

Groundwater Application Review Summary Form

Application # G- 18895

GW Reviewer Phil Marcy Date Review Completed: 2/26/2020

Summary of GW Availability and Injury Review:

Groundwater for the proposed use is either over appropriated, will not likely be available in the amounts requested without injury to prior water rights, OR will not likely be available within the capacity of the groundwater resource per Section B of the attached review form.

Summary of Potential for Substantial Interference Review:

There is the potential for substantial interference per Section C of the attached review form.

Summary of Well Construction Assessment:

The well does not appear to meet current well construction standards per Section D of the attached review form. Route through Well Construction and Compliance Section.
2/27/20

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations and for conditions that may be necessary for a permit (if one is issued).

B. GROUNDWATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070

B1. **Based upon available data**, I have determined that groundwater* for the proposed use:

- a. is over appropriated, is not over appropriated, or cannot be determined to be over appropriated during any period of the proposed use. * This finding is limited to the groundwater portion of the over-appropriation determination as prescribed in OAR 690-310-130;
- b. will not or will likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the groundwater portion of the injury determination as prescribed in OAR 690-310-130;
- c. will not or will likely to be available within the capacity of the groundwater resource; or
- d. will, if properly conditioned, avoid injury to existing groundwater rights or to the groundwater resource:
 - i. The permit should contain condition #(s) 7N; "Large Water Use Reporting";
 - ii. The permit should be conditioned as indicated in item 2 below.
 - iii. The permit should contain special condition(s) as indicated in item 3 below;

- B2. a. **Condition** to allow groundwater production from no deeper than _____ ft. below land surface;
- b. **Condition** to allow groundwater production from no shallower than _____ ft. below land surface;
- c. **Condition** to allow groundwater production only from the _____ groundwater reservoir between approximately _____ ft. and _____ ft. below land surface;
- d. **Well reconstruction** is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Groundwater Section.

Describe injury –as related to water availability– that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc): _____

B3. **Groundwater availability remarks:** The proposed POA well, UNIO 50684, produces from volcanic flow rocks and associated volcanoclastics of the Powder River Volcanics and likely the upper portions of the Grande Ronde Basalt of the Columbia River Basalt Group. Based on construction and similar head elevations, two nearby wells appear to produce water from the same source aquifer. UNIO 2046 lies about 3 miles NNE of the proposed POA, is authorized for irrigation use under certificate 90496, and belongs to the applicant. UNIO 173 is located 2.75 miles due north of the proposed POA, is authorized under certificate 51170 and permits G-15644 and G-16963, and is not owned by the applicant, and therefore likely represents the most likely target of possible well to well interference.

Calculations of expected drawdown at neighboring UNIO 173 include all currently authorized pumping, in addition to the proposed rate herein and on pending application G-18894 (5.18 cfs), a total of 15.73 cfs. Using a range of transmissivity values derived from nearby pump tests in basalt wells, and a range of storativity values appropriate for confined aquifers, a series of Theis drawdown calculations were performed. Expected impacts at UNIO 173 from pumping UNIO 50684 at 15.73 cfs for a period of 214 days fall between 34 and 59 feet under the most likely scenarios (using transmissivity from pump test performed on the POA well). Static water levels in UNIO 173 are typically between 55 and 85 feet above land surface, meaning that if 59' of drawdown does occur, resulting static water level may be below land surface for a portion of the irrigation season.

C. GROUNDWATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. **690-09-040 (1):** Evaluation of aquifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
1	Powder River Volcanics and CRBG	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: The applicant's well produces from depths below 1872' below land surface, and flows artesian at land surface. It is typical for wells producing from deep-seated volcanic aquifers in this region to have static water levels well above the elevation of their respective water-bearing zones.

C2. **690-09-040 (2) (3):** Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected?			Potential for Subst. Interfer. Assumed?	
						YES	NO	ASSUMED	YES	NO
1	1	Canyon Creek	2805	2720	5200	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer hydraulic connection evaluation: Groundwater in the deep-seated volcanic aquifer in the Grande Ronde Valley is likely hydraulically isolated, due to thick successions of volcanic rock and fine-grained sediments that severely limit the ability of groundwater to migrate vertically. In addition, the elevation difference between groundwater in the POA well and surface water within 1 mile are significantly different.

Water Availability Basin the well(s) are located within: GRANDE RONDE R> SNAKE R- AB WILLOW CR

C3a. **690-09-040 (4):** Evaluation of stream impacts for each well that has been determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% *natural* flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < ¼ mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. **Complete only if Q is distributed among wells.** Otherwise same evaluation and limitations apply as in C3a above.

	SW #		Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
			<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
			<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
			<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
			<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Comments: This section does not apply.

C4a. **690-09-040 (5):** Estimated impacts on **hydraulically connected surface water sources greater than one mile** as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

Non-Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
(A) = Total Interf.													
(B) = 80 % Nat. Q													
(C) = 1 % Nat. Q													
(D) = (A) > (C)													
(E) = (A / B) x 100		%	%	%	%	%	%	%	%	%	%	%	%

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: _____ Logid: _____

D2. **THE WELL does not appear to meet current well construction standards based upon:**

- a. review of the well log;
- b. field inspection by _____;
- c. report of CWRE _____;
- d. other: (specify) _____

