Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE # # G-17594

ROUTED TO: Water Rights - Jeana

TOWNSHIP/
RANGE-SECTION: 7S/3E - 25

CONDITIONS ATTACHED?: [X] yes [ ] no

REMARKS OR FURTHER INSTRUCTIONS:

Reviewer: Mike Zwart

WATER RESOURCES DEPARTMENT

MEMO December 13, 2012

TO: Application G- 17594

FROM: GW: Mike Zwart
(Reviewer's Name)

SUBJECT: **Scenic Waterway Interference Evaluation**

_____YES
_✓_NO
The source of appropriation is within or above a Scenic Waterway

_____YES
_✓_NO
Use the Scenic Waterway condition (Condition 7J)

_____Per ORS 390.835, the Ground Water Section is **able** to calculate ground water interference with surface water that contributes to a Scenic Waterway. The calculated interference is distributed below.

_____Per ORS 390.835, the Ground Water Section is **unable** to calculate ground water interference with surface water that contributes to a scenic waterway; **therefore, the Department is unable to find that there is a preponderance of evidence that the proposed use will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway.**

DISTRIBUTION OF INTERFERENCE

Calculate the percentage of consumptive use by month and fill in the table below. If interference cannot be calculated, per criteria in 390.835, do not fill in the table but check the "unable" option above, thus informing Water Rights that the Department is unable to make a Preponderance of Evidence finding.

Exercise of this permit is calculated to reduce monthly flows in _____Scenic Waterway by the following amounts expressed as a proportion of the consumptive use by which surface water flow is reduced.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO: Water Rights Section Date **December 13, 2012**

FROM: Ground Water/Hydrology Section **Michael Zwart**
Reviewer's Name

SUBJECT: Application G- **17594** Supersedes review of **N/A**
Date of Review(s)

PUBLIC INTEREST PRESUMPTION; GROUNDWATER

OAR 690-310-130 (1) *The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.* Department staff review ground water applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

A. GENERAL INFORMATION: Applicant's Name: **Delbert Stephens** County: **Baker**

A1. Applicant(s) seek(s) **6.7** cfs from **three** well(s) in the **Powder** Basin, _____ subbasin Quad Map: **Rock Creek**

A2. Proposed use: **Irrigation, 400 ac. (Sup.)** Seasonality: **March 1 to October 31**

A3. Well and aquifer data **(attach and number logs for existing wells; mark proposed wells as such under logid)**:

Well	Logid	Applicant's Well #	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36
1	**Proposed**	**1**	**Alluvium**	**6.7**	**7S/38E-25 SW-NW**	**1470' S, 105' E fr NW cor S 25**
2	**Proposed**	**2**	**Alluvium**	**6.7**	**7S/38E-25 NW-NW**	**1065' S, 90' E fr NW cor S 25**
3	**Proposed**	**3**	**Alluvium**	**6.7**	**7S/38E-25 NE-NW**	**575' S, 1415' E fr NW cor S 25**
4						
5						

* Alluvium, CRB, Bedrock

Well	Well Elev ft msl	First Water ft bls	SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	**3524**				**300**	**0-20**	**0-300**	**None**	**100-300**			
2	**3520**				**300**	**0-20**	**0-300**	**None**	**100-300**			
3	**3492**				**300**	**0-20**	**0-300**	**None**	**100-300**			

Use data from application for proposed wells.

A4. **Comments: Application is requesting greater than the customary rate. Nearby well logs indicate the SWL will likely be about 15-40 feet. I do not believe that it is possible to produce 6.7 cfs from a single well in this area. Also, it is not clear that a pump of this capacity will fit in the 10 to 12-inch casing being proposed.**

A5. ☒ **Provisions of the Powder** Basin rules relative to the development, classification and/or management of ground water hydraulically connected to surface water ☐ **are**, *or* ☒ **are not**, activated by this application. (Not all basin rules contain such provisions.)
Comments: _____

A6. ☐ **Well(s) #** _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
Name of administrative area: _____
Comments: _____

