

# CLAIM OF BENEFICIAL USE

## for Permits claiming more than 0.1 cfs and All Transfers



**Oregon Water Resources Department**  
725 Summer Street NE, Suite A  
Salem, Oregon 97301-1266  
(503) 986-0900  
[www.wrd.state.or.us](http://www.wrd.state.or.us)

**A fee of \$150 must accompany this form to be accepted for permits  
with a priority date of July 9, 1987, or later. (ORS 536.050(1))**

**A separate form shall be completed for each permit.**

*In cases where a permit has been amended through the permit amendment process, a separate claim for the permit amendment is not required. Incorporate the permit amendment into the claim for the permit.*

This form is subject to revision. **Begin each new claim** by checking for a new version of this form at:  
[http://www.wrd.state.or.us/OWRD/WR/cwre\\_info.shtml#](http://www.wrd.state.or.us/OWRD/WR/cwre_info.shtml#).

The completion of this form is required by OAR 690-014-0100(1) and 690-014-0110(4).

Please type or print in dark ink. If this form is found to contain errors or omissions, it may be returned to you. **Every item must have a response.** If any requested information does not apply to the claim, insert "NA." **Do not delete or alter any section of this form unless directed by the form.** The Department may require the submittal of additional information from any water user or authorized agent.

If you have questions regarding the completion of this form, please call 503-986-0900 and ask for the Certificate Section.

The Department has a program that allows it to enter into a voluntary agreement with an applicant for expedited services. Under such an agreement, the applicant pays the cost to hire additional staff that would not otherwise be available. This program means a certificate may be issued in about a month. For more information on this program see [http://www.wrd.state.or.us/OWRD/mgmt\\_reimbursement\\_authority.shtml](http://www.wrd.state.or.us/OWRD/mgmt_reimbursement_authority.shtml).

### SECTION 1 GENERAL INFORMATION

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**1. File Information**

APPLICATION # (G, R, S OR T) <b>T-10929</b>	PERMIT # (IF APPLICABLE)	PERMIT AMENDMENT # (IF APPLICABLE)
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**2. Property Owner (current owner information)**

APPLICANT/BUSINESS NAME <b>Cline Butte Utility Company</b>		PHONE NO. <b>(541) 504-2305</b>	ADDITIONAL CONTACT NO. <b>(541) 604-0043</b>
ADDRESS <b>1230 Golden Pheasant</b>			
CITY <b>Redmond</b>	STATE <b>OR</b>	ZIP <b>97756</b>	E-MAIL <b><u>Alan@JELD-WENCommunities.com</u></b> <b><u>bobm@jeld-wencommunities.com</u></b>

If the current property owner is not the permit or transfer holder of record, it is recommended that an assignment be filed with the Department. **The COBU must be signed by the permit or transfer holder of record.**

3. Is the Property Owner the permit or transfer holder of record?

YES

If "YES" the remainder of this item may be deleted.

4. Date of Site Inspection: **4/29/2009 and 5/12/2009, 5/24/2006, and June 2004 (Tom Walker)**

5. Person(s) interviewed and description of their association with the project:

NAME	DATE	ASSOCIATION WITH THE PROJECT
<b>Rick Smith</b>	<b>04/29/2009</b>	<b>Golf Course Superintendant</b>
<b>Bob McDaniel</b>	<b>05/12/2009</b>	<b>Manager of Cline Butte Utility Co.</b>
<b>Ric Kuss (by Tom Walker)</b>	<b>05/24/2006</b>	<b>Former Manager of Cline Butte Utility Co.</b>

6. County: **Deschutes**

7. If any property described in the place of use of the permit or transfer final order is excluded from this report, identify the owner of record for that property (ORS 537.230(4)):

\*\*Mark "NA" if there are no owners of property not included in this claim

OWNER OF RECORD		
N/A		
ADDRESS		
CITY	STATE	ZIP

Are there additional Owners of Record?

**YES – NOT LISTED DUE TO SEVERAL HUNDRED LOT OWNERS SERVED BY CLINE BUTTE UTILITY COMPANY ON THIS QUASI-MUNICIPAL WATER RIGHT.**

If "NO" the following box may be deleted.

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## SECTION 2

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### SYSTEM DESCRIPTION

#### A. Points of Diversion/Appropriation

1. Point of diversion/appropriation name or number:

POINT OF DIVERSION/APPROPRIATION (POD/POA) NAME OR NUMBER (CORRESPOND TO MAP)	WELL LOG ID # FOR ALL WORK PERFORMED ON THE WELL (IF APPLICABLE)	WELL TAG # (IF APPLICABLE)
<b>Well 6</b>	<b>DESC 1198</b>	
<b>Well 7</b>	<b>DESC 1083</b>	
<b>Well 8</b>	<b>DESC 51680</b>	
<b>Well 9</b>	<b>DESC 54485</b>	<b>L 50204</b>

Attach each well log available for the well (include the log for the original well and any subsequent alterations, reconstructions, or deepenings)

2. Point of diversion/appropriation source and, if from surface water, the tributary:

POD/POA NAME OR NUMBER	SOURCE	TRIBUTARY
<b>Well 6</b>	<b>WELL IN DESCHUTES RIVER BASIN</b>	<b>N/A</b>
<b>Well 7</b>	<b>WELL IN DESCHUTES RIVER BASIN</b>	<b>N/A</b>
<b>Well 8</b>	<b>WELL IN DESCHUTES RIVER BASIN</b>	<b>N/A</b>
<b>Well 9</b>	<b>WELL IN DESCHUTES RIVER BASIN</b>	<b>N/A</b>

3. Developed use(s), period of use, and rate for each use:

POD/POA NAME OR NUMBER	USES	IF IRRIGATION, LIST CROP TYPE	SEASON OR MONTHS WHEN WATER WAS USED	RATE OR VOLUME FOR USE (CFS, GPM, OR AF)
Well 6	Quasi-Municipal	N/A	Year-round	3.0 CFS
Well 7	Quasi-Municipal	N/A	Year-round	
Well 8	Quasi-Municipal	N/A	Year-round	
Well 9	Quasi-Municipal	N/A	Year-round	
Total Quantity of Water Used				3.0 CFS

4. Provide a general narrative description of the distribution works. This description must trace the water system from each point of diversion or appropriation to the place of use:

**DOMESTIC SYSTEM:**

The extensive underground domestic distribution system serving Eagle Crest III is also interconnected and directly serves the Eagle Crest II area of development. Eagle Crest II and portions of Eagle Crest III are located within the same pressure level and water flows to the points of demand throughout the water distribution system, throughout Eagle Crest II and Eagle Crest III.

A domestic water storage reservoir is located on a high point of land adjacent to the Eagle Crest II and Eagle Crest III expansion areas. The storage reservoir "floats" on the system and effectively serves the Eagle Crest II and Eagle Crest III water distribution systems.

Multiple wells contribute to the Eagle Crest II and Eagle Crest III water distribution system and the common storage reservoir. Three wells (wells #6, #7, #8) are located within the Eagle Crest II expansion area of the resort. The water diversions from the Eagle Crest II wells are commingled with the diversion from well #9, located in Eagle Crest III.

In summary, multiple wells contribute to an interconnected extensive water distribution system that effectively serves all of the demands and uses within Eagle Crest II and Eagle Crest III.

The extensive water distribution system at the Eagle Crest resort is also interconnected to the original Eagle Crest I development area. The Eagle Crest I area, however, primarily receives its water supply from additional water rights and wells located within the Eagle Crest I area. The piping connection between Eagle Crest II/Eagle Crest III and the original Eagle Crest I area is primarily for emergency purposes. Water is not contributed on a regular basis to the Eagle Crest I area, but some contribution is seen annually.

**IRRIGATION SYSTEM:**

Wells 6, 7, and 8 have the capacity to pump into the golf course irrigation system and are authorized under Permit G-11313 as well as T-10929/Certificate 85471.

Wells 6 & 7 pump south into a lake. A Flowtronex brand irrigation pump station (Ridge Pump Station) in separate housing pumps out of lake into 16" main that then splits into 4", 6", 8", 10" and 12" looped mains that distribute water to the Ridge Golf Course. The water is delivered to the sprinklers via 2" and smaller PVC laterals. The water is applied to the golf course with Rainbird and Hunter sprinklers.

Well 8 pumps south into an irrigation lake by way of an 8" ductile iron discharge line. Water is then pumped out of the lake through a 24" PVC pipe by a Flowtronex brand pump station (Challenge Pump Station) that is housed in the same pumphouse as well 8. Water is distributed to the Challenge Golf Course by way of 10", 8", and 6" irrigation mains. The water is delivered to the sprinklers via 2" and smaller PVC laterals. The water is applied to the golf course with Toro sprinklers.

**SECTION 2**

**SYSTEM DESCRIPTION (B through H)**

Are there multiple PODs or POAs?

**YES**

If "YES" you will need to copy and complete Sections 2B through 2H for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

**Well 6**

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CLERK

**B. Place of Use**

1. Is the right for municipal use?

**NO**

If "YES" the table below may be deleted.

TWP	RNG	MER	SEC	Q-Q	GLot	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
15 S	12 E	W.M.	13	SW SW					
15 S	12 E	W.M.	14	NE NW					
15 S	12 E	W.M.	14	NW NW					
15 S	12 E	W.M.	14	SW NW					
15 S	12 E	W.M.	14	SE NW					
15 S	12 E	W.M.	14	NE SW					
15 S	12 E	W.M.	14	NW SW					
15 S	12 E	W.M.	14	SW SW					
15 S	12 E	W.M.	14	SE SW					
15 S	12 E	W.M.	14	NE SE					
15 S	12 E	W.M.	14	NW SE					
15 S	12 E	W.M.	14	SW SE					
15 S	12 E	W.M.	14	SE SE					
15 S	12 E	W.M.	15	SW NE					
15 S	12 E	W.M.	15	SE NE					
15 S	12 E	W.M.	15	NE SE					
15 S	12 E	W.M.	15	NW SE					
15 S	12 E	W.M.	15	SW SE					
15 S	12 E	W.M.	15	SE SE					
15 S	12 E	W.M.	22	NE NE					
15 S	12 E	W.M.	22	NW NE					
15 S	12 E	W.M.	22	SE NE					
15 S	12 E	W.M.	23	NE NE					
15 S	12 E	W.M.	23	NW NE					
15 S	12 E	W.M.	23	SW NE					
15 S	12 E	W.M.	23	SE SE					
15 S	12 E	W.M.	23	SW SW					
15 S	12 E	W.M.	23	NE NW					
15 S	12 E	W.M.	23	NW NW					
15 S	12 E	W.M.	23	SW NW					
15 S	12 E	W.M.	23	NE SE					
15 S	12 E	W.M.	23	NW SE					
15 S	12 E	W.M.	24	NW NW					
15 S	12 E	W.M.	24	SW NW					
15 S	12 E	W.M.	24	NW SW					
15 S	12 E	W.M.	24	SW SW					
<b>Total Acres Irrigated</b>								N/A QUASI-MUNICIPAL	

Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (Gov Lot), Quarter-Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, Gov Lot, and QQ.

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**C. Diversion and Delivery System Information**

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used?

YES

If "NO" items 2 through item 6 may be deleted.

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Goulds	12RJHC	14192 (difficult to read)	Turbine	N/A Turbine	10"

3. Motor Information

MANUFACTURER	HORSEPOWER
US Electrical Motors	250 HP

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *If a well, the water level during pumping	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
250 HP	N/A	523'	0'	1477 gpm (3.291 cfs)

5. Provide pump calculations:

Guess Q to solve for headloss, then solve for Q. Iterate headloss and flow until they converge.