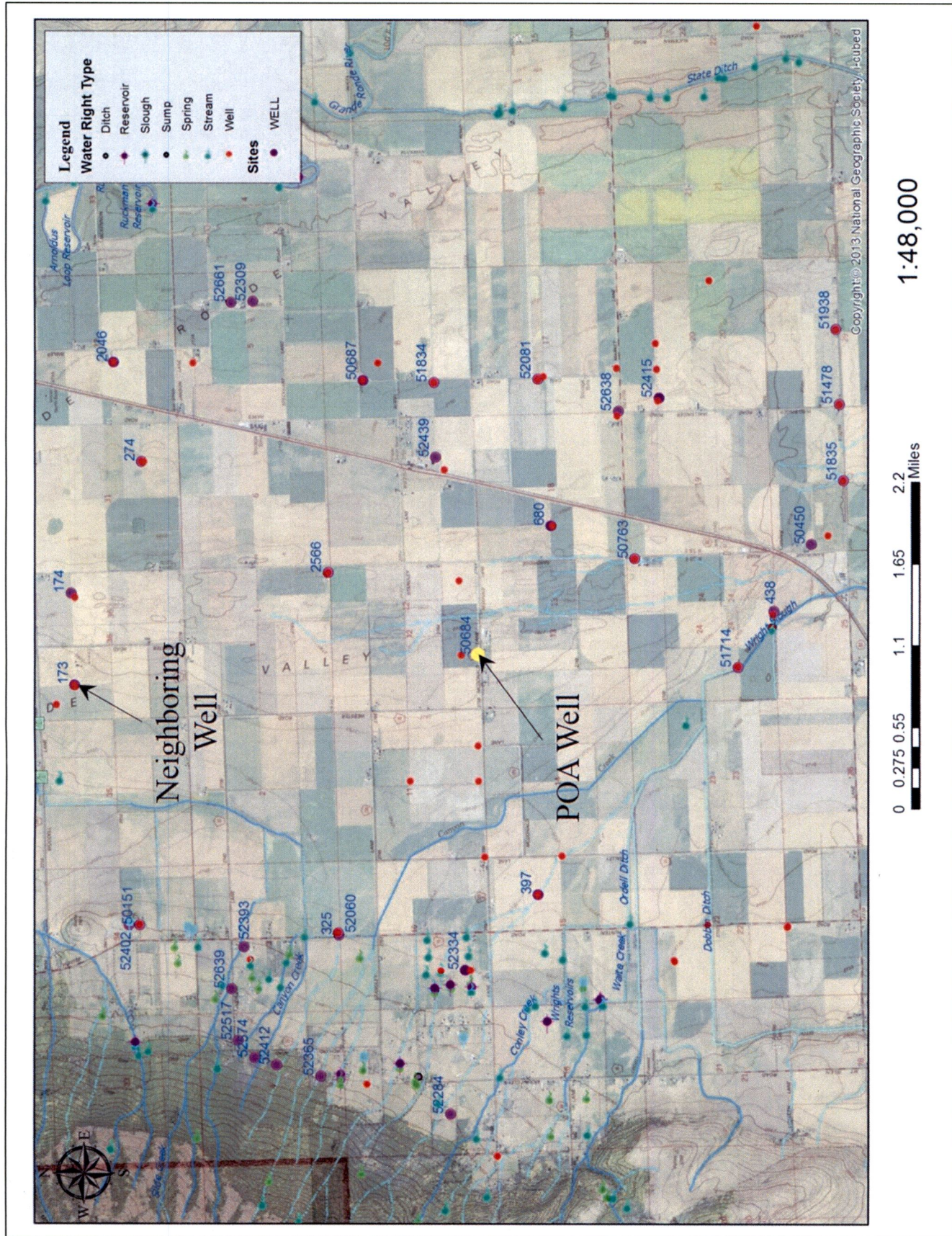
D3. **THE WELL construction deficiency or other comment is described as follows:** _____

D4. **Route to the Well Construction and Compliance Section for a review of existing well construction.**

