

The original and first copy of this report are to be filed with the

RECEIVED WATER WELL RECEIVED

23177 2/5/40E/19ab  
State Well No.

STATE OF OREGON

SEP - 8 1989 (Please type or print) AUG 21 1989

State Permit No.

STATE ENGINEER, SALEM, OREGON 97310  
within 30 days from the date of well completion.

(Do not write above this line)

WATER RESOURCES DEPT.

WATER RESOURCES DEPT.

(1) OWNER: Start Card No. SALEM, OREGON

Name CITY OF UNION OR  
Address UNION OR P.O. Box 529  
97883

(2) TYPE OF WORK (check):

New Well  Deepening  Reconditioning  Abandon   
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

(4) PROPOSED USE (check):

Rotary  Driven  Domestic  Industrial  Municipal   
Cable  Jetted  Irrigation  Test Well  Other   
Dug  Bored

(5) CASING INSTALLED:

Threaded  Welded

16" Diam. from 71 ft. to 393 ft. Gage 1375  
10" Diam. from 393 ft. to 500 ft. Gage 1365  
8" Diam. from 500 ft. to 1686 ft. Gage 1322

(6) PERFORATIONS:

Perforated?  Yes  No.

Type of perforator used MILL CUT  
Size of perforations 1/4 in. by 2 1/2 in.  
7644 perforations from 1000 ft. to 1273 ft.  
9884 perforations from 1333 ft. to 1686 ft.

(7) SCREENS:

Well screen installed?  Yes  No

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

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made?  Yes  No If yes, by whom? DRILLING CONTRACTOR  
1000 gal./min. with 33 ft. drawdown after 6 hrs.  
1600 " 101 " 18 "  
1922 " 134 " 24 "  
Bailer test gal./min. with ft. drawdown after hrs.  
Artesian flow N/A g.p.m.  
Temperature of water 69° Depth artesian flow encountered N/A ft.

(9) CONSTRUCTION:

Well seal—Material used NEAT CEMENT GROUT  
Well sealed from land surface to 393 ft.  
Diameter of well bore to bottom of seal 30 in. TO 61 FT  
Diameter of well bore below seal 10" x 8" in. TO 393 FT  
Number of sacks of cement used in well seal 270 sacks  
Number of sacks of bentonite used in well seal NONE sacks  
Brand name of bentonite N/A  
Number of pounds of bentonite per 100 gallons of water \_\_\_\_\_ lbs./100 gals.  
Was a drive shoe used?  Yes  No Plugs \_\_\_\_\_ Size: location \_\_\_\_\_ ft.  
Did any strata contain unusable water?  Yes  No  
Type of water? \_\_\_\_\_ depth of strata \_\_\_\_\_  
Method of sealing strata off \_\_\_\_\_  
Was well gravel packed?  Yes  No Size of gravel: \_\_\_\_\_  
Gravel placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

(10) LOCATION OF WELL:

County UNION Driller's well number #3  
NW 1/4 NE 1/4 Section 19 T. 43 R. 40E W.M.  
Bearing and distance from section or subdivision corner  
Tax Lot # 454019 A13 Lot # 200

(11) WATER LEVEL: Completed well.

Depth at which water was first found 988 ft.  
Static level 116 ft. below land surface. Date 7-26-89  
Artesian pressure N/A lbs. per square inch. Date

(12) WELL LOG:

Diameter of well below casing 70 in. Cased

Depth drilled 1686 ft. Depth of completed well 1686 ft.  
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
TOP SOIL	0	2	
BASALT GREY HARD	2	80	
BASALT BRN + BRN CLAY	80	155	
BASALT RED SOFT	155	275	
BASALT GREY HARD FRAC	275	467	
CLAY GREEN	467	476	
CLAY RED	476	479	
BASALT BLK + BRN CLAY	479	502	
CLAY GREY GREEN	502	554	
BASALT RED + BRN CLAY	554	608	
BASALT BLK SOFT	608	654	
CLAY GREY	654	668	
CLAY RED + BLK BASALT	668	673	
BASALT BLK + GREY CLAY	673	761	
BASALT BLK + QUARTZ	761	779	
BASALT GREY MED	779	789	
BASALT BLK + GREY CLAY	789	806	
BASALT GREY + MED	806	824	
BASALT RED + BRN SOFT	824	861	

Work started JUNE 6 1989 Completed JULY 28 1989  
Date well drilling machine moved off of well JULY 17 1989

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.  
[Signed] Arnold E. Holman Date AUG 11, 1989  
(Drilling Machine Operator)  
Drilling Machine Operator's License No. 534

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
Name HOLMAN DRILLING CORP (Type or print)  
(Person, firm or corporation)  
Address E 3410 9TH AVE SPOKANE WA.  
[Signed] Arnold E. Holman PDR (Water Well Contractor)  
Contractor's License No. 534 Date AUG 11, 1989

The original and first copy of this report are to be filed with the

# RECEIVED WATER WELL REPORT RECEIVED

STATE OF OREGON

AUG 21 1989

State Well No. \_\_\_\_\_

STATE ENGINEER, SALEM, OREGON 97310  
within 30 days from the date of well completion.