Well #6:

$$H_f = \frac{10.44 * L * Q^{1.85}}{C^{1.85} d^{4.87}} = 1.1 * \left( \frac{10.44 * 523 * 1477^{1.85}}{100^{1.85} 10^{4.87}} + \frac{10.44 * 16.5 * 1477^{1.85}}{100^{1.85} 8^{4.87}} \right) = 1.1 * (10.7 + 1.00) \text{ ft} = 12.9 \text{ ft}$$

Note: Due to significant valving and tees, adding 10% onto friction loss for minor loss

$$\frac{0.8 \times 250 \text{HP} \times 550}{62.4 \times (523' + 0 + 12.9)} = 3.29 \text{ cfs} = 1477 \text{ gpm}$$

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
1270 gpm			1210-1270 gpm (2.696-2.830 cfs)

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped?

YES

If "NO" items 8 through item 11 may be deleted.

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8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
<b>Eagle Crest I</b>			
3"	1,600 LF	PVC	Buried
6"	1,300 LF	PVC	Buried
8"	20,100 LF	PVC	Buried
10"	10,600 LF	PVC	Buried
Unknown size	2800 LF	PVC	Buried
<b>Eagle Crest II</b>			
2" to 4"	700 LF	PVC	Buried
6"	2,200 LF	PVC	Buried
8"	31,600 LF	PVC	Buried
10"	14,900 LF	PVC	Buried
12"	7,400 LF	PVC	Buried
<b>Eagle Crest III</b>			
Not included in area of use			
<b>Irrigation System (operates off Ridge and Challenge Pump Stations)</b>			
2-1/2" to 12"	+/- 43,600 LF	PVC	Buried

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
<b>Domestic System is unknown</b>			
<b>Irrigation</b>			
1" to 2"	+/- 138,400 LF	PVC	Buried

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
<b>Domestic System is unknown.</b>					
<b>Irrigation</b>					
N/A	90 psi	34 gpm	N/A	45	1500 gpm
N/A	98 psi	32-34 gpm	N/A	N/A	2000 gpm
N/A	98 psi	34 gpm	N/A	N/A	2000 gpm
N/A	98 psi	43 gpm	N/A	N/A	2000 gpm
N/A	98 psi	0.5 to 14.1 gpm	N/A	N/A	2000 gpm

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

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12. Additional notes or comments related to the system:

**For irrigation system:**

**Challenge Course - Challenge Irrigation pump station operates at 1500 gpm from Lake #2.**

**Ridge Course - 32-64 assorted heads a hole are used at any given time. The Ridge Irrigation pump station operates at 2000 gpm from Lake #1. Maximum number of each of the different head used at any one time would be difficult to ascertain.**

**D. Groundwater Source Information (Well and Sump)**

1. Is the appropriation from ground water (well or sump)? YES

*If "NO", items 2 through 8 relating to this section may be deleted.*

2. Describe the access port (type and location) or other means to measure the water level in the well:

**Airline. Line will not hold any pressure, which suggests a leak in airline. We consider Well 7 static water level applicable to well 6 due to close proximity of wells (approx. 30')**

3. If well logs are not available, provide as much of the following information as possible:

CASING DIAMETER	CASING DEPTH	TOTAL DEPTH	COMPLETION DATE OF ORIGINAL WELL	COMPLETION DATES OF ALTERATIONS	WHO THE WELL WAS DRILLED FOR	WELL DRILLED BY
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**See attached well log DESC 1198**

4. In addition to the information requested in item "3" above, provide any other information which may help the Department locate any well logs associated with this appropriation.

**Well log provided.**

5. Is the appropriation from a dug well (sump)? NO

*If "NO", items 6 through 8 relating to this section may be deleted.*

**E. Storage**

1. Does the distribution system include in-system storage (i.e. storage tank, bulge in system / reservoir) YES

*If "NO", item 2 and 3 relating to this section may be deleted.*

If "YES" is it a: RECEIVED

Storage Tank AUG 2 - 2010 YES

Bulge in System / Reservoir YES

*Complete appropriate table(s) below, unused table may be deleted.*

2. Storage Tank:

MATERIAL (CONCRETE, FIBERGLASS, METAL, ETC.)	CAPACITY (IN GALLONS)	ABOVE GROUND OR BURIED
Concrete	300,000 Gallons	Above

3. Bulge in System / Reservoir:

RESERVOIR NAME OR NUMBER (CORRESPOND TO MAP)	APPROXIMATE DAM HEIGHT	APPROXIMATE CAPACITY (IN ACRE FEET)
Golf Irrigation Lake #1	No dam, pond excavated	1.52 ACRE FEET



Golf Irrigation Lake #2	No dam, pond excavated	1.92 ACRE FEET
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**F. Gravity Flow Pipe**

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe?

NO

*If "NO", items 2 through 4 relating to this section may be deleted.*

**G. Gravity Flow Canal or Ditch**

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system?

NO

*If "NO", items 2 through 4 relating to this section may be deleted.*

**H. Reservoir**

1. Does the claim involve a reservoir modified through a transfer?

NO

**Reminder: This section should only be completed if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs.**

*If "NO", items 2 through 9 relating to this section may be deleted.*

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**SECTION 2**

**SYSTEM DESCRIPTION (B through H)**

Are there multiple PODs or POAs?

**YES**

If "YES" you will need to copy and complete Sections 2B through 2H for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

**Well 7**

**B. Place of Use**

1. Is the right for municipal use?

**NO**

If "YES" the table below may be deleted.

TWP	RNG	MER	SEC	Q-Q	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
See Place of Use for Well 6									

**See Place of Use for Well 6**

**Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (Gov Lot), Quarter-Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, Gov Lot, and QQ.**

**C. Diversion and Delivery System Information**

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used?

**YES**

If "NO" items 2 through item 6 may be deleted.

**2. Pump Information**

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Berkley	6TP175	N/A	Submersible	N/A	3"

**3. Motor Information**

MANUFACTURER	HORSEPOWER
Franklin	50 HP

**4. Theoretical Pump Capacity**

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
50 HP	N/A	523'	0'	241 gpm (0.537 cfs)

**5. Provide pump calculations:**

**Well #7:**

$$H_1 = \frac{10.44 * L * Q^{1.85}}{C^{1.85} d^{4.87}} = \frac{10.44 * 523 * 241^{1.85}}{100^{1.85} 3^{4.87}} + \frac{10.44 * 18.5 * 241^{1.85}}{100^{1.85} 4^{4.87}} = 132 + 1.15 = 133 \text{ ft}$$

$$\frac{0.8 \times 50\text{HP} \times 550}{62.4 \times (523' - 3.4' + 133)} = 0.537 \text{ cfs} = \mathbf{241 \text{ gpm}}$$

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
Not running during visit			250-260 gpm (0.557-0.579 cfs)

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? YES

If "NO" items 8 through item 11 may be deleted.

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See mainline information section for Well 6			

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See lateral information section for Well 6			

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
See sprinkler information for Well 6					

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

See additional notes section for Well 6

**D. Groundwater Source Information (Well and Sump)**

1. Is the appropriation from ground water (well or sump)? YES

If "NO", items 2 through 8 relating to this section may be deleted.

2. Describe the access port (type and location) or other means to measure the water level in the well:

Airline installed at 567' with direct static water level reading gauge.

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3. If well logs are not available, provide as much of the following information as possible:

CASING DIAMETER	CASING DEPTH	TOTAL DEPTH	COMPLETION DATE OF ORIGINAL WELL	COMPLETION DATES OF ALTERATIONS	WHO THE WELL WAS DRILLED FOR	WELL DRILLED BY
See attached well log DESC 1083						

4. In addition to the information requested in item "3" above, provide any other information which may help the Department locate any well logs associated with this appropriation.

Well log provided

5. Is the appropriation from a dug well (sump)? NO

If "NO", items 6 through 8 relating to this section may be deleted.

**E. Storage**

1. Does the distribution system include in-system storage (i.e. storage tank, bulge in system / reservoir) YES

If "NO", item 2 and 3 relating to this section may be deleted.

If "YES" is it a: YES  
 Storage Tank YES  
 Bulge in System / Reservoir YES

Complete appropriate table(s) below, unused table may be deleted.

2. Storage Tank:

MATERIAL (CONCRETE, FIBERGLASS, METAL, ETC.)	CAPACITY (IN GALLONS)	ABOVE GROUND OR BURIED
See storage tank section for Well 6		

3. Bulge in System / Reservoir:

RESERVOIR NAME OR NUMBER (CORRESPOND TO MAP)	APPROXIMATE DAM HEIGHT	APPROXIMATE CAPACITY (IN ACRE FEET)
See bulge in system section for Well 6		

**F. Gravity Flow Pipe**

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? NO

If "NO", items 2 through 4 relating to this section may be deleted.

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**G. Gravity Flow Canal or Ditch**

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? NO

If "NO", items 2 through 4 relating to this section may be deleted.

**H. Reservoir**

1. Does the claim involve a reservoir modified through a transfer? NO

Reminder: This section should only be completed if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs.

If "NO", items 2 through 9 relating to this section may be deleted.

## SECTION 2

### SYSTEM DESCRIPTION (B through H)

Are there multiple PODs or POAs?

**YES**

If "YES" you will need to copy and complete Sections 2B through 2H for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

Well 8

#### B. Place of Use

1. Is the right for municipal use?

**NO**

*If "YES" the table below may be deleted.*

TWP	RNG	MER	SEC	Q-Q	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
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See Place of Use for Well 6

**Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (Gov Lot), Quarter-Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, Gov Lot, and QQ.**

#### C. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used?

**YES**

*If "NO" items 2 through item 6 may be deleted.*

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
American Turbine	12-H-120	N/A	Turbine	N/A Turbine	10"

3. Motor Information

MANUFACTURER	HORSEPOWER
US Electrical Motors	250 HP

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
250 HP	N/A	363'	0'	2078 gpm (4.630 cfs)

5. Provide pump calculations:

**Well #8:**

$$H_1 = \frac{10.44 * L * Q^{1.85}}{C^{1.85} d^{4.87}} = 1.1 * \left( \frac{10.44 * 363 * 2078^{1.85}}{100^{1.85} 10^{4.87}} + \frac{10.44 * 19 * 2078^{1.85}}{100^{1.85} 8^{4.87}} \right) = 1.1 * (14.0 + 2.17) \text{ ft} = 17.8 \text{ ft}$$

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$$\frac{0.8 \times 250\text{HP} \times 550}{62.4 \times (363' + 17.8)} = 4.63 \text{ cfs} = 2078 \text{ gpm}$$

**6. Measured Pump Capacity (using meter if meter was present and system was operating)**

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
Not running during visit			1760 gpm (3.922 cfs)

**Reminder: For pump calculations use the reference information at the end of this document.**

7. Is the distribution system piped? YES

*If "NO" items 8 through item 11 may be deleted.*

**8. Mainline Information**

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
<b>See mainline information section for Well 6</b>			

**9. Lateral or Handline Information**

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
<b>See lateral information section for Well 6</b>			

**10. Sprinkler Information**

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
<b>See sprinkler information for Well 6</b>					

**Reminder: For sprinkler output determination use the reference information at the end of this document.**

**11. Pivot Information**

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

**12. Additional notes or comments related to the system:**

**See additional notes section for Well 6**

**D. Groundwater Source Information (Well and Sump)**

1. Is the appropriation from ground water (well or sump)? YES

*If "NO", items 2 through 8 relating to this section may be deleted.*

2. Describe the access port (type and location) or other means to measure the water level in the well:

**Well #8: Airline with direct static water level reading gauge.**

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3. If well logs are not available, provide as much of the following information as possible:

CASING DIAMETER	CASING DEPTH	TOTAL DEPTH	COMPLETION DATE OF ORIGINAL WELL	COMPLETION DATES OF ALTERATIONS	WHO THE WELL WAS DRILLED FOR	WELL DRILLED BY
-----------------	--------------	-------------	----------------------------------	---------------------------------	------------------------------	-----------------

See attached well log DESC 51680

4. In addition to the information requested in item "3" above, provide any other information which may help the Department locate any well logs associated with this appropriation.