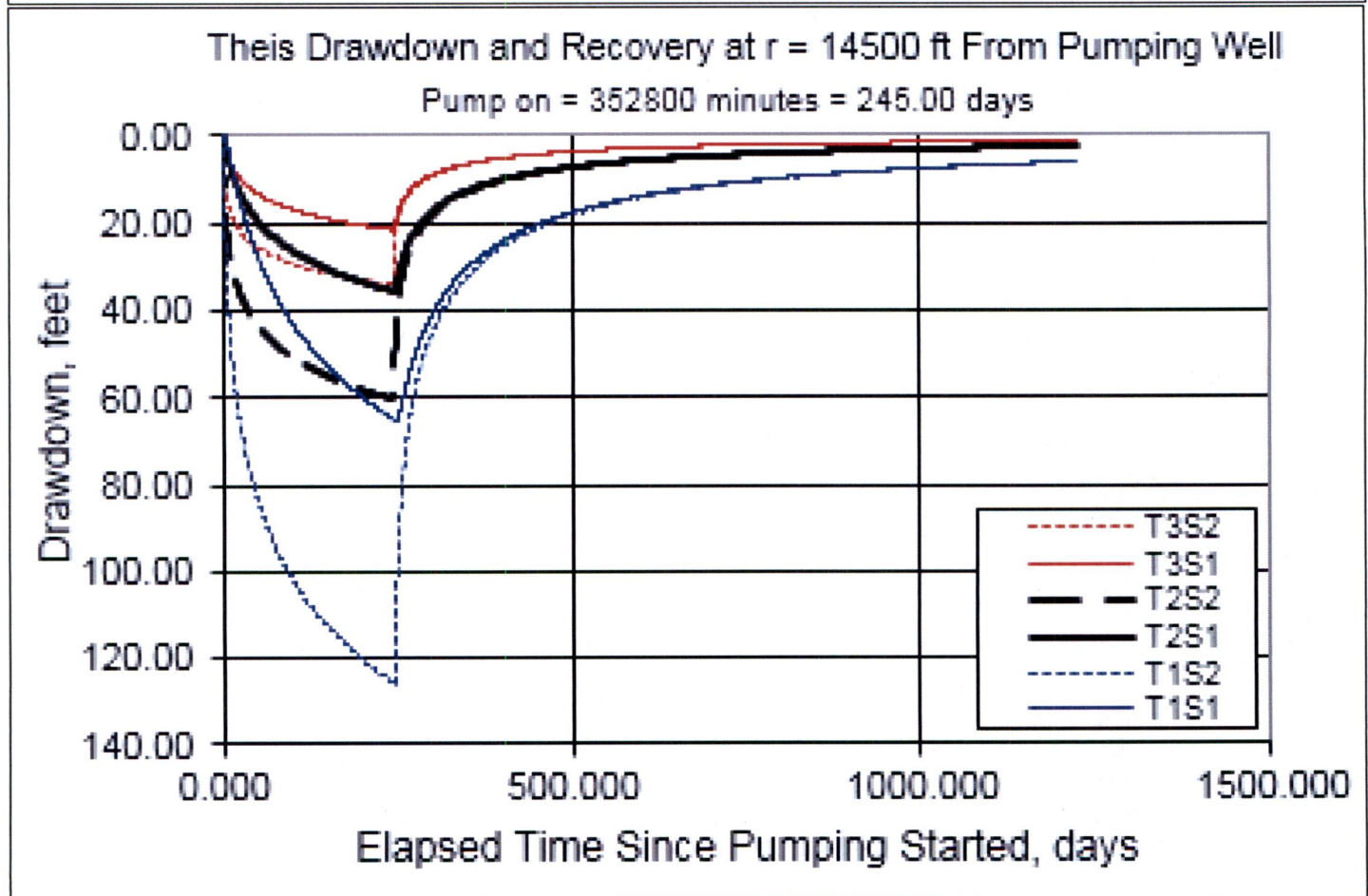
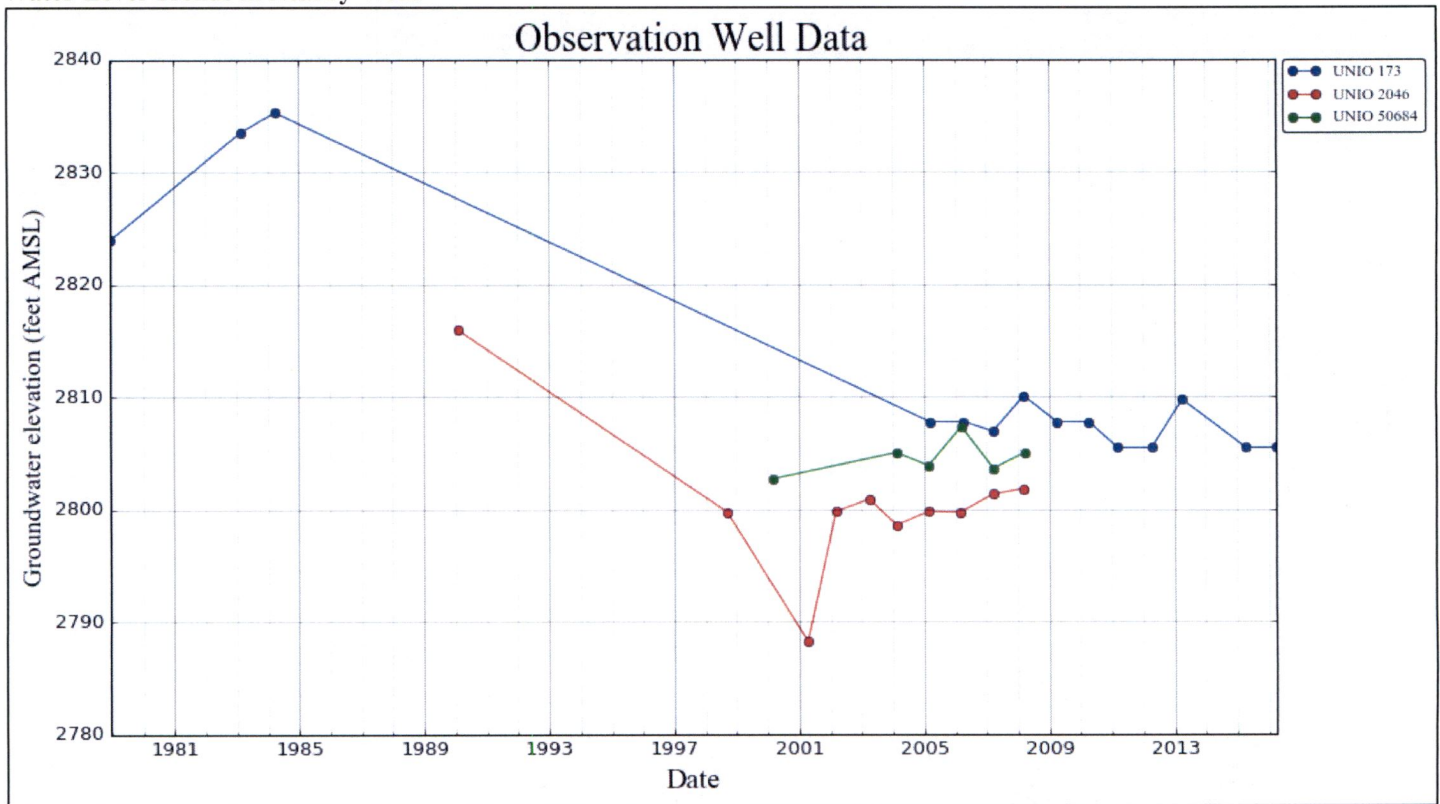
Water Availability Tables