SEP - 8 1989 (Please type or print)  
(Do not write above this line)

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

108  
Un 10 2371

WATER RESOURCES DEPT  
SALEM, OREGON

WATER RESOURCES DEPT.

(1) OWNER: Start Card No. 1491, OREGON  
Name CITY OF UNION OR.  
Address UNION OR P.O. BOX 529  
97883

(10) LOCATION OF WELL:  
County UNION Driller's well number # 3  
NW 1/4 NE 1/4 Section 19 T. 45 R. 40 E W.M.  
Bearing and distance from section or subdivision corner  
TAY LOT# 4S4019 A.B. LOT# 200

(2) TYPE OF WORK (check):  
New Well  Deepening  Reconditioning  Abandon   
If abandonment, describe material and procedure in Item 12.

(11) WATER LEVEL: Completed well.  
Depth at which water was first found 988 ft.  
Static level ft. below land surface. Date  
Artesian pressure lbs. per square inch. Date

(3) TYPE OF WELL: (4) PROPOSED USE (check):  
Rotary  Driven  Domestic  Industrial  Municipal   
Cable  Jetted  Irrigation  Test Well  Other   
Dug  Bored

(5) CASING INSTALLED: Threaded  Welded   
" Diam. from " ft. to " ft. Gage  
" Diam. from " ft. to " ft. Gage  
" Diam. from " ft. to " ft. Gage

(12) WELL LOG: Diameter of well below casing \_\_\_\_\_  
Depth drilled ft. Depth of completed well ft.  
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

(6) PERFORATIONS: Perforated?  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.

MATERIAL	From	To	SWL
GREY BASALT HARD	861	901	
GREY CLAY	901	910	
BASALT BLK MED	910	988	
* BASALT BLK + BRN SOFT	988	1051	116
* BASALT BLK SOFT	1051	1160	116
BASALT RED + GRN CLAY	1160	1174	
BASALT BLK MED	1174	1267	
* BASALT BLK + RED SOFT	1267	1288	116
BASALT RED + TAN CLAY	1288	1314	
BASALT MED	1314	1339	
BASALT BLK + RED TAN CLAY	1339	1369	
* BASALT BLK SOFT	1369	1389	116
BASALT GREY HARD	1389	1411	
BASALT BLK + RED SOFT	1411	1425	
BASALT BLK MED	1425	1462	
* BASALT BLK + RED SOFT	1462	1529	116
BASALT GREY HARD	1529	1563	
* BASALT BLK + RED SOFT	1563	1593	116
BASALT BLK HARD	1593	1624	

(7) SCREENS: Well screen installed?  Yes  No  
Manufacturer's Name  
Type Model No.  
Diam. Slot size Set from " ft. to " ft.  
Diam. Slot size Set from " ft. to " ft.

Work started 19 Completed 19  
Date well drilling machine moved off of well 19

(8) WELL TESTS: Drawdown is amount water level is lowered below static level  
Was a pump test made?  Yes  No If yes, by whom?  
Well: gal./min. with ft. drawdown after hrs.  
" " " " " "  
" " " " " "  
Bailer test gal./min. with ft. drawdown after hrs.  
Artesian flow g.p.m.  
Temperature of water Depth artesian flow encountered ft.

Drilling Machine Operator's Certification:  
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.  
[Signed] \_\_\_\_\_ Date \_\_\_\_\_, 19\_\_\_\_  
(Drilling Machine Operator)  
Drilling Machine Operator's License No. \_\_\_\_\_

(9) CONSTRUCTION:  
Well seal—Material used \_\_\_\_\_  
Well sealed from land surface to \_\_\_\_\_ ft.  
Diameter of well bore to bottom of seal \_\_\_\_\_ in.  
Diameter of well bore below seal \_\_\_\_\_ in.  
Number of sacks of cement used in well seal \_\_\_\_\_ sacks  
Number of sacks of bentonite used in well seal \_\_\_\_\_ sacks  
Brand name of bentonite \_\_\_\_\_  
Number of pounds of bentonite per 100 gallons of water \_\_\_\_\_ lbs./100 gals.  
Was a drive shoe used?  Yes  No Plugs \_\_\_\_\_ Size: location \_\_\_\_\_ ft.  
Did any strata contain unusable water?  Yes  No  
Type of water? \_\_\_\_\_ depth of strata \_\_\_\_\_  
Method of sealing strata off \_\_\_\_\_  
Was well gravel packed?  Yes  No Size of gravel: \_\_\_\_\_  
Gravel placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Water Well Contractor's Certification:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
Name \_\_\_\_\_ (Person, firm or corporation) (Type or print)  
Address \_\_\_\_\_  
[Signed] \_\_\_\_\_ (Water Well Contractor)  
Contractor's License No. \_\_\_\_\_ Date \_\_\_\_\_, 19\_\_\_\_

The original and first copy of this report are to be filed with the

RECEIVED WATER WELL REPORT RECEIVED

STATE ENGINEER, SALEM, OREGON, 97310  
with 30 days from the date of well completion.