Well log provided

5. Is the appropriation from a dug well (sump)? NO

If "NO", items 6 through 8 relating to this section may be deleted.

Reminder: Construction standards for sumps can be found in OAR 690-210-0400.

**E. Storage**

1. Does the distribution system include in-system storage (i.e. storage tank, bulge in system / reservoir) YES

If "NO", item 2 and 3 relating to this section may be deleted.

If "YES" is it a: Storage Tank YES

Bulge in System / Reservoir YES

Complete appropriate table(s) below, unused table may be deleted.

2. Storage Tank:

MATERIAL (CONCRETE, FIBERGLASS, METAL, ETC.)	CAPACITY (IN GALLONS)	ABOVE GROUND OR BURIED
--	-----------------------	------------------------

See storage tank section for Well 6

3. Bulge in System / Reservoir:

RESERVOIR NAME OR NUMBER (CORRESPOND TO MAP)	APPROXIMATE DAM HEIGHT	APPROXIMATE CAPACITY (IN ACRE FEET)
--	------------------------	-------------------------------------

See bulge in system section for Well 6

**F. Gravity Flow Pipe**

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? NO

If "NO", items 2 through 4 relating to this section may be deleted.

**G. Gravity Flow Canal or Ditch**

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? NO

If "NO", items 2 through 4 relating to this section may be deleted.

**H. Reservoir**

1. Does the claim involve a reservoir modified through a transfer? NO

Reminder: This section should only be completed if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs. If "NO", items 2 through 9 relating to this section may be deleted.

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**SECTION 2**

**SYSTEM DESCRIPTION (B through H)**

Are there multiple PODs or POAs?

**YES**

If "YES" you will need to copy and complete Sections 2B through 2H for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

**Well 9**

**B. Place of Use**

1. Is the right for municipal use?

**NO**

*If "YES" the table below may be deleted.*

TWP	RNG	MER	SEC	Q-Q	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
-----	-----	-----	-----	-----	------	-----	-----	--------------------------------------	---

**See Place of Use for Well 6**

**Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (Gov Lot), Quarter-Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, Gov Lot, and QQ.**

**C. Diversion and Delivery System Information**

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used?

**YES**

*If "NO" items 2 through item 6 may be deleted.*

**2. Pump Information**

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
<b>Robbco</b>	<b>12CHE</b>	<b>N/A</b>	<b>Turbine</b>	<b>10" Column</b>	<b>10"/12"</b>

**3. Motor Information**

MANUFACTURER	HORSEPOWER

**4. Theoretical Pump Capacity**

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
<b>450 HP</b>	<b>100 psi</b>	<b>546'</b>	<b>827' TDH</b>	<b>1722 gpm (3.837 cfs)</b>

**5. Provide pump calculations:**

**TDH = 231' + 546' + 50' Friction Loss = 827'**  
**Q = (HP) (550) (EFF) / (62.4) (TDH) = (450) (550) (0.80) / (62.4) (827) = 3.84 cfs = 1722 gpm**

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6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
211,394,559 gallons	211,396,115 gallons	60 seconds	1556 gpm (3.467 cfs)

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped?

YES

If "NO" items 8 through item 11 may be deleted.

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See mainline information section for Well 6, excepting irrigation system. Well 9 cannot pump directly to irrigation lake.			

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See lateral information section for Well 6, excepting irrigation system. Well 9 cannot pump directly to irrigation lake.			

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
Domestic unknown. Well 9 cannot pump directly to irrigation lake.					

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

See additional notes section for Well 6, excepting irrigation system. Well 9 cannot pump directly to irrigation lake.
---

D. Groundwater Source Information (Well and Sump)

1. Is the appropriation from ground water (well or sump)?

YES

If "NO", items 2 through 8 relating to this section may be deleted.

2. Describe the access port (type and location) or other means to measure the water level in the well:

Two 1/4" air lines were installed on the pump column. A casing Vent was also provided.
--

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3. If well logs are not available, provide as much of the following information as possible:

CASING DIAMETER	CASING DEPTH	TOTAL DEPTH	COMPLETION DATE OF ORIGINAL WELL	COMPLETION DATES OF ALTERATIONS	WHO THE WELL WAS DRILLED FOR	WELL DRILLED BY
-----------------	--------------	-------------	----------------------------------	---------------------------------	------------------------------	-----------------

See attached well log DESC 54485

4. In addition to the information requested in item "3" above, provide any other information which may help the Department locate any well logs associated with this appropriation.

Well log attached

5. Is the appropriation from a dug well (sump)?

NO

If "NO", items 6 through 8 relating to this section may be deleted.

Reminder: Construction standards for sumps can be found in OAR 690-210-0400.

### E. Storage

1. Does the distribution system include in-system storage (i.e. storage tank, bulge in system / reservoir)

YES

If "NO", item 2 and 3 relating to this section may be deleted.

If "YES" is it a: Storage Tank

YES

Bulge in System / Reservoir

NO

Complete appropriate table(s) below, unused table may be deleted.

2. Storage Tank:

MATERIAL (CONCRETE, FIBERGLASS, METAL, ETC.)	CAPACITY (IN GALLONS)	ABOVE GROUND OR BURIED
See storage tank section for Well 6		

3. Bulge in System / Reservoir:

RESERVOIR NAME OR NUMBER (CORRESPOND TO MAP)	APPROXIMATE DAM HEIGHT	APPROXIMATE CAPACITY (IN ACRE FEET)
N/A - Well 9 Cannot Pump to ponds		

### F. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe?

NO

If "NO", items 2 through 4 relating to this section may be deleted.

### G. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system?

NO

If "NO", items 2 through 4 relating to this section may be deleted.

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**H. Reservoir**

1. Does the claim involve a reservoir modified through a transfer?

NO

**Reminder: This section should only be completed if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs.**

*If "NO", items 2 through 9 relating to this section may be deleted.*

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## SECTION 2

### SYSTEM DESCRIPTION (B through H)

Are there multiple PODs or POAs?

YES

If "YES" you will need to copy and complete Sections 2B through 2H for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

**Ridge Pump Station**

#### B. Place of Use

1. Is the right for municipal use?

NO

*If "YES" the table below may be deleted.*

TWP	RNG	MER	SEC	Q-Q	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
15 S	12 E	W.M.	14	NE NW					
15 S	12 E	W.M.	14	NW NW					
15 S	12 E	W.M.	14	SW NW					
15 S	12 E	W.M.	14	SE NW					
15 S	12 E	W.M.	14	NE SW					
15 S	12 E	W.M.	14	NW SW					
15 S	12 E	W.M.	14	SW SW					
15 S	12 E	W.M.	14	SE SW					
15 S	12 E	W.M.	15	SW NE					
15 S	12 E	W.M.	15	SE NE					
15 S	12 E	W.M.	15	NE SE					
15 S	12 E	W.M.	15	NW SE					
15 S	12 E	W.M.	15	SW SE					
15 S	12 E	W.M.	15	SE SE					
15 S	12 E	W.M.	22	NE NE					
15 S	12 E	W.M.	22	NW NE					
15 S	12 E	W.M.	22	SE NE					
15 S	12 E	W.M.	23	NE NW					
15 S	12 E	W.M.	23	NW NW					
15 S	12 E	W.M.	23	SW NW					
<b>Total Acres Irrigated</b>								<p>N/A QUASI-MUNICIPAL</p>	

**Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (Gov Lot), Quarter-Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, Gov Lot, and QQ.**

#### C. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used?

YES

*If "NO" items 2 through item 6 may be deleted.*

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2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
American Turbine	12H150	8171	Turbine	N/A	8"
American Turbine	12H150	8172	Turbine	N/A	8"

3. Motor Information

MANUFACTURER	HORSEPOWER
US Electrical Motors	100 HP
US Electrical Motors	100 HP

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
(2) 100 HP	98 psi	3'	103'	1788 gpm (3.984 cfs)

5. Provide pump calculations:

**Ridge Pump Station:**  

$$2 \text{ Pumps} \times \frac{0.8 \times 100 \text{ HP} \times 550}{62.4 \times (106' + 98 \times 1.1 \times 2.31)} = 3.98 \text{ cfs} = 1788 \text{ gpm (from Lake \#1)}$$

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			2000 gpm (4.456 cfs)

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped?

YES

If "NO" items 8 through item 11 may be deleted.

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See mainline information section for Well 6, Irrigation System			

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See lateral information section for Well 6, Irrigation System			

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
See sprinkler information for Well 6, Irrigation System					

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

**Ridge Course: 32-64 assorted heads a hole are used at any given time. The Ridge Irrigation pump station operates at 2000 gpm from Lake #1. Maximum number of each of the different head used at any one time would be difficult to ascertain.**

**Golf Irrigation Lake #1 (near Wells #6 and #7) Outlet Works:  
Submerged 30" CMP pipe connected to concrete wet well for Ridge Pump Station.**

**D. Groundwater Source Information (Well and Sump)**

1. Is the appropriation from ground water (well or sump)? **NO**

*If "NO", items 2 through 8 relating to this section may be deleted.*

**E. Storage**

1. Does the distribution system include in-system storage (i.e. storage tank, bulge in system / reservoir) **YES**

*If "NO", item 2 and 3 relating to this section may be deleted.*

If "YES" is it a: Storage Tank **NO**

Bulge in System / Reservoir **YES**

*Complete appropriate table(s) below, unused table may be deleted.*

2. Storage Tank:

MATERIAL (CONCRETE, FIBERGLASS, METAL, ETC.)	CAPACITY (IN GALLONS)	ABOVE GROUND OR BURIED
<b>N/A - pump station cannot pump into domestic system</b>		

3. Bulge in System / Reservoir:

RESERVOIR NAME OR NUMBER (CORRESPOND TO MAP)	APPROXIMATE DAM HEIGHT	APPROXIMATE CAPACITY (IN ACRE FEET)
<b>Golf Irrigation Lake #1</b>	<b>No dam, pond excavated</b>	<b>1.52 ACRE FEET</b>

**F. Gravity Flow Pipe**

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

*If "NO", items 2 through 4 relating to this section may be deleted.*

**G. Gravity Flow Canal or Ditch**

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **NO**

*If "NO", items 2 through 4 relating to this section may be deleted.*

**H. Reservoir**

1. Does the claim involve a reservoir modified through a transfer? **NO**

**Reminder: This section should only be completed if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs. If "NO", items 2 through 9 relating to this section may be deleted.**

## SECTION 2

### SYSTEM DESCRIPTION (B through H)

Are there multiple PODs or POAs?

