Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE # # G-17628

ROUTED TO: Water Rights

TOWNSHIP/
RANGE-SECTION: 7S/39E - 4, 8 + 17

CONDITIONS ATTACHED?: [4 yes [ ] no

REMARKS OR FURTHER INSTRUCTIONS:

Reviewer: Mike Zwart

WATER RESOURCES DEPARTMENT

MEMO May 7, 2013

TO: **Application G-** 17628

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 **May 7, 2013**

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

SUBJECT: Application G- **17628** Supersedes review of _____
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: **Larry Wogman** County: **Baker**

A1. Applicant(s) seek(s) **7.0** cfs from **three** well(s) in the **Powder** Basin, _____ subbasin Quad Map: **Haines**

A2. Proposed use: **Irrigation, 1525.45 ac P & S** 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**	**S-4 Well**	**Bedrock**	**2.5**	**7S/39E-4 NW-SE**	**1650' N, 1431' W fr SE cor S 4**
2	**Proposed**	**S-8 Well**	**Bedrock**	**2.0**	**7S/39E-8 SW-NW**	**2580' S, 312' E fr NW cor S 8**
3	**Proposed**	**S-17 Well**	**Bedrock**	**2.5**	**7S/39E-17 NW-SE**	**1439' N, 1700' W fr SE cor S 17***
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	**3430**				**375**	**0-200**	**0-375**		**200-375**			
2	**3382**				**300**	**0-120**	**0-300**		**130-300**			
3	**3402**				**300**	**0-120**	**0-300**		**130-300**			

Use data from application for proposed wells.

A4. **Comments: Proposed well #2 in Sec. 8 is located near BAKE 84 (copy of well log attached). This well is not completed in bedrock at a total depth of 190 feet. Therefore, the proposed construction here (seal to only 120 feet, perforations as shallow as 130 feet) does not appear to be sufficient to develop the bedrock aquifer. The recommended permit condition will ensure that the targeted bedrock aquifer is actually developed. *In a telephone conversation with Peggy Browne, it was determined that the metes and bounds for this well were transposed on the application map. The correct location is as noted above.**

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: _____

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 prescribein 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**;
   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: Special Condition: The wells shall be cased and sealed a minimum of five feet into competent bedrock.**

The few nearby observation wells are non-current. The water levels have been reasonably stable during the period of record. I have some greater concern about the potential for interference with a senior groundwater right (Permit G-16687) by proposed well #1 in Sec. 4. This proposed well is within 300 feet of one of the two proposed well locations for file G-17198. The permittee has constructed two wells in 2012 (copies of well logs attached). One of them (BAKE 52211) appears likely to be the permitted well. It is recommended that the applicant be informed of this senior right and that he give some consideration to relocating this proposed well a greater distance from this existing well.

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
1,3	**Bedrock mapped as KJi, plutonic rocks**	☒	☐
2	**Bedrock mapped as TrPv, volcanic and sedimentary rocks**	☒	☐
		☐	☐
		☐	☐
		☐	☐

Basis for aquifer confinement evaluation: **The wells penetrating bedrock typically have water levels well above the depth that groundwater was first encountered.**

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**	**Powder River**	**3330±**	**3273**	**8900**	☐	☒	☐	☐	☒
2	**1**	**Powder River**	**3300±**	**3295**	**12800**	☐	☒	☐	☐	☒
2	**2**	**Trib. Little Muddy Creek**	**3300±**	**3375**	**900**	☐	☒	☐	☐	☒
3	**1**	**Powder River**	**3300±**	**3292**	**5550**	☐	☒	☐	☐	☒
3	**2**	**Trib. Little Muddy Creek**	**3300±**	**3338**	**1800**	☐	☒	☐	☐	☒
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: **Hydraulic connection with the older plutonic and volcanic rocks is indirect at best with alluvial deposits, which overlie and are adjacent to these older rocks. The alluvial deposits are in good hydraulic connection with the river and tributaries.**

Water Availability Basin the well(s) are located within: **POWDER R > SNAKE R - AB UNN STR (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: ____

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:

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: **Geology of the Oregon Part of the Baker 1° by 2° Quad, Brooks, 1976; OWRD Ground Water Report #6; Ground Water Resources of Baker Valley, Baker County, Oregon, by Frederick D. Trauger; Ground Water of Baker Valley, Baker County, Oregon, by Lystrom, Nees and Hampton, 1967; past personal communications with DOGAMI Regional Geologist and other OWRD staff; nearby recent reviews.**

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).**

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

RECEIVED FEB 27 1975 STATE ENGINEER SALEM, OREGON

Bake 84

WATER WELL REPORT

NC

STATE OF OREGON

(Please type or print)

(Do not write above this line)

RECEIVED MAY 7 1974 STATE ENGINEER SALEM, OREGON

State Well No. 7S/39E-8bc

State Permit No. G7050

form Brand # 543184

(1) OWNER:

Name Leland J Hellberg

Address Rt 1 Lowden Wash 99342

(2) TYPE OF WORK (check):

New Well ■ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary ☐ Driven ☐
Cable ■ Jetted ☐
Dug ☐ Bored ☐

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ■ Test Well ☐ Other ☐

CASING INSTALLED: Threaded ☐ Welded ■

18" Diam. from 0 ft. to 190 ft. Gage .025"
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

PERFORATIONS: Perforated? ☒ Yes ☐ No.