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION						
Watershed ID #: 30810407		GRANDE RONDE R > SNAKE R - AB WILLOW CR			Exceedance Level: 80	
Time: 3:52 PM		Basin: GRANDE RONDE			Date: 02/11/2020	
Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirements	Net water Available
Monthly values are in cfs. Storage is the annual amount at 50% exceedance in ac-ft.						
JAN	138.00	17.70	120.00	23.70	0.00	96.60
FEB	246.00	21.70	224.00	62.30	0.00	162.00
MAR	431.00	23.50	408.00	118.00	0.00	290.00
APR	966.00	148.00	818.00	131.00	0.00	687.00
MAY	1,100.00	332.00	768.00	187.00	0.00	581.00
JUN	530.00	293.00	237.00	58.40	0.00	179.00
JUL	257.00	138.00	119.00	0.00	0.00	119.00
AUG	185.00	90.20	94.80	0.00	0.00	94.80
SEP	127.00	63.60	63.40	0.00	0.00	63.40
OCT	85.60	23.30	62.30	1.55	0.00	60.80
NOV	93.10	15.00	78.10	0.00	0.00	78.10
DEC	111.00	16.80	94.20	13.00	0.00	81.20
ANN	429,000	71,500	358,000	35,900	0	322,000

Well Location Map



Water-Level Trends in Nearby Wells



Expected drawdown (using T2 curves) at UNIO 173 is between roughly 34 and 59 feet after pumping UNIO 50684 for 214 days at a rate of 15.73 cfs, the combined rate of current authorizations and the proposed rate on this application.

MEMO



To: Kristopher Byrd, Well Construction and Compliance Section Manager
From: Joel Jeffery, Well Construction Program Coordinator
Subject: Review of Water Right Application G-18895
Date: March 3, 2020

The attached application was forwarded to the Well Construction and Compliance Section by Water Rights. Phil Marcy reviewed the application. Please see Phil's review and the Well Log.

Applicant's Well #1 (UNIO 50684): Based on a review of the Well Report, Applicant's Well #1 seems to protect the groundwater resource.

The construction of Applicant's Well #1 may not satisfy hydraulic connection issues.

4110
50684

APR 13 2000

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number _____
Name GREG BINGAMAN
Address 64088 MCDONALD LANE
City LAGRANDE State OR Zip 97850

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other AIR REVERSE

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well 3138 ft.
Explosives used Yes No Type _____ Amount _____

HOLE		SEAL			
Diameter	From To	Material	From To	Sacks or pounds	
2.3"	0 430	Concrete	0 197	2.25 SK	
1.9"	430 1872	Concrete	1772 1872	150 SK	

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material 5440^s
Gravel placed from 197 ft. to 1772 ft. Size of gravel 3/8

Casing/Liner	Diameter	From To	Gauge	Steel	Plastic	Welded	Threaded	Final location of shoe(s)	
								1772	2472
Casing	1.8"	42	8	375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	1.6"	8	430	375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	1.4"	430	1872	375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Liner	10.750	1772 2472	2.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	8 3/8	2417 3138	2.50	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

(7) PERFORATIONS/SCREENS:
 Perforations Method Factory
 Screens Type _____ Material STEEL

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
1772	1952	2.50	700	10.750	2.50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2352	2472	2.50	240	10.750	2.50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2417	2457	3/16	640	8 3/8	2.50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2587	2687	3/16	1600	8 3/8	2.50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2697	2767	3/16	1120	8 3/8	2.50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air PUMP Flowing Artesian
Yield gal/min 1700 Drawdown 36' Drill stem at 10.750-180' Time 7 hrs.

Temperature of water 10.1 Depth Artesian Flow Found 1916
Was a water analysis done? No Yes By whom _____
Did any strata contain water not suitable for intended use? No Too little.
 Salty Muddy Odor Colored Other _____
Depth of strata: ARTESIAN 12 POUNDS

(9) LOCATION OF WELL by legal description:
County UNION Latitude _____ Longitude _____
Township 2S ~~4~~ or S Range 38E E or ~~W~~-WM.
Section 12 SE 1/4 SW 1/4
Tax Lot 2301 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 64088 MCDONALD LANE

(10) STATIC WATER LEVEL:
Flowing ft. below land surface. Date 7-30-98
Artesian pressure 12 lb. per square inch. Date 3-6-2000

(11) WATER BEARING ZONES:
Depth at which water was first found 153

From	To	Estimated Flow Rate	SWL
154	171	100	22
325	334		
436	439		
542	544		
768	774		

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
TOPSOIL	0	1	
Amby clay TAN	1	108	22
clay green SOFT	108	112	
clay gray SOFT	112	137	
clay green & sand	137	141	
clay gray	141	142	
clay gray & sand coarse 1/2" V4	142	147	
clay gray & sand coarse	147	153	
sandstone & sand coarse 1/4	153	154	
gravel 1/4 - 1" & sand	154	171	water
clay gray SOFT	171	182	
clay Brown & gray	182	188	
Sand & sandstone grain & clay	188	202	
sandstone block	202	205	
clay gray & green SOFT sand	205	209	
claystone gray	209	214	
clay Brown & sand coarse	214	219	
clay TAN - SOFT	219	223	
clay & sand - green	223	237	
clay TAN - SOFT	237	241	

Date started 6-29-1998 Completed 3-6-2000

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 1399
Signed Walter Lowe Date 3-20-2000

RECEIVED

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UNIO
50684

APR 13 2000

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE		SEAL		Sacks or pounds
Diameter	From	Material	To	
12 1/4	1872	2472		
9 7/8	2472	3138		

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type 33B Material STEEL

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
9817	3138	5/16	5120	8 3/8	8.30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing Artesian
Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL
797	800		
862	867		
1001	1003		
1056	1058		
1062	1067		