**YES**

If "YES" you will need to copy and complete Sections 2B through 2H for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

**Challenge Pump Station**

#### B. Place of Use

1. Is the right for municipal use?

**NO**

*If "YES" the table below may be deleted.*

TWP	RNG	MER	SEC	Q-Q	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
15 S	12 E	W.M.	14	NE NW					
15 S	12 E	W.M.	14	NW NW					
15 S	12 E	W.M.	14	SW NW					
15 S	12 E	W.M.	14	SE NW					
15 S	12 E	W.M.	14	NE SW					
15 S	12 E	W.M.	14	NW SW					
15 S	12 E	W.M.	14	SW SW					
15 S	12 E	W.M.	14	SE SW					
15 S	12 E	W.M.	15	SW NE					
15 S	12 E	W.M.	15	SE NE					
15 S	12 E	W.M.	15	NE SE					
15 S	12 E	W.M.	15	NW SE					
15 S	12 E	W.M.	15	SW SE					
15 S	12 E	W.M.	15	SE SE					
15 S	12 E	W.M.	22	NE NE					
15 S	12 E	W.M.	22	NW NE					
15 S	12 E	W.M.	22	SE NE					
15 S	12 E	W.M.	23	NE NW					
15 S	12 E	W.M.	23	NW NW					
15 S	12 E	W.M.	23	SW NW					
<b>Total Acres Irrigated</b>								<b>N/A QUASI-MUNICIPAL</b>	

**Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (Gov Lot), Quarter-Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, Gov Lot, and QQ.**

#### C. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used?

**YES**

*If "NO" items 2 through item 6 may be deleted.*

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2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Flowtronex	12M90A	7730-1	Turbine	N/A	6"
Flowtronex	12M90A	7730-2	Turbine	N/A	6"

3. Motor Information

MANUFACTURER	HORSEPOWER
US Electrical Motors	60 HP
US Electrical Motors	60 HP

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
(2) 60 HP	90 psi	6.5'	32'	1421 gpm (3.166 cfs)

5. Provide pump calculations:

**Challenge Pump Station:**

$$2 \text{ Pumps} \times \frac{0.8 \times 60 \text{ HP} \times 550}{62.4 \times (38.5' + 90 \times 1.1 \times 2.31)} = 3.17 \text{ cfs} = 1421 \text{ gpm (from Lake \#2)}$$

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			1500 gpm (3.342 cfs)

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped?

YES

If "NO" items 8 through item 11 may be deleted.

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See mainline information section for Well 6, Irrigation System			

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
See lateral information section for Well 6, Irrigation System			

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
See sprinkler information for Well 6, Irrigation System					

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				



12. Additional notes or comments related to the system:

**Challenge Course: Challenge Irrigation pump station operates at 1500 gpm from Lake #2.**

**Golf Irrigation Lake #2 (near Well #8) Outlet works:**

**Submerged 24" PVC pipe connected to 60" concrete wet well for Challenge Pump Station.**

**D. Groundwater Source Information (Well and Sump)**

1. Is the appropriation from ground water (well or sump)?

NO

*If "NO", items 2 through 8 relating to this section may be deleted.*

**E. Storage**

1. Does the distribution system include in-system storage (i.e. storage tank, bulge in system / reservoir)

YES

*If "NO", item 2 and 3 relating to this section may be deleted.*

*If "YES" is it a:* Storage Tank

NO

Bulge in System / Reservoir

YES

*Complete appropriate table(s) below, unused table may be deleted.*

2. Storage Tank:

MATERIAL (CONCRETE, FIBERGLASS, METAL, ETC.)	CAPACITY (IN GALLONS)	ABOVE GROUND OR BURIED
N/A - pump station cannot pump into domestic system		

3. Bulge in System / Reservoir:

RESERVOIR NAME OR NUMBER (CORRESPOND TO MAP)	APPROXIMATE DAM HEIGHT	APPROXIMATE CAPACITY (IN ACRE FEET)
Golf Irrigation Lake #2	No dam, pond excavated	1.92 ACRE FEET

**F. Gravity Flow Pipe**

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe?

NO

*If "NO", items 2 through 4 relating to this section may be deleted.*

**G. Gravity Flow Canal or Ditch**

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system?

NO

*If "NO", items 2 through 4 relating to this section may be deleted.*

**H. Reservoir**

1. Does the claim involve a reservoir modified through a transfer?

NO

**Reminder: This section should only be completed if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs. If "NO", items 2 through 9 relating to this section may be deleted.**

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## SECTION 3 CONDITIONS

Please pay special attention to this section. All conditions contained in the permit, permit amendment, transfer final order, or any extension final order shall be addressed. Reports that do not address all performance related conditions will be returned.

### 1. Time Limits:

Permits, transfer final orders, and any extension final orders contain any or all of the following dates; the date when the actual construction work was to begin, the date when the construction was to be completed, and the date when the complete application of water to the proposed use is to be completed by. These dates may be referred to as ABC dates. Describe how the water user has complied with each of the development timelines established in the permit, extension or transfer final order:

	DATE FROM PERMIT OR TRANSFER	DATE ACCOMPLISHED*	DESCRIPTION OF ACTIONS TAKEN BY WATER USER TO COMPLY WITH THE TIME LIMITS
ISSUANCE DATE	April 21, 2010		
BEGIN CONSTRUCTION (A)	N/A	Wells 6, 7, &8: 1991 Well 9: 05/21/2001	Well construction initiated
COMPLETE CONSTRUCTION (B)	October 1, 2015	Wells 6, 7, &8: 1999 Well 9: 10/01/2005	Construct well pumps and distribution systems
COMPLETE APPLICATION OF WATER (C)	October 1, 2015	Wells 6, 7, &8: 2007 Well 9: 10/01/2005	Water application completed and refined

\* MUST BE WITHIN PERIOD BETWEEN PERMIT, TRANSFER FINAL ORDER, OR ANY EXTENSION FINAL ORDER ISSUANCE AND THE DATE TO COMPLETELY APPLY WATER

2. Is there an extension final order(s)? NO

*If "NO", you may delete item 3 in this section.*

### 4. Initial Water Level Measurements:

a. Was the water user required to submit an initial static water level measurement? NO

*If "NO", items 4b through 4d relating to this section may be deleted.*

### 5. Annual Static Water Level Measurements:

a. Was the water user required to submit annual static water level measurements? Not per the transfer final order, but is per certificate 85471 (cancelled by T-10929)

*If "NO", items 5b through 5e relating to this section may be deleted.*

b. Provide the month in which the static water level measurement was to be made:

March

c. Were the static water level measurements taken in the month required? YES

d. If "YES", were those measurements submitted to the Department? YES

e. If the annual measurements were not submitted, provide the measurements now:

DATE OF MEASUREMENT	MEASUREMENT MADE BY	METHOD	MEASUREMENT
N/A Submitted			

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6. Pump Test (Required for most ground water permits prior to issuance of a certificate)

a. Did the permit require the submittal of a pump test? NO

*If "NO", items 6b through 6d relating to this section may be deleted.*

b. Has the pump test been previously submitted to the Department? YES

c. Is the pump test attached to this claim? NO

d. Has the pump test been approved by the Department? YES

7. Measurement Conditions:

a. Does the permit, permit amendment, transfer final order, or any extension final order require the installation of a meter or approved measuring device? YES

*If "NO", items 7b through 7f relating to this section may be deleted.*

**Reminder: If a meter or approved measuring device was required, the COBU map must indicate the location of the device in relation to the point of diversion or appropriation.**

b. Has a meter been installed? YES

c. Meter Information

POD/POA NAME OR #	MANUFACTURER	SERIAL #	CONDITION (WORKING OR NOT)	CURRENT METER READING	DATE INSTALLED
Well 6 to Domestic	Data Industrial	N/A	Working	26245000 (Sept. 2009)	Sometime between 1992 and 1995
Well 6 to Ridge Golf Irrigation Lake	Data Industrial	N/A	Working		Sometime between 1992 and 1995
Well 7	Data Industrial	N/A	Working	7607000 (Sept. 2009)	Sometime between 1992 and 1995
Well 8	Data Industrial	N/A	Working	9852557 (Sept. 2009)	1998
Well 9	Data Industrial	N/A	Working	28866316 (Sept. 2009)	July 2003

d. If a meter has not been installed, has a suitable measuring device been installed and approved by the Department? N/A

*If a meter has been installed, items 7e through 7g relating to this section may be deleted.*

8. Recording and reporting conditions

a. Is the water user required to report the water use to the Department? **Not per the transfer final order, but is per certificate 85471 (cancelled by T-10929)**

*If "NO", item 8b relating to this section may be deleted.*

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b. Have the reports been submitted?

YES

METHOD OF SUBMITTING REPORT (PAPER OR ELECTRONIC)	WATER USER REPORTING ID
Paper	29088

If the reports have not been submitted, attach a copy of the reports if available.

9. Fish Screening

a. Are any points of diversion required to be screened to prevent fish from entering the point of diversion?

NO

If "NO", items 9b through 9e relating to this section may be deleted.

10. By-pass Devices

a. Are any points of diversion required to have a by-pass device to prevent fish from entering the point of diversion?

NO

If "NO", items 10b and 10c relating to this section may be deleted.

11. Other conditions required by permit, permit amendment final order, extension final order, or transfer final order

- a. Were there special well construction standards? NO
- b. Was submittal of a ground water monitoring plan required? NO
- c. Was the water user required to restore the riparian area if it was disturbed? NO
- d. Was a fishway required? NO
- e. Was submittal of a letter from an engineer required prior to storage of water? NO
- f. Was submittal of a water management and conservation plan required? NO
- g. Other conditions? NO

If "YES" to any of the above, identify the condition and describe the water user's actions to comply with the condition(s):

SECTION 4  
VARIATIONS

Include a description of variations from the permit, permit amendment final order, extension final order, or transfer final order. (i.e. "The permit allowed three points of diversion. The water user only developed one of the points." or "The permit allowed 40.0 acres of irrigation. The water user only developed 10.0 acres.")

Item 3 in the background section of final order 80-704 states "Transfer Application T-10929 proposes an additional point of appropriation (Well #8) approximately...."

This should read: "Transfer Application T-10929 proposes an additional point of appropriation (Well #9) approximately...." The remainder of the final order correctly identifies the additional point of appropriation as Well #9.

## SECTION 5 ATTACHMENTS

If you are attaching any documents to this report, provide a list:

ATTACHMENT NAME	DESCRIPTION
Appendix A	Email Correspondence approving mapping waiver
Appendix B – Water Rights	Certificate 85471 – Certificate modified by transfer T-10929 Transfer T-10929
Appendix C – Well Logs	Well logs for wells 6 (DESC 1198), 7 (DESC 1083), 8 (DESC 51680), and 9 (DESC 54485)
Appendix D	Claim of Beneficial Use map for Permit G-11313 submitted to OWRD by WHPacific in 2009 to show layout of irrigation system water lines
Appendix E	As-built map of the domestic water system in Eagle Crest II
Appendix F	As-built map of the domestic water system in Eagle Crest I

## SECTION 6 CLAIM SUMMARY

POD / POA NAME OR #	MAXIMUM RATE AUTHORIZED	CALCULATED THEORETICAL RATE BASED ON SYSTEM	AMOUNT OF WATER MEASURED	USE	# OF ACRES ALLOWED	# OF ACRES DEVELOPED
Well 6	3.0 CFS (1346 gpm)	1477 gpm	1210-1270 gpm	Quasi- municipal	N/A	N/A
Well 7		241 gpm	250-260 gpm			
Well 8		2078 gpm	1760 gpm			
Well 9		1722 gpm	1556 gpm			

## SECTION 7 CLAIM OF BENEFICIAL USE MAP

The Claim of Beneficial Use Map must be submitted with this claim. Claims submitted without the Claim of Beneficial Use map will be returned. The map shall be submitted on poly film at a scale of 1" = 1320 feet, 1" = 400 feet, or the original full-size scale of the county assessor map for the location.