Type of perforator used Milling

Size of perforations 3/16 in. by 2½ in.

perforations from 30 ft. to 190 ft.
perforations from ft. to ft.
perforations from ft. to ft.

(7) SCREENS: Well screen installed? ☐ Yes ■ No

Manufacturer's Name

Type Model No.

Diam. Slot size Set from ft. to ft.

Diam. Slot size Set from ft. to ft.

(8) WELL TESTS: Drawdown is amount water level is lowered below static level

Was a pump test made? ☐ Yes ■ No If yes, by whom?

Yield: gal./min. with ft. drawdown after hrs.

Courtright Irrigation, LaGrande, Ore. "
in Test 1500 GPM " 4 "

Bailer test gal./min. with ft. drawdown after hrs.

Artesian flow g.p.m.

Temperature of water 54° Depth artesian flow encountered ft.

(9) CONSTRUCTION:

Well seal—Material used Neat Cement

Well sealed from land surface to 20 ft.

Diameter of well bore to bottom of seal 24 in.

Diameter of well bore below seal 18 in.

Number of sacks of cement used in well seal 18 sacks

Number of sacks of bentonite used in well seal sacks

Brand name of bentonite

Number of pounds of bentonite per 100 gallons of water lbs./100 gals.

Was a drive shoe used? ■ Yes ☐ No Plugs 18' Size: location 190 ft.

Did any strata contain unusable water? ■ Yes ☒ No

Type of water? depth of strata

Method of sealing strata off

Was well gravel packed? ☒ Yes ☐ No Size of gravel: ¼ & ⅜

Gravel placed from 20 ft. to 190 ft.

(10) LOCATION OF WELL:

County Baker Driller's well number

SW ¼ NW ¼ Section 8 T. 7 S R. ~~54 E~~ 39 E.W.M.

Bearing and distance from section or subdivision corner 180' NE of SW corner of SW¼ of NW¼ of Sec 8

(11) WATER LEVEL: Completed well.

Depth at which water was first found 7 ft.

Static level 6 ft. below land surface. Date 3/11/74

Artesian pressure lbs. per square inch. Date

(12) WELL LOG: Diameter of well below casing

Depth drilled 190 ft. Depth of completed well 190 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
Soil Clay	0	6	
Sand	6	7	6
Clay	7	34	"
Sand	34	38	"
Clay	38	50	"
Sand Gravel [illegible] ½"	50	68	"
Clay	68	90	"
Sand	90	102	"
Clay	102	122	"
Sand	122	132	"
Blue Clay	132	150	"
Sand	150	162	"
Clay	162	180	"
Sand	180	190	"

Work started Mar 8 1974 Completed Apr 19 1974

Date well drilling machine moved off of well 19

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] Leland Hellberg (Drilling Machine Operator) Date 5/6, 1974

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 Leland J Hellberg (Person, firm or corporation) (Type or print)

Address Rt 1 Lowden Wash 99342

[Signed] Leland Hellberg (Water Well Contractor)

Contractor's License No. Date , 19

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

BAKE 52211
6/1/2012

WELL I.D. LABEL# L 107025
START CARD # 207686
ORIGINAL LOG #

(1) LAND OWNER

Owner Well I.D.
First Name Last Name
Company WILLIAMS LAND LLC
Address 48857 HWY 30
City NORTH POWDER State OR Zip 97867

(2) TYPE OF WORK

☒ New Well ☐ Deepening ☐ Conversion ☐ Alteration (complete 2a & 10) ☐ Abandonment(complete 5a)

(2a) PRE-ALTERATION

	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
Casing:									

	Material	From	To	Amt	sacks/lbs
Seal:					

(3) DRILL METHOD

☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Reverse Rotary ☐ Other

(4) PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Community
☐ Industrial/ Commericial ☐ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION

Special Standard ☐ (Attach copy)
Depth of Completed Well 375.00 ft.