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay green + gray dry	241	254	
clay gray SOFT	254	265	
clay green SOFT	265	320	
clay gray + green some dry	320	325	
sandstone + clay - green	325	334	water
clay green + gray - HARD	334	406	
gravel + sand + clay gray	406	410	
clay gray	410	436	
gravel sand + sand coarse	436	439	water
clay green SOFT	439	463	
claystone + clay green HARD	463	481	
clay gray SOFT	481	487	
clay + sand green SOFT	487	528	
clay Brown SOFT	528	542	
sand green FINE	542	544	water
clay green green SOFT	544	576	
clay green sandy SOFT	576	615	
Rock	615	616	
clay gray + green SOFT	616	712	
clay Brown + sandy SOFT	712	725	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 1399
Signed Wally Lowe Date _____

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50684

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____

Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump Yield gal/min	<input type="checkbox"/> Bailer Drawdowns	<input type="checkbox"/> Air Drill stem at	<input type="checkbox"/> Flowing Artesian Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL
1091	1093		
1222	1226		
1477	1479		
1540	1542		
1620	1623		

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay Brown's Red SOFT	725	729	
clay TAN SOFT + DRY	729	731	
clay Tan + gravel 1/8-1"	731	732	
clay green SOFT	732	739	
gravel + clay green	739	740	
clay Brown SOFT	740	768	
sand + gravel + clay green	768	774	water
clay green SOFT	774	797	
gravel 1/8-1"	797	800	water
clay Brown SOFT	800	827	
clay TAN SOFT	827	832	
clay gray + green SOFT	832	842	
clay green Hard + Dry	842	862	
sand coarse + gravel 1/8-1"	862	867	water
clay green + gray SOFT	867	898	
clay Tan + shale Hard	898	900	
clay gray + sandstone	900	918	
sandy clay - green	918	923	
clay gray + Brown Hard Dry	923	969	
sand + clay green + gravel small	969	971	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

Signed _____ Date _____ WWC Number _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

Signed Waldo Irvine WWC Number _____ Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT

APR 13 2000

WELL I.D. # L 40696
START CARD # 114141

(as required by ORS 537.765)

Instructions for completing this report are on the last page WATER RESOURCES DEPT.

SALEM, OREGON

(1) OWNER: _____ Well Number _____
 Name _____
 Address _____
 City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
 Special Construction approval Yes No Depth of Completed Well _____ ft.
 Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E
 Other _____
 Backfill placed from _____ ft. to _____ ft. Material _____
 Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Material			
				Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Bailor Air Flowing Artesian
 Yield gal/min _____ Drawdown _____ Drill stem at _____ Time _____ 1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
 Was a water analysis done? Yes By whom _____
 Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
 Depth of strata: _____

(9) LOCATION OF WELL by legal description:
 County _____ Latitude _____ Longitude _____
 Township _____ N or S Range _____ E or W. WM. _____
 Section _____ 1/4 _____ 1/4 _____
 Tax Lot _____ Lot _____ Block _____ Subdivision _____
 Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
 _____ ft. below land surface. Date _____
 Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
 Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL
1915	1918	Flowing 350 gpm	7
2412	2417	25 gpm	QUIET
2722	2730		QUIET
2839	2845	350 gpm	8

(12) WELL LOG:
 Ground Elevation _____

Material	From	To	SWL
clay green SOFT	971	973	
gravel + sand + clay - green	973	974	
clay green	974	983	
sand + clay green	983	985	
clay green SOFT	985	1001	
sand coarse	1001	1003	Water
clay green SOFT	1003	1006	
sand coarse	1006	1008	
clay green	1008	1022	
clay green + gravel 3/8-1/2	1022	1024	
clay green SOFT	1024	1032	
sand coarse	1032	1034	
clay green SOFT	1034	1048	
clay + sand Fine + green	1048	1056	
gravel 1/8-3/4	1056	1058	Water
clay green SOFT + wood	1058	1062	
gravel 1/8-1/2	1062	1067	Water
clay green	1067	1079	
sand coarse	1079	1081	
clay gray - green	1081	1091	

Date started _____ Completed _____
 (unbonded) Water Well Constructor Certification:
 I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
 WWC Number _____
 Signed _____ Date _____

(bonded) Water Well Constructor Certification:
 I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
 WWC Number _____
 Signed Walter Lome Date _____

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APR 13 2000

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WELL I.D. # 140696
START CARD # 114141

Instructions for completing this report are on the last page of this form. WATER RESOURCES DEPT. SALEM, OREGON

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Bailer Drawdown	Air Drill stem at	Flowing Artesian Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
sand coarse	1091	1093	Water
clay green hard	1093	1118	
clay Brown hard	1118	1126	
sand coarse green	1126	1131	
clay green	1131	1146	
clay gray hard	1146	1149	
clay Brown + claystone hard	1149	1152	
clay light green hard	1152	1198	
clay tan SOFT + sand coarse medium	1198	1222	
sand coarse green	1222	1226	Water
clay gray SOFT	1226	1229	
clay tan SOFT	1229	1245	
clay stone green	1245	1254	
clay gray + green + claystone	1254	1258	
clay Brown's sub SOFT + HARD	1258	1261	
clay green SOFT	1261	1273	
clay gray SOFT	1273	1292	
sand coarse green	1292	1293	
clay green	1293	1295	
clay Block hard	1295	1298	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____
Signed Wally Jones Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WELL I.D. # L 40696
START CARD # 114141

WATER RESOURCES DEPT.
SALEM, OREGON

Instructions for completing this report are on the last page.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Material	Tele/pipe size	Casing	Liner
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing
Yield gal/min	Drawdown	Drill stem at	Artesian

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay gray SOFT	1298	1323	
sand coarse	1323	1325	
clay green + dogstone	1325	1343	
sand FINE + clay green	1343	1345	
clay green Hard	1345	1375	
sand coarse	1375	1378	
clay green + dogstone	1378	1392	
clay gray SOFT	1392	1393	
clay Brown SOFT	1393	1403	
clay green sand + clay Red	1403	1405	
clay green SOFT	1405	1416	
clay green + sand coarse	1416	1421	
sand coarse + gravel small	1421	1423	
clay green SOFT	1423	1439	
clay sandy + SOFT	1439	1441	
sand coarse + clay green	1441	1444	
clay green + Brown SOFT	1444	1447	
clay gray + green Very SOFT	1447	1451	
clay sandy Red SOFT	1451	1453	
clay gray green SOFT	1453	1455	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____
Signed Walter Lowe Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT

(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696

START CARD # 114141

Instructions for completing this report are on the last page of this report.