Provide a general description of the survey method used to prepare the map. Examples of possible methods include, but are not limited to, a traverse survey, GPS, or the use of aerial photos. If the basis of the survey is an aerial photo, provide the source, date, series and the aerial photo identification number.

**Deschutes County GIS taxlot base drawing used.**

### Map Checklist

Please be sure that the map you submit includes ALL the items listed below.  
(Reminder: Incomplete maps and/or claims may be returned.)

AUG 24 2010

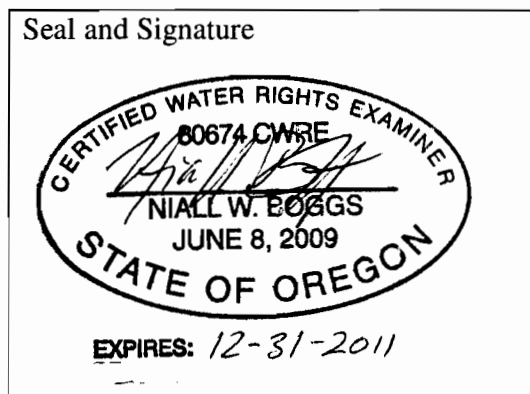
- Map on polyester film.
- Appropriate scale (1" = 400 feet, 1" = 1320 feet, or the original full-size scale of the county assessor map)
- Township, Range, Section, Donation Land Claims, and Government Lots
- If irrigation, number of acres irrigated within each projected Donation Land Claims, Government Lots, Quarter-Quarters
- Locations of fish screens, fish by-pass devices, meters and measuring devices in relationship to point of diversion or appropriation.
- Conveyance structures illustrated (pumps, reservoirs, pipelines, ditches, etc.) **Waiver received from OWRD to omit pipelines for map clarity**
- Point(s) of diversion or appropriation (illustrated and coordinates)
- Tax lot boundaries and numbers **Waiver received from OWRD to omit tax lot numbers from map for map clarity**
- N/A Source illustrated if surface water
- Disclaimer ("This map is not intended to provide legal dimensions or locations of property ownership lines")
- Application and permit number or transfer number
- North arrow
- Legend
- CWRE stamp and signature

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## SECTION 8 SIGNATURES

### CWRE Statement, Seal and Signature

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge.



<b>CWRE NAME</b> <b>Niall W. Boggs, PE, CWRE</b>	<b>PHONE NO.</b> <b>(541) 388-4255</b>	<b>ADDITIONAL CONTACT NO.</b>
<b>ADDRESS</b> <b>123 SW Columbia Street</b>		
<b>CITY</b> <b>Bend</b>	<b>STATE</b> <b>OR</b>	<b>ZIP</b> <b>97702</b>
<b>E-MAIL</b> <b>nboggs@whpacific</b>		

### Permit or Transfer Holder's of Record Signature or Acknowledgement

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge. I request that the Department issue a water right certificate.

SIGNATURE	PRINT OR TYPE NAME	DATE
	JERRY ANDRES	8-6-10

AUG 9 2010

June 30, 2009

Oregon Water Resources Department  
North Mall Office Building  
725 Summer Street NE., Suite A  
Salem, Oregon 97301-1271

**Re: Cline Butte Utility Company  
Well 9 Transfer Application**

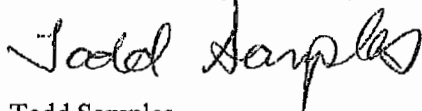
Gentlemen/Ladies:

WHPacific, Inc. is hereby authorized to act as an agent of the Cline Butte Utility Company, in regards to the attached transfer application. We expect WHPacific to prepare and file appropriate application documents, respond to your questions and needs, and generally facilitate the desired transfer application.

Thank you for your assistance.

Sincerely,

**Cline Butte Utility Company**



Todd Samples  
General Manager

AUG 31 2010



**APPENDIX A**

## Boggs, Niall

---

**From:** Gerry Clark [clarkge@wrđ.state.or.us]  
**Sent:** Wednesday, July 21, 2010 10:16 AM  
**To:** Boggs, Niall  
**Cc:** Frost, Jim  
**Subject:** RE: Mapping Waiver Request for T-10929

Niall,

Your request for a waiver is approved as requested. Please attach a copy of this approval to Claim when it is submitted.

If you have any additional questions, please feel free to contact me.

Gerry

Gerry Clark  
Water Rights and Adjudications Division  
Water Resources Department  
725 Summer Street NE, Suite A  
Salem, Oregon 97301  
Phone: 503-986-0811  
Fax: 503-986-0901

WRD Home Page: [www.wrd.state.or.us](http://www.wrd.state.or.us)

---

**From:** Boggs, Niall [mailto:NBoggs@whpacific.com]  
**Sent:** Friday, July 16, 2010 12:09 PM  
**To:** Gerry Clark  
**Cc:** Frost, Jim  
**Subject:** Mapping Waiver Request for T-10929

Gerry:

Eagle Crest Resort, served by Cline Butte Utility Company, has made full beneficial use of water under transfer T-10929 (adds an additional point of appropriation to Cert 85471), and we are currently working on a Claim of Beneficial Use application for this permit. We are requesting prior approval for a waiver of mapping standards for this claim of Beneficial Use for showing taxlot numbers and water system details.

The basis for this request is that the permit for this Quasi-Municipal right covers hundreds of individual taxlots and showing the place of use along with the individual taxlot numbers on a standard 1"=1320' scale map would be extremely cluttered and difficult to accomplish. Looking at other Quasi-Municipal Claim of Beneficial Use maps done for Eagle Crest Resort in the past, place of use has been shown by quarter-quarter section only. We propose to do the same with this application.

Additionally, we propose to exclude water piping as the domestic water system for Eagle Crest Resort is quite complex and would make the map unreadable and cluttered. The existing water rights, domestic water system and wells in this transfer application have all been certificated and mapped on previous Claims of Beneficial Use (Certificate 85471 for Wells 6, 7, 8 and 85472 for Well 9). We can provide as-built schematics of the system that were submitted with the COBU that was previously for Cert.85471 as an attached exhibit. Generally, 6", 8", 10" or 12" mains are installed in the streets and with individual water services to the private lots, commercial lots and open space tracts.

This method of mapping is similar to other COBU's we have completed and received Certificates for Quasi-municipal rights.

Please do not hesitate to contact me if you have any questions or comments.

**Niall Boggs, PE, CWRE**  
Civil Engineer

**WHPacific**

123 SW Columbia Street | Bend, OR 97702  
D 541.312.2540 | O 541.388.4255 | F 541.388.4229

*Enhancing communities through creative, exceptional service*

**APPENDIX B**



Oregon

Theodore R. Kulongoski, Governor

Water Resources Department

North Mall Office Building  
725 Summer Street NE, Suite A  
Salem, OR 97301-1266  
503-986-0900  
FAX 503-986-0904

April 22, 2010

CLINE BUTTE UTILITY COMPANY  
1230 GOLDEN PHEASANT  
REDMOND OR 97756

REFERENCE: Transfer Application T-10929

Enclosed is a copy of the final order approving your water right transfer application.

The time allowed to complete the transfer is specified in the final order. YOU SHOULD GIVE PARTICULAR ATTENTION TO THE TIME LIMIT.

An extension of the time limit can be allowed only upon a showing that diligent effort has been made to complete the actual change(s) within the time allowed.

You are required to hire a Certified Water Rights Examiner (CWRE) to complete a Claim of Beneficial Use report and map which must be submitted to this Department within one year of the date you complete the change(s) or within one year of the completion date authorized in the transfer final order, whichever occurs first.

If you have any questions related to the approval of this transfer, you may contact me by telephone at (503) 986-0883 or by e-mail at [Sarah.A.Henderson@wrđ.state.or.us](mailto:Sarah.A.Henderson@wrđ.state.or.us).

Sincerely,

*Sarah Henderson*

Sarah Henderson  
Executive Support  
Field Services Division

cc: Watermaster Dist. #11  
Thomas Walker, CWRE  
Niall Boggs, Agent

Enclosure

AUG 24 2010

BEFORE THE WATER RESOURCES DEPARTMENT  
OF THE  
STATE OF OREGON

In the Matter of Transfer Application )  
T-10929, Deschutes County ) FINAL ORDER APPROVING AN  
 ) ADDITIONAL POINT OF  
 ) APPROPRIATION

**Authority**

ORS 537.705 and 540.505 to 540.580 establish the process in which a water right holder may submit a request to transfer the point of appropriation, place of use, or character of use authorized under an existing water right. OAR Chapter 690, Division 380 implements the statutes and provides the Department's procedures and criteria for evaluating transfer applications.

**Applicant**

CLINE BUTTE UTILITY COMPANY  
1230 GOLDEN PHEASANT  
REDMOND OR 97756

**Findings of Fact**

**Background**

1. On July 8, 2009, CLINE BUTTE UTILITY COMPANY filed an application for an additional point of appropriation under Certificate 85471. The Department assigned the application number T-10929.

2. The right to be transferred is as follows:

- Certificate:** 85471 in the name of CLINE BUTTE UTILITY CO. (perfected under Permit G-11762)
- Use:** QUASI-MUNICIPAL USES
- Priority Date:** MAY 4, 1992
- Rate:** 3.0 CUBIC FEET PER SECOND
- Source:** THREE WELLS in the DESCHUTES RIVER BASIN

This final order is subject to judicial review by the Court of Appeals under ORS 183.482. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.482(1). Pursuant to ORS 536.075 and OAR 137-003-0675, you may petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

**Authorized Points of Appropriation:**

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15 S	12 E	WM	14	NW SW	WELL 8: 1404 FEET NORTH AND 281 FEET EAST FROM THE SW CORNER OF SECTION 14
15 S	12 E	WM	15	SW SE	WELL 6: 966 FEET NORTH AND 1817 FEET WEST FROM THE SE CORNER OF SECTION 15
15 S	12 E	WM	15	SW SE	WELL 7: 930 FEET NORTH AND 1819 FEET WEST FROM THE SE CORNER OF SECTION 15

**Authorized Place of Use:**

Twp	Rng	Mer	Sec	Q-Q
15 S	12 E	WM	13	SW SW
15 S	12 E	WM	14	NE NW
15 S	12 E	WM	14	NW NW
15 S	12 E	WM	14	SW NW
15 S	12 E	WM	14	SE NW
15 S	12 E	WM	14	NE SW
15 S	12 E	WM	14	NW SW
15 S	12 E	WM	14	SW SW
15 S	12 E	WM	14	SE SW
15 S	12 E	WM	14	NE SE
15 S	12 E	WM	14	NW SE
15 S	12 E	WM	14	SW SE
15 S	12 E	WM	14	SE SE
15 S	12 E	WM	15	SW NE
15 S	12 E	WM	15	SE NE
15 S	12 E	WM	15	NE SE
15 S	12 E	WM	15	NW SE
15 S	12 E	WM	15	SW SE
15 S	12 E	WM	15	SE SE
15 S	12 E	WM	22	NE NE
15 S	12 E	WM	22	NW NE
15 S	12 E	WM	22	SE NE
15 S	12 E	WM	23	NE NE
15 S	12 E	WM	23	NW NE
15 S	12 E	WM	23	SW NE
15 S	12 E	WM	23	SE NE
15 S	12 E	WM	23	NE NW
15 S	12 E	WM	23	NW NW
15 S	12 E	WM	23	SW NW
15 S	12 E	WM	23	SE NW
15 S	12 E	WM	23	NE SE
15 S	12 E	WM	23	NW SE
15 S	12 E	WM	24	NW NW
15 S	12 E	WM	24	SW NW
15 S	12 E	WM	24	NW SW
15 S	12 E	WM	24	SW SW