BORE HOLE

Dia	From	To
14	0	21
12	21	298
10	298	375

SEAL

Material	From	To	Amt	sacks/ lbs
Bentonite	0	21	16	S
Cement	278	298	10	S

How was seal placed: Method ☐ A ☒ B ☐ C ☐ D ☐ E
☒ Other POURED BENTONITE
Backfill placed from ft. to ft. Material
Filter pack from ft. to ft. Material Size
Explosives used: ☐ Yes Type Amount

(5a) ABANDONMENT USING UNHYDRATED BENTONITE

Proposed Amount Actual Amount

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
●	○	10	☒	2	297	.250	●	○	☒	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐

Shoe ☐ Inside ☒ Outside ☐ Other Location of shoe(s) 297
Temp casing ☒ Yes Dia 14 From 0 To 8

(7) PERFORATIONS/SCREENS

Perforations Method
Screens Type Material

Perf/ Screen	Casing/ Screen Liner	Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size

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

○ Pump ○ Bailer ● Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
1000		370	3

Temperature 52 °F Lab analysis ☐ Yes By
Water quality concerns? ☐ Yes (describe below) TDS amount

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)

County BAKER Twp 7.00 S N/S Range 39.00 E E/W WM
Sec 4 NE 1/4 of the SE 1/4 Tax Lot 701
Tax Map Number Lot
Lat ° ' " or DMS or DD
Long ° ' " or DMS or DD
○ Street address of well ● Nearest address
48857 HWY 30 NORTH POWDER, OR 97867

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Pre-Alteration				
Completed Well	5/2/2012			98

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 321.00

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
5/2/2012	321	375	1000			98

(11) WELL LOG

Ground Elevation

Material	From	To
Top Soil	0	3
Brown clay with broken rock	3	244
Consolidated Rock black	244	321
Fractured Black Rock	321	372
Granite	372	375

Date Started 4/2/2012 Complete 5/2/2012

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, 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.

License Number Date

Signed

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, 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.

License Number 1640 Date 6/1/2012

Signed JEFF STOFFEL (E-filed)
Contact Info (optional) Jeff Stoffel

ORIGINAL - WATER RESOURCES DEPARTMENT

THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version:

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

BAKE 52207
3/26/2012

WELL I.D. LABEL# L 107021
START CARD # 207683
ORIGINAL LOG #

(1) LAND OWNER
Owner Well I.D.
First Name Last Name
Company WILLIAMAS LAND LLC
Address 48857 HWY 30
City NORTH POWDER State OR Zip 97867

(2) TYPE OF WORK
☒ New Well ☐ Deepening ☐ Conversion ☐ Alteration (complete 2a & 10) ☐ Abandonment(complete 5a)

(2a) PRE-ALTERATION
	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
Casing:						◯	◯	☐	☐

	Material	From	To	Amt	sacks/lbs
Seal:					

(3) DRILL METHOD
☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Reverse Rotary ☐ Other

(4) PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Community
☐ Industrial/ Commericial ☒ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION
Special Standard ☐ (Attach copy)
Depth of Completed Well 394.00 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs
12	0	25	Bentonite	0	25	18	S
8	25	394					

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☒ Other POURED BENTONITE
Backfill placed from ft. to ft. Material
Filter pack from ft. to ft. Material Size
Explosives used: ☐ Yes Type Amount

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
Proposed Amount Actual Amount

(6) CASING/LINER
Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
◉	◯	8	☒	2	57	250	◉	◯	☒	☐
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐

Shoe ☐ Inside ☒ Outside ☐ Other Location of shoe(s) 57
Temp casing ☒ Yes Dia 12 From 0 To 6

(7) PERFORATIONS/SCREENS
Perforations Method
Screens Type Material

Perf/ Screen	Casing/ Screen Liner	Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour
◯ Pump ◯ Bailer ◉ Air ◯ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
75		390	1

Temperature 54 °F Lab analysis ☐ Yes By
Water quality concerns? ☐ Yes (describe below) TDS amount

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)
County BAKER Twp 7.00 S N/S Range 39.00 E E/W WM
Sec 4 NE 1/4 of the SE 1/4 Tax Lot 701
Tax Map Number Lot
Lat ° ' " or DMS or DD
Long ° ' " or DMS or DD
◯ Street address of well ◉ Nearest address
48857 HWY 30 NORTH POWDER, OR 97867

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Pre-Alteration				
Completed Well	2/26/2012			71

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 310.00

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
2/25/2012	310	394	75			71

(11) WELL LOG
Ground Elevation

Material	From	To
TOP SOIL	0	4
BROWN CLAY WITH BROKEN ROCK	4	240
BLACK BASALT	240	308
FRACTURED BLACK BASALT	308	394

Date Started 2/19/2012 Complete 2/26/2012

(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, 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.
License Number Date
Signed

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, 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.
License Number 1640 Date 3/26/2012
Signed JEFF STOFFEL (E-filed)
Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version:

Application G-17528, Larry Wogman