Application G-17594 continued Date: December 13, 2012

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

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

a. ☐ **is** over appropriated, ☐ **is not** over appropriated, *or* ☒ **cannot be determined to be** over appropriated during any period of the proposed use. * This finding is limited to the ground water portion of the over-appropriation determination as prescribed in OAR 690-310-130;

b. ☐ **will not** *or* ☐ **will** likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the ground water portion of the injury determination as prescribed in OAR 690-310-130;

c. ☐ **will not** *or* ☐ **will** likely to be available within the capacity of the ground water resource; or

d. ☒ **will, if properly conditioned,** avoid injury to existing ground water rights or to the ground water resource:
   i. ☒ The permit should contain condition #(s) **7N, 7T, 7K (100 feet, shallower water-bearing zones)**;
   ii. ☐ The permit should be conditioned as indicated in item 2 below.
   iii. ☐ The permit should contain special condition(s) as indicated in item 3 below;

B2. a. ☐ **Condition** to allow ground water production from no deeper than _____ ft. below land surface;

b. ☐ **Condition** to allow ground water production from no shallower than _____ ft. below land surface;

c. ☐ **Condition** to allow ground water production only from the _____ ground water reservoir between approximately_____ ft. and_____ ft. below land surface;

d. ☐ **Well reconstruction** is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Ground Water Section.

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

B3. **Ground water availability remarks:** **The nearest SOW (#3) indicates that water levels are relatively stable.**

The application proposes to perforate or screen intervals no shallower than 100 feet. The recommended well construction condition will ensure that no shallow water-bearing zones are actually developed. Some local well logs report the top of a fairly thick clay bed at 91 to 93 feet below land surface

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

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

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
All	**Interbedded sand, gravel, clay and shale**	☒	☐
	Likely Qtg of Brooks, 1976	☐	☐
		☐	☐
		☐	☐
		☐	☐

Basis for aquifer confinement evaluation: **Based on nearby well logs, the aquifer appears confined to semiconfined. Regionally, the aquifer is probably poorly confined or unconfined.**

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

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected? YES	NO	ASSUMED	Potential for Subst. Interfer. Assumed? YES	NO
1	**1**	**Big Muddy Creek**	**3495±**	**3530**	**2300**	☐	☒	☐	☐	☒
1	**2**	**Little Muddy Creek**	**3495±**	**3500**	**4600**	☐	☒	☐	☐	☒
2	**1**	**Big Muddy Creek**	**3495±**	**3525**	**2100**	☐	☒	☐	☐	☒
2	**2**	**Little Muddy Creek**	**3495±**	**3500**	**4200**	☐	☒	☐	☐	☒
3	**1**	**Big Muddy Creek**	**3495±**	**3488**	**2000**	☐	☒	☐	☐	☒
3	**2**	**Little Muddy Creek**	**3495±**	**3475**	**4100**	☐	☒	☐	☐	☒
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: **The proposed well construction and likely depth to the water-bearing zone suggest that hydraulic connection is poor with the nearest stream reaches. Downstream reaches greater than one mile are likely to be in better hydraulic connection, where the creeks descend from the older terrace deposits into the interbedded or overlying Quaternary alluvial deposits.**

Water Availability Basin the well(s) are located within: **Powder R > Snake R above unnamed stream (72191).**

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

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

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

	SW #		Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐

Comments: This section does not apply.

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

Non-Distributed Wells

Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													

Distributed Wells

Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													

(A) = Total Interf.												
(B) = 80 % Nat. Q												
(C) = 1 % Nat. Q												
(D) = (A) > (C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(E) = (A / B) x 100	%	%	%	%	%	%	%	%	%	%	%	%

(A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed. as CFS; (C) = 1% of calculated natural flow at 80% exceed. as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage.

Basis for impact evaluation: This section applies, however, it is not possible to determine the likely distance(s) hydraulic connection occurs with the more distant reaches of surface water sources. Potential interference is likely diffuse and distributed between both Big and Little Muddy Creeks, the Powder River, and possibly with Sand Creek and Rock Creek. Hydraulic connection with the mainstem Powder River is likely poor due to the effect of Hutchinson Hill, a bedrock outcrop. It is judged to be inappropriate to use a simple analytical model (Hunt/Wozniak) to calculate the potential interference.