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- Transfer Application T-10929 proposes an additional point of appropriation (Well #8) approximately 1.33 miles Northwest from the existing point of appropriation:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
15S	12E	WM	16	NE NE	WELL 9: 204 FEET SOUTH AND 476 FEET WEST FROM THE NE CORNER OF SECTION 16

- Notice of the application for transfer was published on July 21, 2009, pursuant to OAR 690-380-4000. No comments were filed in response to the notice.
- On December 31, 2009, additional information was submitted, indicating that use of Well #9 is intended to fill the reservoir if Well #6 cannot keep up with demands, thereby minimizing dependence on Well #8 for domestic use. It is estimated that Well #9 will produce an annual volume of 279.46 million gallons, correlating to an average yearly duration of use of 3,212 hours at an average production rate of 1,450 gallons per minute.
- On January 6, 2010, the Department mailed a copy of the draft Preliminary Determination proposing to approve Transfer Application T-10929 to the applicant. The draft Preliminary Determination cover letter set forth a deadline of February 6, 2010, for the applicant to respond. The applicant requested that the Department proceed with issuance of a Preliminary Determination and is authorized to pursue the transfer.
- On February 17, 2010, the Department issued a Preliminary Determination proposing to approve Transfer Application T-10929 and mailed a copy to the applicant. Additionally, notice of the Preliminary Determination for the transfer application was published on the Department's weekly notice on February 23, 2010, and in the Redmond Spokesman newspaper on March 3, 10, and 17, 2010, pursuant to ORS 540.520 and OAR 690-380-4020. No protests were filed in response to the notice.

***Transfer Review Criteria (OAR 690-380-4010)***

- Water has been used within the last five years according to the terms and conditions of the right. There is no information in the record that would demonstrate that the right is subject to forfeiture under ORS 540.610.
- A pump, pipeline, and sprinkler system sufficient to use the full amount of water allowed under the existing right was present within the five-year period prior to submittal of Transfer Application T-10929.
- The proposed change would not result in enlargement of the right.
- The proposed change would not result in injury to other water rights.

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**Conclusions of Law**

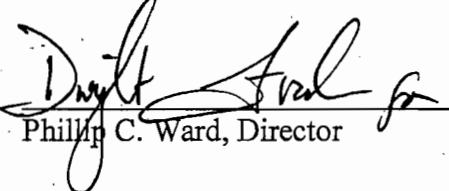
The additional point of appropriation proposed in Transfer Application T-10929 is consistent with the requirements of ORS 537.705 and 540.505 to 540.580 and OAR 690-380-5000.



**Now, therefore, it is ORDERED:**

1. The additional point of appropriation proposed in application T-10929 is approved.
2. The right to the use of the water is restricted to beneficial use at the place of use described, and is subject to all other conditions and limitations contained in Certificate 85471 and any related decree.
3. Water right certificate 85471 is cancelled.
4. The quantity of water diverted at the additional point of appropriation, together with that diverted at the original points of appropriation, shall not exceed the quantity of water lawfully available at the original points of appropriation.
5. Water use measurement conditions:
  - a. Before water use may begin under this order, the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device, at the new point of appropriation.
  - b. The water user shall maintain the meter or measuring device in good working order.
  - c. The water user shall allow the Watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the Watermaster shall request access upon reasonable notice.
6. Water shall be acquired from the same aquifer (water source) as the original points of appropriation.
7. The approved changes shall be completed and full beneficial use of the water shall be made on or before **October 1, 2015**. A Claim of Beneficial Use prepared by a Certified Water Rights Examiner shall be submitted by the applicant to the Department within one year after the deadline for completion of the change and full beneficial use of the water.
8. When satisfactory proof of the completed change is received, a new certificate confirming the right transferred will be issued.

Dated at Salem, Oregon this 21 day of April 2010.

  
Phillip C. Ward, Director

AUG 9 2010

Mailing date: APR 23 2010

6, 7, 8 Quasi STATE OF OREGON

COUNTY OF DESCHUTES

CERTIFICATE OF WATER RIGHT

THIS CERTIFICATE ISSUED TO

CLINE BUTTE UTILITY CO.  
1230 GOLDEN PHEASANT DRIVE  
REDMOND OR 97756

confirms the right to use the waters of THREE WELLS (WELLS 6, 7 AND 8) in the Deschutes Basin for QUASI-MUNICIPAL USE.

This right was perfected under Permit G-11762. The date of priority is MAY 4, 1992. The amount of water to which this right is entitled is limited to an amount actually used beneficially, and shall not exceed 3.0 CUBIC FEET PER SECOND or its equivalent in case of rotation, measured at the well.

The wells are located as follows:

Well	Twp	Rng	Mer	Sec	Q-Q	Measured Distances
8	15 S	12 E	WM	14	NW SW	1404 FEET NORTH & 281 FEET EAST FROM SW CORNER, SECTION 14
6	15 S	12 E	WM	15	SW SE	966 FEET NORTH & 1817 FEET WEST FROM SE CORNER, SECTION 15
7	15 S	12 E	WM	15	SW SE	930 FEET NORTH & 1819 FEET WEST FROM SE CORNER, SECTION 15

A description of the place of use to which this right is appurtenant is as follows:

Twp	Rng	Mer	Sec	Q-Q
15 S	12 E	WM	13	SW SW
15 S	12 E	WM	14	NE NW
15 S	12 E	WM	14	NW NW
15 S	12 E	WM	14	SW NW
15 S	12 E	WM	14	SE NW
15 S	12 E	WM	14	NE SW
15 S	12 E	WM	14	NW SW
15 S	12 E	WM	14	SW SW
15 S	12 E	WM	14	SE SW

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**NOTICE OF RIGHT TO PETITION FOR RECONSIDERATION OR JUDICIAL REVIEW**

This is an order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080, you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied. In addition, under ORS 537.260 any person with an application, permit or water right certificate subsequent in priority may jointly or severally contest the issuance of the certificate at any time before it has issued, and after the time has expired for the completion of the appropriation under the permit, or within three months after issuance of the certificate.

Twp	Rng	Mer	Sec	Q-Q
15 S	12 E	WM	14	NE SE
15 S	12 E	WM	14	NW SE
15 S	12 E	WM	14	SW SE
15 S	12 E	WM	14	SE SE
15 S	12 E	WM	15	SW NE
15 S	12 E	WM	15	SE NE
15 S	12 E	WM	15	NE SE
15 S	12 E	WM	15	NW SE
15 S	12 E	WM	15	SW SE
15 S	12 E	WM	15	SE SE
15 S	12 E	WM	22	NE NE
15 S	12 E	WM	22	NW NE
15 S	12 E	WM	22	SE NE
15 S	12 E	WM	23	NE NE
15 S	12 E	WM	23	NW NE
15 S	12 E	WM	23	SW NE
15 S	12 E	WM	23	SE NE
15 S	12 E	WM	23	NE NW
15 S	12 E	WM	23	NW NW
15 S	12 E	WM	23	SW NW
15 S	12 E	WM	23	SE NW
15 S	12 E	WM	23	NE SE
15 S	12 E	WM	23	NW SE
15 S	12 E	WM	24	NW NW
15 S	12 E	WM	24	SW NW
15 S	12 E	WM	24	NW SW
15 S	12 E	WM	24	SW SW

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The wells shall be maintained in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the wells at all times.

Measurement, recording and reporting conditions:

- A. The water user shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month, and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the water user to report general water-use information, including the place and nature of use of water under the right.
- B. The water user shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

The Department requires the water user to measure and report annual static water levels for each well on the right. Or the water user can measure other wells in close proximity to the wells, if the Department's Groundwater Staff determines that the substitute observation wells will provide adequate data to assess the impacts from the wells. The static water level shall be measured in the month of March. Reports shall be submitted to the Department within 30 days of measurement.

The water user shall submit annual measurements. Annual measurements are required whether or not the well is used. Reference water-level measurements for determining water level declines on this right are as follows: Well #6: 518 feet;

Well #7: 518 feet; and Well #8: 312 feet. Or, the first annual measurement at the substitute observation wells will establish the reference levels against which future measurements will be compared. The Director may require the user to measure and report additional water levels each year if more data is needed to evaluate the aquifer system.

All measurements shall be made by a certified water rights examiner, registered professional geologist, registered professional engineer, licensed well constructor, or pump installer licensed by the Construction Contractors Board. Measurements shall be submitted on forms provided by, or specified by, the Department. Measurements shall only be made using an electric tape or steel tape that is accurate to at least the standards specified in OAR 690-217-0045. The Department requires the individual performing the measurement to:

- A. Associate each measurement with an owner's well name or number and a Department well log: and
- B. Report water levels to at least the nearest tenth of a foot as depth-to-water below ground surface: and
- C. Specify the method of measurement: and
- D. Certify the accuracy of all measurements and calculations submitted to the Department.

The water user shall discontinue use of, or reduce the rate of volume of withdrawal from the wells if annual water-level measurements decline of 10 or more feet.

The period of restricted use shall continue until the water level rises above the decline level which triggered the action or the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or causing substantial interference with senior water rights. The water user shall not allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

In the event of a request for a change in point of appropriation, an additional point of appropriation or alternation of the appropriation facility associated with this authorized diversion, the quantity of water allowed herein, together with any other right, shall not exceed the capacity of the facility at the time of perfection of this right.

This right is limited to any deficiency in the available supply of any prior right existing for the same land.

The Director may require water level or pump tests every ten years.

Failure to comply with any of the provisions of this right may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the right.

This right is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

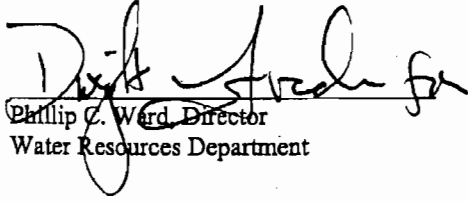
The right to the use of the water for the above purpose is restricted to beneficial use on the lands or place of use described.

Water may be applied to lands which are not specifically described above, provided the holder of this right complies with ORS 540.510(3).

AUG 24 2010

The use of water shall be limited when it interferes with any prior surface or ground water rights.

Issued MAY 08 2009

  
Phillip C. Ward, Director  
Water Resources Department

AUG 24 2010

**APPENDIX C**

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

Desc  
 1198

155/12E/15dc  
 (START CARD) # 36697

(1) OWNER: Well Number: PW #1  
 Name Eagle Ridge Development Corporation  
 Address P.O. Box 1215  
 City Redmond State OR Zip 97756

(2) TYPE OF WORK:  
 New Well  Deepen  Recondition  Abandon

(3) DRILL METHOD  
 Rotary Air  Rotary Mud  Cable  
 Other

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

(5) BORE HOLE CONSTRUCTION:  
 Special Construction approval Yes  No  Depth of Completed Well 800 ft.  
 Explosives used   Type \_\_\_\_\_ Amount \_\_\_\_\_

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
24	0	47	cement	0	47	80 sacks
17	47	800				

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:	18	+1	47	.250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Liner:	14"	+2	800	.375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Final location of sheet(s) 800'

(7) PERFORATIONS/SCREENS:  
 Perforations Method Factory perforated  
 Screens Type \_\_\_\_\_ Material \_\_\_\_\_

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
510	790	1/8 X 3	7000	14"		<input type="checkbox"/>	<input checked="" type="checkbox"/>
			1000	2.5"		<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour  
 Pump  Bailer  Air  Flowing Artesian  
 Yield gal/min 800 (est.) Drawdown \_\_\_\_\_ Drill stem at 750 Time 1 hr.