STATE OF OREGON  
(Please type or print) SEP - 8 1989 AUG 21 1989

State Well No. \_\_\_\_\_  
State Permit No. \_\_\_\_\_

WATER RESOURCES DEPT.

WATER RESOURCES DEPT.

(1) OWNER: Start Card No. 1491  
Name CITY OF UNION OR  
Address UNION OR P.O. Box 529 97883

(10) LOCAL WELL:  
County UNION Driller's well number #3  
NW 1/4 NE 1/4 Section 19 T. 45S R. 40E W.M.  
Bearing and distance from section or subdivision corner  
TAX LOT # 454019 AB LOT # 200

(2) TYPE OF WORK (check):  
New Well  Deepening  Reconditioning  Abandon   
If abandonment, describe material and procedure in Item 12.

(11) WATER LEVEL: Completed well.  
Depth at which water was first found 988 ft.  
Static level 116 ft. below land surface. Date 7-26-89  
Artesian pressure N/A lbs. per square inch. Date

(3) TYPE OF WELL: (4) PROPOSED USE (check):  
Rotary  Driven  Domestic  Industrial  Municipal   
Cable  Jetted  Irrigation  Test Well  Other   
Dug  Bored

(5) CASING INSTALLED: Threaded  Welded   
" Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Gage \_\_\_\_\_  
" Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Gage \_\_\_\_\_  
" Diam. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Gage \_\_\_\_\_

(12) WELL LOG: Diameter of well below casing TO CASING  
Depth drilled 7686 ft. Depth of completed well 1686 ft.  
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

(6) PERFORATIONS: Perforated?  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.

MATERIAL	From	To	SWL
* BASALT RED SOFT	1624	1648	116
BASALT BLK MED	1648	1686	
* INDICATES WATER BEARING ZONE			

(7) SCREENS: Well screen installed?  Yes  No  
Manufacturer's Name \_\_\_\_\_ Model No. \_\_\_\_\_  
Type \_\_\_\_\_ Diam. \_\_\_\_\_ Slot size \_\_\_\_\_ Set from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Diam. \_\_\_\_\_ Slot size \_\_\_\_\_ Set from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

(8) WELL TESTS: Drawdown is amount water level is lowered below static level  
Was a pump test made?  Yes  No If yes, by whom? DRILLING CONTRACTOR  
Yield: 1600 gal./min. with 33 ft. drawdown after 6 hrs.  
" 1600 " 121 " 18 "  
" 1922 " 134 " 24 "  
Baller test gal./min. with \_\_\_\_\_ ft. drawdown after \_\_\_\_\_ hrs.  
Artesian flow N/A g.p.m.  
Temperature of water 69° Depth artesian flow encountered N/A ft.

Work started JUNE 6 1989 Completed JULY 28 1989  
Date well drilling machine moved off of well JULY 17 1989

(9) CONSTRUCTION:  
Well seal—Material used \_\_\_\_\_  
Well sealed from land surface to \_\_\_\_\_ ft.  
Diameter of well bore to bottom of seal \_\_\_\_\_ in.  
Diameter of well bore below seal \_\_\_\_\_ in.  
Number of sacks of cement used in well seal \_\_\_\_\_ sacks  
Number of sacks of bentonite used in well seal \_\_\_\_\_ sacks  
Brand name of bentonite \_\_\_\_\_  
Number of pounds of bentonite per 100 gallons of water \_\_\_\_\_ lbs./100 gals.  
Was a drive shoe used?  Yes  No Plugs \_\_\_\_\_ Size: location \_\_\_\_\_ ft.  
Did any strata contain unusable water?  Yes  No  
Type of water? \_\_\_\_\_ depth of strata \_\_\_\_\_  
Method of sealing strata off \_\_\_\_\_  
Was well gravel packed?  Yes  No Size of gravel: \_\_\_\_\_  
Gravel placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Drilling Machine Operator's Certification:  
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.  
[Signed] Arnold E. Holman Date Aug 11 1989  
(Drilling Machine Operator)

Drilling Machine Operator's License No. 534

Water Well Contractor's Certification:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
Name HOLMAN DRILLING CORP (Type or print)  
Address E 3410 9TH AVE SPOKANE WA  
[Signed] Arnold E. Holman PRES. (Water Well Contractor)  
Contractor's License No. 534 Date AUG 11 1989