C4b. **690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.**

C5. ☐ **If properly conditioned**, the surface water source(s) can be adequately protected from interference, and/or ground water use under this permit can be regulated if it is found to substantially interfere with surface water:

i. ☐ The permit should contain condition #(s)_____;

ii. ☐ The permit should contain special condition(s) as indicated in "Remarks" below;

C6. **SW / GW Remarks and Conditions**

References Used: Local well logs; local recent reviews; Brooks, Geology of the Oregon Part of the Baker 1° by 2° Quad, 1976. OWRD Ground Water Report #6. Ground Water Resources of Baker Valley, Baker County, Oregon, by Frederick D. Trauger.

D. WELL CONSTRUCTION, OAR 690-200

D1. **Well #:** _____ **Logid:** _____

D2. **THE WELL does not meet current well construction standards based upon:**
- a. ☐ review of the well log;
- b. ☐ field inspection by _____;
- c. ☐ report of CWRE _____;
- d. ☐ other: (specify) _____

D3. **THE WELL construction deficiency**:
- a. ☐ constitutes a health threat under Division 200 rules;
- b. ☐ commingles water from more than one ground water reservoir;
- c. ☐ permits the loss of artesian head;
- d. ☐ permits the de-watering of one or more ground water reservoirs;
- e. ☐ other: (specify) _____

D4. **THE WELL construction deficiency is described as follows:** _____

D5. **THE WELL**
- a. ☐ **was,** *or* ☐ **was not** constructed according to the standards in effect at the time of original construction or most recent modification.
- b. ☐ I don't know if it met standards at the time of construction.

D6. ☐ **Route to the Enforcement Section.** I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Enforcement Section and the Ground Water Section.

THIS SECTION TO BE COMPLETED BY ENFORCEMENT PERSONNEL

D7. ☐ Well construction deficiency has been corrected by the following actions: _____

_____ _____, 200____.
(Enforcement Section Signature)

D8. ☐ **Route to Water Rights Section (attach well reconstruction logs to this page).**

WATER WELL REPORT
STATE OF OREGON

Baker 49

RECEIVED
JAN 26 1984
WATER RESOURCES DEPT.
SALEM, OREGON

State Well No. 7S/38E-23dc

State Permit No.

(1) OWNER:
Name Garnet MAXWELL
Address
City Haines State ORE

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

(3) TYPE OF WELL:
Rotary Air [X] Driven [ ]
Rotary Mud [ ] Dug [ ]
[ ] Bored [ ]

(4) PROPOSED USE (check):
Domestic [X] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]
Thermal: [ ] Withdrawal [ ] Reinjection [ ]

(5) CASING INSTALLED:
Steel [X] Plastic [ ]
Threaded [ ] Welded [X]
6" Diam. from +1 ft. to 95 ft. Gauge .250
" Diam. from ft. to ft. Gauge

LINER INSTALLED:
6" Diam. from 95 ft. to 115 ft. Gauge .188

(6) PERFORATIONS:
Perforated? [X] Yes [ ] No
Type of perforator used Slotted Pipe
Size of perforations 1/4 in. by 4 in.
12 perforations from 105 ft. to 115 ft.
perforations from ft. to ft.
perforations from ft. to ft.

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

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
a pump test made? [ ] Yes [X] No If yes, by whom?
eld: gal./min. with ft. drawdown after hrs.
" " " "
Air test 20 gal./min. with drill stem at 120 ft. 1 hrs.
Bailer test gal./min. with ft. drawdown after hrs.
sian flow g.p.m.
emperature of water 53 Depth artesian flow encountered ft.

(9) CONSTRUCTION:
Special standards: Yes [ ] No [ ]
Well seal—Material used CEMENT
Well sealed from land surface to 20 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 17 sacks
How was cement grout placed? GROUT PUMP

Was pump installed? NO Type HP Depth ft.
Was a drive shoe used? [X] Yes [ ] No Plugs Size: location ft.
Did any strata contain unusable water? [ ] Yes [X] No
Type of Water? depth of strata
Method of sealing strata off
Was well gravel packed? [ ] Yes [X] No Size of gravel:
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:
County Baker Driller's well number
SE ¼ SE ¼ Section 23 T. 7 R. 38E W.M.
Tax Lot # Lot Blk Subdivision
Address at well location:

(11) WATER LEVEL: Completed well.
Depth at which water was first found 80 ft.
Static level 12 ft. below land surface. Date 10-26-83
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:
Diameter of well below casing 6
Depth drilled 120 ft. Depth of completed well 115 ft.