Temperature of water 52° 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 Deschutes Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Township 15 S Nor. S. Range 12 E E or W. WM. \_\_\_\_\_  
 Section 15 SW 1/4 SE 1/4  
 Tax Lot 1500 Lot \_\_\_\_\_ Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
 Street Address of Well (or nearest address) N/A

(10) STATIC WATER LEVEL:  
518 ft. below land surface. Date 2/20/92  
 Artesian pressure \_\_\_\_\_ lb. per square inch. Date \_\_\_\_\_

(11) WATER BEARING ZONES:  
 Depth at which water was first found 540

From	To	Estimated Flow Rate	SWL
540	800	800	518

(12) WELL LOG: Ground elevation \_\_\_\_\_

Material	From	To	SWL
Sand & cobbles	1	4	
Broken lava red and brown	4	40	
Basalt gray hard	40	55	
Lava cinders red	55	68	
Lava brown	68	80	
Basalt gray and brown hard	80	85	
Basalt softer	85	93	
Lava red & brown broken soft	93	111	
Basalt gray hard	111	157	
Basalt gray softer w/ red cinder	157	162	
Lava red	162	185	
Lava brown w/sandstone	185	299	
Lava dark brown w/pumice	299	330	
Andacite brown hard	330	375	
Andacite gray	375	400	
Andacite Gray & brown hard	400	469	
Andacite gray softer	469	502	
Andacite hard brown	502	524	
Andacite light brown softer	524	568	
Rock black and red	568	600	
Andacite brown hard	600	608	
Red cinder	608	612	
Andacite brown hard	612	620	

Date started 1/30/92 Completed 2/20/92

(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 well construction standards. Materials used and information reported above are true to my best knowledge and belief.  
 Signed [Signature] WWC Number 1353  
 Date 2/4/92

(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 well construction standards. This report is true to the best of my knowledge and belief.  
 Signed [Signature] WWC Number 723  
 Date 2/4/92

RECEIVED

155/12E/15dc  
MAR 14 1992  
36697 Conf

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

DESC  
11/98

WATER RESOURCES DEPARTMENT (START CARD) # 36697

**(1) OWNER:**  
Name Eagle Ridge Development Corporation  
Address Page 2  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Well Number: PW #1

**(2) TYPE OF WORK:**  
 New Well  Deepen  Recondition  Abandon

**(3) DRILL METHOD**  
 Rotary Air  Rotary Mud  Cable  
 Other \_\_\_\_\_

**(4) PROPOSED USE:**  
 Domestic  Community  Industrial  Irrigation  
 Thermal  Injection  Other \_\_\_\_\_

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

**HOLE SEAL**

HOLE		SEAL		Amount 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 sheets: \_\_\_\_\_

**(7) PERFORATIONS/SCREENS:**  
 Perforations Method \_\_\_\_\_  
 Screens Type \_\_\_\_\_ Material \_\_\_\_\_

From	To	Slot size	Number	Diameter	Telo/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  Bailer  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 Deschutes Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Township 15 S N or S. Range 12 E E or W. WM.  
Section 15 SW 1/4 SE 1/4  
Tax Lot 1500 Lot \_\_\_\_\_ Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
Street Address of Well (or nearest address) N/A

**(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
<u>Andacite light gray w/pumice</u>	<u>620</u>	<u>645</u>	
<u>Andacite brown fractured</u>	<u>645</u>	<u>655</u>	
<u>Andacite brown hard</u>	<u>655</u>	<u>670</u>	
<u>Andacite gray w/brown med.</u>	<u>670</u>	<u>691</u>	
<u>Andacite gray hard</u>	<u>691</u>	<u>710</u>	
<u>Andacite brown w/pumice interbed</u>	<u>710</u>	<u>733</u>	
<u>Andacite brown &amp; red fractured</u>	<u>733</u>	<u>740</u>	
<u>Andacite brown very hard</u>	<u>740</u>	<u>761</u>	
<u>Pumice white</u>	<u>761</u>	<u>776</u>	
<u>Andacite gray and brown</u>	<u>776</u>	<u>800</u>	

AUG 2 - 2010

Date started 1/30/92 Completed 2/20/92

**(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 well construction standards. Materials used and information reported above are true to my best knowledge and belief.  
Signed [Signature] WWC Number 1358  
Date 3/1/92

**(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 well construction standards. This report is true to the best of my knowledge and belief.  
Signed [Signature] WWC Number 723  
Date 3/1/92



STATE OF OREGON  
**WATER WELL REPORT**  
(as Required by ORS 537.765)

*Dose*  
**1083**

**RECEIVED**

OCT 28 1991

*15S/12E-22a*

(START CARD) # 34267

**(1) OWNER:**  
 Name Eagle Ridge Development  
 Address P.O. Box 1215  
 City Redmond State OR Zip 97756

**(2) TYPE OF WORK:**  
 New Well  Deepen  Recondition  Abandon

**(3) DRILL METHOD**  
 Rotary Air  Rotary Mud  Cable  
 Other

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

**(5) BORE HOLE CONSTRUCTION:**  
 Special Construction approval Yes  No   
 Depth of Completed Well 800 ft.  
 Explosives used   Type \_\_\_\_\_ Amount \_\_\_\_\_

HOLE			SEAL		Amount sacks or pounds	
Diameter	From	To	Material	From		To
13	0	50	cement	18	50	60
10	50	100	cement	0	18	15
8	100	800	bentonite	90	100	

How was seal placed: Method  A  B  C  D  E  
 Other bentonite dry in top 18'  
 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	8"	±2	98'	250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Liner	6"	0	800		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) 800

**(7) PERFORATIONS/SCREENS:**  
 Perforations Method air perf  
 Screens Type \_\_\_\_\_ Material \_\_\_\_\_

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
600	620	1X1/8	400	6"		<input type="checkbox"/>	<input checked="" type="checkbox"/>
700	800	1X1/8	2000	6"		<input type="checkbox"/>	<input checked="" type="checkbox"/>

**(8) WELL TESTS: Minimum testing time is 1 hour**  
 Pump  Bailor  Air  Flowing Artesian  
 Yield gal/min 30 Drawdown \_\_\_\_\_ Drill stem at 800 Time 1 hr.

Temperature of water 54 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 Dose Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Township 15S N or S, Range 12E E or W, WM.  
 Section 22 SE 1/4 NE 1/4  
 Tax Lot \_\_\_\_\_ Lot \_\_\_\_\_ Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
 Street Address of Well (or nearest address) Chase Falls Hwy

**(10) STATIC WATER LEVEL:**  
528 ft. below land surface. Date 10/11/91  
 Artesian pressure \_\_\_\_\_ lb. per square inch. Date \_\_\_\_\_

**(11) WATER BEARING ZONES:**  
 Depth at which water was first found 608

From	To	Estimated Flow Rate	SWI
608	615		
720	735		

**(12) WELL LOG:** Ground elevation \_\_\_\_\_

Material	From	To	SWI
dirt	0	2	
broken rock	2	12	
sand black coarse dry	12	25	
broken rock red & grey	25	36	
Rock harder	36	42	
sandstone soft brown	42	48	
lava porous grey & brown	48	55	
broken lava red & grey	55	83	
lava harder red & grey	83	132	
basalt grey hard	132	160	
lava red med	160	185	
lava red w/white pumice	185	203	
multi colored lava brn/red/gr	203	310	
broken lava red/brown	310	375	
rock brn med	375	392	
rock grey w/some pumice	392	400	
rock grey and white	400	435	
rock brn/grey/white	435	442	
basalt grey hard	442	461	
andacite grey/brn hard	461	608	
cinders or pumice	608	615	
quartzite/andacite whered	615	720	
brown andacite weathered	720	735	H <sub>2</sub> O

Date started 9/18/91 Completed 10/11/91

**(unbonded) Water Well Constructor Certification:**  
 I certify that the work I performed on the construction, alteration, abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.  
 Signed [Signature] WWC Number 1358  
 Date 10/24/91

**(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. work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.  
 Signed [Signature] WWC Number 723  
 Date 10/24/91

RECEIVED

155/12E-22a

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

OCT 28 1991

(START CARD) # 34267

Disc 1083

(1) OWNER: Eagle Ridge Development Well Number: WATER RESOURCES DEPT. SALEM OREGON

(9) LOCATION OF WELL by legal description: Township, Section, Tax Lot, Lot, Block, Subdivision, Street Address of Well

(2) TYPE OF WORK: New Well, Deepen, Recondition, Abandon

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

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

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

Table with columns: HOLE Diameter, SEAL Material, Amount 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

Final location of sheets

(7) PERFORATIONS/SCREENS: Perforations Method, Screens Type, Material

Table with columns: From, To, Slot size, Number, Diameter, Tela/pipe size, Casing, Liner

(8) WELL TESTS: Minimum testing time is 1 hour. Pump, Bailer, Air, Artesian. Yield gal/min, 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

(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

Table with columns: Material, From, To, SWL. Includes entries for andacite hard, andacite red/grey w/pumice sft, andacite hard, andacite softer.

AUG 2 - 2010

Date started 9/18/91 Completed 10/11/91

(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 well construction standards. Signed [Signature] WWC Number 1358 Date 10/24/91

(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. Signed [Signature] WWC Number 723 Date 10/24/91

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

Desc  
 1083

**RECEIVED RECEIVED** s/12e/22a

MAR - 9 1993

MAR 24 1993  
 (START CARD) #

34267

Page 1 of 2

(1) OWNER: Well Number \_\_\_\_\_  
 Name Eagle Ridge Development  
 Address P.O. Box 1215  
 City Redmond State OR Zip 97756

(2) TYPE OF WORK:  
 New Well  Deepen  Recondition  Abandon

(3) DRILL METHOD:  
 Rotary Air  Rotary Mud  Cable  
 Other \_\_\_\_\_

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

(5) BORE HOLE CONSTRUCTION:  
 Special Construction approval  Yes  No Depth of Completed Well 800 ft.  
 Explosives used  Yes  No Type \_\_\_\_\_ Amount \_\_\_\_\_

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
13	0	50	Bentonite	0	18	15
10	50	100	Cement	18	100	60
8	100	800				

How was seal placed: Method  A  B  C  D  E  
 Other Bentonite dry in top 18'

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	Steel	Plastic	Welded	Threaded
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Casing:	8	+2	98	.250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Liner:	6	0	800		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) 800

(7) PERFORATIONS/SCREENS:  
 Perforations Method Air  
 Screens Type \_\_\_\_\_ Material \_\_\_\_\_

From	To	Slot size	Number	Diameter	Ten./pipe size	Casing	Liner
600	620	1x1/8	400	6		<input type="checkbox"/>	<input checked="" type="checkbox"/>
700	800	1x1/8	2000	6		<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Yield gal/min	Drawdown	Drill stem at	Time
30	AUG 9 - 2010	800	1 hr.

