/16/93</i>	Are there any drinking water systems affected? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>
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If drinking water systems are affected, are the systems public, private, or both? (circle one)	If drinking water systems are affected, has alternate drinking water been provided? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/>
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**General Hazardous Substance Categories** Using the contaminants listed below, complete the table. (A more detailed description of the contaminants can be found in Appendix A of the guidance.)

Affected Media	Contaminants. For each of the applicable contaminants, enter the appropriate letter designating the status of the contaminants: C = Confirmed or S = Suspected (Contaminant status definitions are defined in Appendix A of the guidance.)																
	Halogenated Organic Compounds	Metals - Priority Pollutants	Metals - Other	Polychlorinated Bi-Phenyls (PCBs)	Pesticides/Herbicides	Petroleum Products	Phenolic Compounds	Non-Halogenated Solvents	Dioxins	Polynuclear Aromatic Hydrocarbons (PAH)	Reactive Wastes	Corrosive Wastes	Radioactive Wastes	Conventional Contaminants - Organics	Conventional Contaminants - Inorganic	Base/Neutral Organic Compounds	Asbestos
Ground Water							C										
Surface Water																	
Drinking Water																	
Soil							C										
Air																	

**CLEANUP INFORMATION**

Indicate cleanup level methods used by completing Table 5-A below. (Check all that apply)

TABLE 5-A		Soil	Ground Water	Air	Surface Water
Method	A	✓	✓		
	B				
	C				
Have these levels been met throughout the site? (circle only one)		YES <span style="border:1px solid black; border-radius:50%; padding:2px;">NO</span>	<span style="border:1px solid black; border-radius:50%; padding:2px;">YES</span> NO	YES NO	YES NO



**CLEANUP INFORMATION (continued)**

Indicate the treatment methods used by completing Tables 5-B through 5-D below. (Check all that apply)

TABLE 5-B							
	Destruction or Detoxification				Media Transfer		
	Carbon Adsorption <sup>1</sup>	Biological Treatment	Chemical Destruction	Incineration	Air Stripping/ Air Sparging	Aeration/Vapor Extraction	Thermal Desorption
Soil	-NA-	X			-NA-		
Ground Water		X		-NA-		-NA-	-NA-
Surface Water				-NA-		-NA-	-NA-
Air		-NA-				-NA-	
Wastes	-NA-				-NA-	-NA-	-NA-

<sup>1</sup>Carbon followed by regeneration; use of granular activated carbon followed by landfilling would be classified in these tables as volume reduction and off-site landfill.

TABLE 5-C						
	Immobilization		Reuse/Recycling <sup>2</sup>	Separation/Volume Reduction		
	Vitrification	Solidification/ Stabilization		Solvent Extraction	Soil Washing	Physical Separation <sup>3</sup>
Soil						
Ground Water	-NA-	-NA-		-NA-	-NA-	
Surface Water	-NA-	-NA-		-NA-	-NA-	
Wastes						

<sup>2</sup>For example, reuse of free petroleum product recovered in a pump and treat system.  
<sup>3</sup>For example, oil/water separators.

TABLE 5-D				
	Land Disposal/Containment		Institutional Controls	Others
	Containment or On-site Landfill	Off-site Landfill		Specify treatment method
Soil		X		
Ground Water		-NA-		
Surface Water	-NA-	-NA-		
Wastes				

**LUST SITE INFORMATION**

Type of product released (check one)	Approx. Tank Size: <u>1,000</u> gals
Leaded Gas <input type="checkbox"/> Diesel <input checked="" type="checkbox"/> Waste Oil <input type="checkbox"/>	Was free product encountered? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Unleaded Gas <input checked="" type="checkbox"/> Heating Oil <input type="checkbox"/> Other <input type="checkbox"/> (Identify _____)	

**ENVIRONMENTAL INDICATORS**

Answer the following questions as they are applicable to your site:

How many cubic yards of soil have been treated? 3112

Where soil treatment was conducted, was it done on-site, off-site, or both? (circle one)

How many cubic yards of soil have been disposed of off-site? \_\_\_\_\_ (Calculate these quantities of soil while the soil is in place, prior to any excavation and/or treatment.)

Identify the off-site location(s) where soil was disposed. Anderson Rock & Demolition Pit

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If ground water pump and treatment was conducted, how many gallons of ground water have been treated to date? 20,000 gals.

How many years is the ground water extraction system expected to continue in operation? 0 yrs.