(1) OWNER: Well Number _____
 Name _____
 Address _____
 City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
 Special Construction approval Yes No Depth of Completed Well _____ ft.
 Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E
 Other _____
 Backfill placed from _____ ft. to _____ ft. Material _____
 Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Casing/Liner	Diameter	From	To	Gauge	Material			
					Steel	Plastic	Welded	Threaded
Casing:					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing Artesian
Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
 Was a water analysis done? Yes By whom _____
 Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
 Depth of strata: _____

(9) LOCATION OF WELL by legal description:
 County _____ Latitude _____ Longitude _____
 Township _____ N or S Range _____ E or W. WM. _____
 Section _____ 1/4 _____ 1/4 _____
 Tax Lot _____ Lot _____ Block _____ Subdivision _____
 Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
 _____ ft. below land surface. Date _____
 Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
 Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
 Ground Elevation _____

Material	From	To	SWL
clay green SOFT	1455	1461	
clay green + claystone Hard	1461	1463	
clay green + gray SOFT	1463	1476	
clay gray green + sand course	1476	1477	
sand course + gravel 3/8"	1477	1479	Water
clay green SOFT	1479	1496	
clay green soft + claystone	1496		
Dark to sand course		1498	
clay gray SOFT	1498	1514	
clay green SOFT + sand course	1514	1518	
clay green SOFT	1518	1540	
sand course	1540	1549	Water
clay green SOFT	1549	1547	
clay tan SOFT	1547	1563	
clay green SOFT + sand course	1563	1567	
clay green SOFT	1567	1579	
clay green + shale green Dark	1579	1582	
clay green SOFT sand course	1582	1591	
sand course green	1591	1594	
clay green SOFT	1594	1609	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
 I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
 Signed _____ Date _____

(bonded) Water Well Constructor Certification:
 I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____
 Signed Walter Lorne Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL
Diameter From To Material From To Sacks or pounds

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Bailor Air Flowing
Yield gal/min Drawdown Drill stem at Time

Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM.
Section _____ 1/4 _____ 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay green + sand course	1609	1620	
sand course + gravel 1/2-3/8	1620	1623	water
clay green SOFT	1623	1627	
sand course green + clay green	1627	1629	
sand course + gravel 1/2-3/8	1629	1632	
clay + sand green	1632	1636	
sand course green	1636	1638	
clay + shale - green Dark	1638	1647	
clay gray + Black SOFT	1647	1649	
clay green SOFT	1649	1653	
clay gray SOFT	1653	1657	
clay green	1657	1660	
clay + shale - green + gray	1660	1661	
clay green SOFT	1661	1681	
clay green + shale green + Red	1681	1709	
shale green Dark + gravel 3/4	1709	1713	
clay green SOFT + gravel 3/4	1713	1716	
clay green SOFT	1716	1738	
clay green Dark	1738	1740	
sand course	1740	1743	

Date started _____ Completed _____
(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number _____
Signed Walter Lowe Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

APR 13 2000

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page WATER RESOURCES DEPT.
SALEM, OREGON

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing
Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay gray SOFT	1743	1746	
clay Brown SOFT DRY	1746	1751	
clay & shale Block	1751	1766	
clay Brown SOFT	1766	1771	
clay green SOFT	1771	1776	
clay Brown SOFT	1776	1779	
clay green SOFT	1779	1781	
clay Brown SOFT	1781	1784	
clay & shale Brown's green SOFT & HARD	1784	1786	
clay Brown	1786	1787	
clay Brown's green SOFT & HARD	1787	1788	
clay green & SOFT	1788	1791	
clay gray-green SOFT	1791	1793	
clay Brown SOFT	1793	1796	
clay gray SOFT	1796	1798	
clay Brown SOFT	1798	1805	
clay gray SOFT & HARD	1805	1808	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____
Signed Waldo Lorne Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

APR 13 2000

WELL I.D. # L 40696
START CARD # 114141

WATER RESOURCES DEPT.
SALEM, OREGON

Instructions for completing this report are on the last page of this report.

(1) OWNER: Well Number _____

Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E

Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Material			
				Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

Perforations		Method		Screens		Type		Material	
From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner		
						<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>		

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailor	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing
Yield gal/min	Drawdown	Drill stem at	Artesian Time

Temperature of water _____ Depth Artesian Flow Found _____

Was a water analysis done? Yes By whom _____

Did any strata contain water not suitable for intended use? Too little

Salty Muddy Odor Colored Other _____

Depth of strata: _____

(9) LOCATION OF WELL by legal description:

County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM.
Section _____ 1/4 _____ 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:

_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:

Ground Elevation _____

Material	From	To	SWL
clay gray & Brown + Black SOFT + Hard	1808	1810	
clay green SOFT	1810	1811	
clay gray	1811	1815	
clay gray green SOFT	1815	1817	
clay Brown	1817	1820	
clay green brown & claystone	1820	1823	
clay gray SOFT + claystone	1823		
Block		1829	
clay Brown SOFT + Hard	1829	1838	
clay gray Brown SOFT	1838	1849	
clay Brown & gray SOFT	1849	1852	
clay green SOFT	1852	1867	
Basalt Block + clay Blue gray	1867	1876	
cinder Block SOFT + clay Block	1876	1879	
gray clay green SOFT + Basalt Block	1879	1889	
clay red SOFT cinder Block	1889	1892	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____
Signed Waldo Lowe Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