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

MATERIAL	From	To	SWL
Top soil	0	3	
CLAY Brown	3	14	
CLAY Yellow	14	80	
Gravel SMALL	80	93	
CLAY yellow	93	115	
SAND Med - W-B	115	120	12

Work started 10-19 1983 Completed 10-26 1983
Date well drilling machine moved off of well 10-26 1983

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] (Drilling Machine Operator) Date 10-26 1983
Drilling Machine Operator's License No.

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name (Person, firm or corporation) (Type or print)
Address SUMPTER STAGE BAKER ORE
[Signed] (Water Well Contractor)
Contractor's License No. 591 Date 10-26 1983

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310

SP*12658-690

WATER WELL REPORT
STATE OF OREGON

Baker 51

RECEIVED
JAN 26 1984
WATER RESOURCES DEPT.
SALEM, OREGON

State Well No. 7S/38E-24dc

State Permit No.

(1) OWNER:
Name DENNIS AXNESS
Address RT 1
City HAINES State OR

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

(3) TYPE OF WELL:
Rotary Air [X] Driven [ ]
Rotary Mud [ ] Dug [ ]
Cable [ ] Bored [ ]

(4) PROPOSED USE (check):
Domestic [X] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]
Thermal: [ ] Withdrawal [ ] Reinjection [ ]

(5) CASING INSTALLED:
Steel Threaded [X] Plastic Welded [X]
6 " Diam. from +1 ft. to 90 ft. Gauge 250
" Diam. from ft. to ft. Gauge

LINER INSTALLED:
" Diam. from ft. to ft. Gauge

(6) PERFORATIONS:
Perforated? [X] Yes [ ] No
Type of perforator used Slotted Pipe
Size of perforations 3/16 in. by 6 in.
12 perforations from 75 ft. to 90 ft.
perforations from ft. to ft.
perforations from ft. to ft.

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

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? [ ] Yes [X] No If yes, by whom?
gal/min. with ft. drawdown after hrs.
Air test 30 gal./min. with drill stem at 90 ft. 2 hrs.
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m.
Temperature of water 52 Depth artesian flow encountered ft.

(9) CONSTRUCTION:
Special standards: Yes [ ] No [X]
Well seal—Material used Cement
Well sealed from land surface to 18 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 12 sacks
How was cement grout placed? GROUT PUMP

Was pump installed? NO Type HP Depth ft.
Was a drive shoe used? [X] Yes [ ] No Plugs Size: location ft.
Did any strata contain unusable water? [ ] Yes [X] No
Type of Water? depth of strata
Method of sealing strata off
Was well gravel packed? [ ] Yes [X] No Size of gravel:
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:
County BAKER Driller's well number
SW ¼ SE ¼ Section 24 T. 7 R. 38E W.M.
Tax Lot # Lot Blk Subdivision
Address at well location: HAINES

(11) WATER LEVEL: Completed well.
Depth at which water was first found 25 ft.
Static level 12 ft. below land surface. Date 10-17-82
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:
Diameter of well below casing 6
Depth drilled 100 ft. Depth of completed well 100 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
TOP SOIL	0	4	
CLAY BROWN	4	25	
SAND GRAVEL & CLAY	25	85	
SAND MED MW-13	85	91	12
CLAY YELLOW	91	100	

Work started 10-11 1982 Completed 10-13 1982
Date well drilling machine moved off of well 10-14 1982

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] (Drilling Machine Operator) Date 10-14, 1982
Drilling Machine Operator's License No.

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name D. DENNIS D. BILLINGS (Person, firm or corporation) (Type or print)
Address SUMPTER VALLEY BAKER, ORE
[Signed] (Water Well Contractor)
Contractor's License No. Date 10-14, 1982

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date of well completion.

SP*12658-880

Application G-17594, Delbert Stephens