Temperature of Water 54 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: \_\_\_\_\_

WATER RESOURCES DEPT  
 LOCATION OF WELL by legal description:  
 County OREGON Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Township 15 S N or S. Range 12 E E or W. WM. \_\_\_\_\_  
 Section 22 SE 4 NE 4  
 Tax Lot \_\_\_\_\_ Lot \_\_\_\_\_ Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
 Street Address of Well (or nearest address) Cline Falls Hwy

(10) STATIC WATER LEVEL:  
528 ft. below land surface. Date 10-11-91  
 Artesian pressure \_\_\_\_\_ lb. per square inch. Date \_\_\_\_\_

(11) WATER BEARING ZONES:

Depth at which water was first found 608

From	To	Estimated Flow Rate	SWL
608	615		
720	735		

(12) WELL LOG:

Ground elevation \_\_\_\_\_

Material	From	To	SWL
Dirt	0	2	
Broken rock	2	12	
Sand black coarse dry	12	25	
Broken rock red & gray	25	36	
Rock harder	36	42	
Sandstone soft brown	42	48	
Lava porous gray & brown	48	55	
Broken lava red & gray	55	83	
Lava harder red & gray	83	132	
Basalt gray hard	132	160	
Lava red medium	160	185	
Lava red with white pumice	185	203	
Multi-colored lava brown red gray		310	
Broken lava red brown	310	375	
Rock medium brown	375	392	
Rock gray with some pumice	392	400	
Rock gray and white	400	435	
Rock brown gray white	435	442	
Basalt gray hard	442	461	
AMENDED LOG			
CONTINUED			

Date started 9-18-91 Completed 10-11-91

(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 well construction standards. Maps used and information reported above are true to my best knowledge and belief.

Signed [Signature] WWC Number 135  
 Date 3-8-93

(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 well construction standards. This report is true to the best of my knowledge and belief.

Signed [Signature] WWC Number 22  
 Date 3-8-93

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

*Desc 1083*

**RECEIVED**

*5/12E/2200*

MAR - 9 1993 MAR 24 1993

Page 2 of 2

(START CARD) # 34267

WATER RESOURCES DEPARTMENT  
 SALEM, OREGON

(1) OWNER: Well Number \_\_\_\_\_  
 Name Eagle Ridge Development  
 Address P.O. Box 1215  
 City Redmond State OR Zip 97756

(2) TYPE OF WORK:  
 New Well  Deepen  Recondition  Abandon

(3) DRILL METHOD:  
 Rotary Air  Rotary Mud  Cable  
 Other \_\_\_\_\_

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

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

HOLE Diameter	From	To	Material	SEAL		Amount sacks or pounds
				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:  
 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

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: \_\_\_\_\_

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
Andacite gray brown hard	461	608	
Cinders or pumice	608	615	
quartzite andacite weathered	615	720	
Brown andacite weathered	720	735	
Brown andacite hard	735	765	
Andacite red gray with pumice softer	765	787	
Andacite hard	787	790	
Andacite softer	790	800	

Date started 9-18-91 Completed 10-11-91  
 (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 well construction standards. Materials used and information reported above are true to my best knowledge and belief.

Signed *[Signature]* WWC Number 1358  
 Date 3-8-93

(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 well construction standards. This report is true to the best of my knowledge and belief.

Signed *[Signature]* WWC Number 723  
 Date 3-8-93

51680 MAY 19 1998

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T.D.# L22893

STATE OF OREGON WATER RESOURCES DEPT. WATER WELL REPORT SALEM, OREGON (as required by ORS 537.785)

JUL - 7 1998

(START CARD) # 89252

(1) OWNER: Name Eagle Crest Well Number: 8 Address po box 1215 City Redmond State OR Zip 97756

(9) LOCATION OF WELL by legal description: County Oregon Township 15S N or S. Range 12E E or W, WM. Section 14 NW 1/4 SW 1/4 Tax Lot 1542-1546 Lot Block Subdivision Street Address of Well (or nearest address) cline falls hwy

(2) TYPE OF WORK: [X] New Well [ ] Deepen [ ] Recondition [ ] Abandon

(3) DRILL METHOD [X] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Other

(4) PROPOSED USE: [ ] Domestic [X] Community [ ] Industrial [ ] Irrigation [ ] Thermal [ ] Injection [ ] Other

(5) BORE HOLE CONSTRUCTION: special Construction approval Yes No Depth of Completed Well 600 ft. Explosives used [ ] [X] Type Amount

Table with columns: HOLE Diameter, SEAL From, To, Material, Amount sacks or pounds. Rows include cement, bent, and cement with various diameters and depths.

How was seal placed: Method [ ] A [ ] B [X] C [ ] D [ ] E [ ] Other chips poured Backfill placed from ft. to ft. Material Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER: Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded. Rows for Casing and Liner.

(7) PERFORATIONS/SCREENS: [X] Perforations Method factory - swift [ ] Screens Type Material

Table for perforations with columns: From, To, Slot size, Number, Diameter, Tele/pipe size, Casing, Liner. Includes handwritten values like 390, 600, 1/2 x 3, 8000, 14, and date AUG 2 2010.

(8) WELL TESTS: Minimum testing time is 1 hour [ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian Yield gal/min Drawdown Drill stem at Time

Temperature of water 52 degrees 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

(10) STATIC WATER LEVEL: 312 ft. below land surface. Date 4-22-98 Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES: Table with columns: From, To, Estimated Flow Rate, SWL. Row: 350 to 600, Estimated Flow Rate, SWL 312.

(12) WELL LOG: Table with columns: Material, From, To, SWL. Lists various geological layers like soil, basalt grey fractured, lava red hard, etc.

Date started 3-19-98 Completed 4-22-98

(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 well construction standards. 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. WWC Number 1358 Signed Date 5/4/98

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

MAY 27 1998

FILE # L22493

desc 57680 pg 2 of 2

WATER RESOURCES DEPT

(START CARD) # 89252

(1) OWNER:

Name **Eagle Crest**  
Address **PO Box 1215**  
City **Redmond** State **OR** Zip **97756**

Well Number: **8**

SALEM, OREGON OF WELL by legal description:

County **Duches** Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Township **15S** Nor S. Range **12E** E or W. WM. \_\_\_\_\_  
Section **14** NW 1/4 SW 1/4  
Tax Lot **15-12-150** Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
Street Address of Well (or nearest address) \_\_\_\_\_  
**Cline Falls Hwy**

(2) TYPE OF WORK:

New Well  Deepen  Recondition  Abandon

(3) DRILL METHOD:

Rotary Air  Rotary Mud  Cable  
 Other \_\_\_\_\_

(4) PROPOSED USE:

Domestic  Community  Industrial  Irrigation  
 Thermal  Injection  Other \_\_\_\_\_

(5) BORE HOLE CONSTRUCTION:

Special Construction approval Yes No Depth of Completed Well \_\_\_\_\_ ft.  
 Yes  No  
Explosives used  Type \_\_\_\_\_ Amount \_\_\_\_\_

HOLE		SEAL		Amount 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:

Perforations Method \_\_\_\_\_  
 Screens Type \_\_\_\_\_ Material \_\_\_\_\_

From	To	Slot size	Number	Diameter	Tel./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  Bailer  Air  Flowing Artesian

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: \_\_\_\_\_

(10) STATIC WATER LEVEL:

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

(11) WATER BEARING ZONES:

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:

Ground elevation \_\_\_\_\_

Material	From	To	SWL
<b>basalt grey and brown hard</b>	<b>567</b>	<b>580</b>	
<b>basalt soft</b>	<b>580</b>	<b>590</b>	
<b>basalt hard</b>	<b>590</b>	<b>600</b>	

AUG 3 2010

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 well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number \_\_\_\_\_

Signed \_\_\_\_\_ Date \_\_\_\_\_

(bonded) Water Well Constructor Certification:

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

WWC Number **1255**

Signed \_\_\_\_\_ Date **04/1/98**

DESC 54485

WELL ID # L 50204  
START CARD # 111252

STATE OF OREGON  
WATER SUPPLY WELL REPORT

(as required by ORS 537.765)

(1) OWNER:

Well Number: #9

Name: Eagle Crest Resort  
Address: 920 SW Emkay DR Suite C-100  
City: Redmond State: OR Zip: 97702

(2) TYPE OF WORK:

(repair/

New Well  Deepening  Alteration/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 735"

Explosives Used  Yes  No Type --- Amount ---

HOLE			SEAL			sacks or pounds
Diameter	From	To	Material	From	To	
23	0	20	Cement	0	20	34 Sacks
17	20	736	---	---	---	---

How was seal placed: Method  A  B  C  D  E

Other \_\_\_\_\_

Backfill placed from \_\_\_\_\_ to \_\_\_\_\_ Material \_\_\_\_\_  
from \_\_\_\_\_ to \_\_\_\_\_ Material \_\_\_\_\_

Gravel placed from 635 to 736 Size of gravel #6-9sand

(6) CASING/LINER:

CASING:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
18"	+1	20	.375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14"	20	630	.375	<input checked="" 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"/>

LINER:

8"	663	671		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8"	731	736	.250	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of Shoe(s): \_\_\_\_\_

(7) PERFORATIONS/SCREENS:

Perforations Method: \_\_\_\_\_

Screen Type: \_\_\_\_\_ Material: SS  
Slot \_\_\_\_\_ Tele/pipe \_\_\_\_\_

From	To	Size	No.	Diameter	size	Casing	Liner
628	663	.20		8"	P	<input type="checkbox"/>	<input checked="" type="checkbox"/>
671	731	.20		8"	P	<input type="checkbox"/>	<input checked="" 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 gpm Drawdown Drill Stem at Time

					1 hr.
500'			610		8

Temperature of water 51 Depth Artesian Flow Found ---

Was a water analysis done? --- By whom: ---

Did any strata contain water not suitable for intended use? (explain)

Depth of Strata: ---

(9) LOCATION OF WELL by legal description:

County: Deschutes Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Township: 15 S Range: 12 E

Section: 16 NE 1/4 NE 1/4

Tax Lot: 4800 Lot: N/A Block: \_\_\_\_\_ Subdivision: \_\_\_\_\_

Street Address of Well (or nearest address) \_\_\_\_\_

Eagle Crest Dr

(10) STATIC WATER LEVEL:

508 Ft. below land surface Date 11/15/01

Artesian pressure \_\_\_\_\_ lb. per sq. in. Date \_\_\_\_\_

(11) WATER BEARING ZONES:

Depth at which water was first found

From	To	Est. Flow Rate	SWL
630	660	200+	508
671	730	500+	508

(12) WELL LOG:

Ground Elevation: \_\_\_\_\_

Material	From	To	SWL
Top Soil	0	2	
Basalt Gray Vic	2	8	
Basalt Gray	8	34	
Cinders Black	34	40	
Cinders Loose Cir	40	62	
Basalt Gray	62	78	
Basalt Multi Color Loose Circulation	78	136	
Basalt Gray	136	148	
Basalt Brown with Red & Black Soft	148	242	
Gray Pumi with Multi Color Soft	242	267	
Brownish Gray Rock some Gray	267		
Pumi Soft		302	
Gray Rock Soft Med	302	324	
Multi Color Rock Most Brown	324	380	
Brownish Red Rock w/Pumi Med Soft	380	435	
Basalt Black & Gray Hard	435	540	
Multi Color Rock Red & Brown Mostly	540	602	
SandStone	602	626	508
Basalt Med-Hard Gray	626	671	
Cinders Red Green	671	736	508

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WATER RESOURCES DEPT.  
SALEM, OREGON

Date Started: 5/21/01

Completed: 11/15/01

(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 Don Donly WWC Number 1487  
Date 11/20/01

(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 \_\_\_\_\_ WWC Number 723  
Date 11/20/01

**APPENDIX D**