APR 13 2000

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page. WATER RESOURCES DEPT.
SALEM, OREGON

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing Artesian
Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM.
Section _____ 1/4 _____ 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay Brown + cinder block	1892	1894	
clay block + 1/2" "	1894	1897	
clay block gray green + Brown SOFT cinder block	1897	1912	
Basalt block clay gray SOFT	1912	1914	
clay gray SOFT Basalt block	1914	1915	
Basalt block + clay + shale green	1915	1918	Flowing
Basalt block + clay gray SOFT	1918	1920	
clay gray SOFT + Basalt block	1920	1926	
clay block SOFT	1926	1929	
clay block cinder block	1929	1931	
Basalt block Yes. + shale green	1931	1934	
Basalt gray Hard shale green	1934	1937	
Basalt gray + clay gray-green	1937	1949	
clay gray + Basalt block	1949	1954	
Basalt gray	1954	1960	
Basalt gray clay gray + shale green	1960	1963	
Basalt gray clay gray SOFT	1963	1976	
clay gray green block SOFT + Basalt block + shale green	1976	1994	

Date started _____ Completed _____
(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 1399
Signed Waldo Lowe Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT

(as required by ORS 537.765)

WATER RESOURCES DEPT.

SALEM, OREGON

WELL I.D. # L 40694

START CARD # 117141

Instructions for completing this report are on the last page

(1) OWNER: Well Number _____

Name _____

Address _____

City _____ State _____ Zip _____

(2) TYPE OF WORK

New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:

Rotary Air Rotary Mud Cable Auger

Other _____

(4) PROPOSED USE:

Domestic Community Industrial Irrigation

Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:

Special Construction approval Yes No Depth of Completed Well _____ ft.

Explosives used Yes No Type _____ Amount _____

HOLE

SEAL

Diameter From To Material From To Sacks or pounds

Table with columns for Diameter, From, To, Material, From, To, Sacks or pounds. Multiple rows for hole and seal data.

How was seal placed: Method A B C D E

Other _____

Backfill placed from _____ ft. to _____ ft. Material _____

Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter From To Gauge Steel Plastic Welded Threaded

Casing: _____

Liner: _____

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

Perforations Method _____

Screens Type _____

From To Slot size Number Diameter Tele/pipe size Casing Liner

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Bailer Air Flowing

Yield gal/min Drawdown Drill stem at Time

_____ 1 hr.

Temperature of water _____ Depth Artesian Flow Found _____

Was a water analysis done? Yes By whom _____

Did any strata contain water not suitable for intended use? Too little

Salty Muddy Odor Colored Other _____

Depth of strata: _____

(9) LOCATION OF WELL by legal description:

County _____ Latitude _____ Longitude _____

Township _____ N or S Range _____ E or W. WM.

Section _____ 1/4 _____ 1/4

Tax Lot _____ Lot _____ Block _____ Subdivision _____

Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:

_____ ft. below land surface. Date _____

Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found _____

Table with columns: From, To, Estimated Flow Rate, SWL. Multiple rows for water bearing zones.

(12) WELL LOG:

Ground Elevation _____

Well log table with columns: Material, From, To, SWL. Contains handwritten entries for various geological layers.

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____

Signed _____ Date _____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____

Signed *Walter Linn* Date _____

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APR 13 2000

STATE OF OREGON WATER SUPPLY WELL REPORT

WELL I.D. # L 40696 START CARD # 114141

WATER RESOURCES DEPT. SALEM, OREGON

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number Name Address City State Zip

(2) TYPE OF WORK: New Well, Deepening, Alteration, Abandonment

(3) DRILL METHOD: Rotary Air, Rotary Mud, Cable, Auger, Other

(4) PROPOSED USE: Domestic, Community, Industrial, Irrigation, Thermal, Injection, Livestock, Other

(5) BORE HOLE CONSTRUCTION: Special Construction approval, Explosives used, Depth of Completed Well

Table with columns: HOLE Diameter, SEAL From, To, Material, From, To, Sacks or pounds

How was seal placed: Method A, B, C, D, E, Other, Backfill placed from, Gravel placed from

(6) CASING/LINER: Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded

(7) PERFORATIONS/SCREENS: Table with columns: From, To, Slot size, Number, Diameter, Tele/pipe size, Casing, Liner

(8) WELL TESTS: Minimum testing time is 1 hour. Pump, Bailer, Air, Flowing Artesian. Yield, Drawdown, Drill stem at, Time

Temperature of water, Depth Artesian Flow Found, Was a water analysis done?, Did any strata contain water not suitable for intended use?, Depth of strata

(9) LOCATION OF WELL by legal description: County, Latitude, Longitude, Township, N or S Range, E or W. WM, Section, 1/4, 1/4, Tax Lot, Lot, Block, Subdivision, Street Address of Well

(10) STATIC WATER LEVEL: ft. below land surface, Date, Artesian pressure, lb. per square inch, Date

(11) WATER BEARING ZONES: Table with columns: From, To, Estimated Flow Rate, SWL

(12) WELL LOG: Ground Elevation

Well Log Table with columns: Material, From, To, SWL. Includes entries like Basalt gray-brown + shale green, Basalt gray shale green, Limer Red + clay Red SOFT, etc.

Date started, Completed, (unbonded) Water Well Constructor Certification, I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards.

(bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards.

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 119141

Instructions for completing this report are on the last page.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL
Diameter From To Material From To Sacks or pounds

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing Artesian
Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
clay TAN SOFT	2428	2451	
clay green + gray + DRY+HARD	2451	2454	
clay green + gray + Basalt Block Rec	2454	2456	
clay TAN SOFT	2456	2457	
shale green + Basalt Block Rec.	2457	2461	
clay tan Brown SOFT	2461	2464	
Basalt Block Rec. shale green	2464	2472	
Basalt Block Rec. clay green	2472	2509	
Basalt Block clay tan shale green	2509	2511	
clay Red + clay Brown + Red shale green	2511	2516	
Basalt Block clay gray green	2516	2525	
Basalt Brown SOFT	2525	2527	
clay Red shale green gray	2527	2529	
Basalt Brown + shale "	2529	2581	
Basalt Block + shale green gray + quality	2581	2584	
Basalt Brown + clay green SOFT	2584	2587	
Basalt Block + clay green HARD	2587	2590	
clay, Brown + Red + shale green	2590	2593	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number _____
Signed Walter Lorne Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page or call for it.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL
Diameter From To Material From To Sacks or pounds

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tube/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Drawdown	Air Drill stem at	Flowing Artesian Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Basalt Brown shale green	2593	2596	
Basalt Brown shale green quartz	2596		
White + cinder Red clay red		2597	
Basalt Brown SOFT	2597	2600	
Basalt Black shale green - quartz	2600	2603	
Basalt Brown " " " "	2603	2605	
Basalt Black shale green	2605	2612	
Basalt gray's red shale green	2612	2629	
Basalt gray Brown quartz white	2629	2632	
Basalt Red shale green	2632	2637	
Basalt Black quartz wash hole	2637	2645	
Basalt gray shale green + quartz	2645	2652	
Basalt Brown shale green	2652	2657	
Basalt Black var. shale green	2657	2663	
Basalt gray + Black shale green	2663		
clay gray		2667	
shale green Basalt Black	2667	2683	
Basalt Black shale green	2683		
clay gray SOFT		2689	
shale green Basalt Black	2689	2690	

Date started _____ Completed _____
(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number _____
Signed Waldo Jones Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE SEAL
Diameter From To Material From To Sacks or pounds

Diameter	From	To	Material	From	To	Sacks or pounds

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Bailor Air Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Shale gray + Brown Hard + clay gray SOFT	2690	2705	
Basalt Black cavity in	2705	2711	
shale Brown + clay Brown	2711	2714	
shale Brown + green Hard	2714	2718	
shale green + Brown + gray	2718	2720	
shale " " Basalt Black	2720	2722	
Basalt Black	2722	2730	water
Basalt gray quartz white	2730	2761	
Basalt gray clay crush gray	2761	2778	
Basalt Black " " "	2778	2779	
Basalt Black shale green in Re	2779	2782	
shale Brown HARD	2782	2784	
Basalt Black + shale gray	2784	2791	
Basalt gray shale gray	2791	2799	
shale Brown + Basalt Black	2799	2801	
limestone Black shale green	2801	2816	
Basalt Black + shale gray + green	2816	2826	
limestone Black + red shale green	2826	2829	
" " " shale Brown + green	2829	2835	

Date started _____ Completed _____
(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 1397
Signed Walter Lorne Date _____

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APR 13 2000

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
OREGON

WELL I.D. # L 40696
START CARD # 114141

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number _____
Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE		SEAL		Material	Sacks or pounds	
Diameter	From To	From To				

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Material	Tele./pipe size	Casing	Liner
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Basalt Block shale green	2833	2839	
Basalt Block	2839	2845	350 GPM
Basalt gray shale green	2845	2863	
Basalt Block + quartz	2863	2870	
Basalt gray + shale green	2870	2872	
Basalt Block + shale green	2872	2879	
Basalt gray + shale green	2879	2881	
Basalt Block " "	2881	2914	
Basalt Block + cinder Red	2914	2922	
Basalt gray + shale green	2922	2924	
Basalt Block shale green	2924	2939	
Basalt gray + shale green + gray	2939	2943	
Basalt Block " " "	2943	2954	
Basalt gray + shale green	2954	2958	
Basalt Block + " "	2958	2962	
Basalt gray + shale green	2962	2970	
Basalt Brown + Block shale green	2970	2973	
Basalt gray + shale green	2973	2976	
Basalt Block	2976	2982	
Basalt gray + Block quartz	2982	2986	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 1399
Signed Wally Lane Date _____

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT.
OREGON

WELL I.D. # L 40696
START CARD # 214191

Instructions for completing this report are on the last page of this form.

(1) OWNER: _____ Well Number _____

Name _____
Address _____
City _____ State _____ Zip _____

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____

Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Material	Tele/pipe size	Casing	Liner
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

<input type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	<input type="checkbox"/> Flowing Artesian
Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County _____ Latitude _____ Longitude _____
Township _____ N or S Range _____ E or W. WM. _____
Section _____ 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Basalt block + gray	2986	2988	
Basalt gray	2988	2991	
Basalt block cinder Red shale	2991	2997	
Basalt gray + shale Brown	2997	3009	
Basalt gray shale green	3009	3023	
Basalt block quartz white	3023	3027	
Basalt block cinder red	3027	3035	
Basalt gray quartz shale gray	3035	3041	
Basalt block + shale green	3041	3043	
Basalt gray + shale gray quartz	3043	3054	
Basalt gray shale green	3054	3078	
Basalt block quartz white	3078	3081	
Basalt gray shale green + cinder	3081		
cinder's red + block		3099	
Basalt block + quartz white	3099		
		8106	
Basalt gray + shale green + gray	3106	3109	
Basalt block + clay block	3109	3111	
shale green + cinder red	3111	3114	
Basalt block via shale green	3114	3124	

Date started _____ Completed _____

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 1399
Signed Wally Jones Date _____

