Water Right Conditions Tracking Slip

Groundwater/Hydrology Section
FILE ## G-17536
ROUTED TO: Water Rights - Jeana
RANGE-SECTION: 135/29E- 26
CONDITIONS ATTACHED? [1] yes [] no
REMARKS OR FURTHER INSTRUCTIONS:
Reviewer: Mike Zwart

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO:		Wate	r Rights S	ection				Dat	te	March 8	<u>8, 2012</u>		
FROM	ſ :	Grou	nd Water/	Hydrology	Section	Mich	ael Zwari	t					
SUBJI	ECT:		ication G-		_	Rev	riewer's Name Ipersedes r	_					
ocb,	201.	rippi	ication G	17550		50	ipersedes i	eview oi		_	Date of Re	view(s)	
OAR 6 welfare to deter	90-310-1 , safety a mine wh	130 (1) and heal ether th	The Depart th as descri e presumpti	<i>ibed in ORS</i> on is establ	oresume the 537.525. Ished. OAI	at a proposi Departmen R 690-310-	sed grounds at staff revie 140 allows	water use will w ground wat the proposed d agency pol	er ap	plications e modified	under OA I or condi	R 690-3 tioned to	10-140 meet
A. <u>GE</u>	NERAL	INFO	DRMATIC	<u>DN</u> : A	pplicant's	Name:	Homer a	nd Jeannett	e Ha	rrison (County:_	Grant	
A 1.	Applica	ant(s) se	ek(s) 0.9 7	7 cfs from	m two	well	(s) in the	John Day					Basin,
		Dry Cr						uad Map: V		iger Butte	;		
A2. A3.				gation, 77.			sonality:	March 1 t	o Oci	tober 31		-!-1\.	
A3.	wenan	ia aquii						ark proposed	well				, -
Well	Logid Applicant's Well #			oposed quifer*	Propos Rate(c	I	Location I/R-S QQ-Q)			n, metes a N, 1200' E			
1 2	GRAN 50081 2 Proposed 1			elly clay	0.111 0.862		29E-23 NW-			N, 2360' W			
3	гторс	seu	1 Basalt(?)		0.802	3 135/	13S/29E-23 NW-SE			1670' N, 2000' W fr SE cor S 23			
5								-					
	um, CRB,	Bedrock	<u> </u>										
Well	Well Elev ft msl	First Water	f SWL	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)		rforations Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	2810	107	65	10/09/96	154	0-135	0-135	None	Noi		50	(11)	Air
2	2860		+		300±	?	300±	?	?				
A4. well log "bould	Comme	ents: <u>A</u> area wl	nat the dep e" at the bo	oroposes a th to basal	t (or other s formation	bedrock)	is likely to	er for propose be. The dee n? (Tm)) app	pest l	ocal well l	ogs repo	rt a hard	
A5. ⊠	manage (Not all	ment of basin r	ules contain	ter hydrauli such provi	cally conne sions.)	ected to sur	rface water	ules relative t	are	not, activa	ated by th		
A6. □	Name o	f admin	istrative are	ea:				ap(s) an aquif				rative res	triction.

Version: 08/15/2003

ation	G- <u>1/536</u> continued Date: <u>March 8, 2012</u>
<u>ROUI</u>	ND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070
Bas	sed upon available data, I have determined that ground water* for the proposed use:
a.	is over appropriated, is not over appropriated, or is cannot be determined to be over appropriated during a 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 find 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)
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 120 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;
	issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Gro Water Section. Describe injury —as related to water availability—that is likely to occur without well reconstruction (interference value) senior water rights, not within the capacity of the resource, etc):
a c	ound water availability remarks:The location is somewhat remote and no nearby state observation wells developperable aquifer. Due to the complexity of the local geology, the two relatively nearby reviews disclosed that ferent aquifers were proposed for development at those locations.
	
_	
	<u> </u>

Application G-17536	continued	Date: March 8, 2012

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	Likely the Rattlesnake Formation (QTr)		
2	Rattlesnake Formation or underlying Mascall Formation		

Basis for aquifer confinement evaluation: <u>The proposed well may need to be deeper than 300 feet to penetrate below</u> the Rattlesnake Formation. Local wells that develop these aquifers all appear to have water levels above the level where grondwater 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	Potentia Subst. Int Assume YES	erfer.
1	1	Dry Creek	2745	2805	56			\boxtimes
1	2	John Day River	2745	2730	2500			
2	1	Dry Creek	2600±	2805	415			\boxtimes
2	2	John Day River	2600±	2735	2600			\boxtimes
		•						

Basis for aquifer hydraulic connection evaluation: The aquifer developed by well #1 could be in indirect hydraulic connection with the alluvium within the John Day River valley, given the head relationship. However, the complex local geology makes a positive finding of hydraulic connection problematic.

Water Availability Basin the well(s) are located within: John Day R > Columbia R ab S Fk John Day R (212).

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 < 1/4 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?
				_						
									_	
									_	
							-			

Version: 08/15/2003

	2012	8	March	Date:
--	------	---	-------	-------

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-D	istributed	Wells											
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
	ence CFS												
		_					_						
	uted Wel												
Well	SW#_	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q			,										
Interfere	ence CFS												
		%	%	-%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfere	ence CFS	_											
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS			_									
Interfere	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS						_						
	ence CFS												
(A) = To	tal Interf.												
	% Nat. Q												
	% Nat. Q		_			_							
(D) = (A		٧′	~· <u>~</u>	√'	· ·	v'	· ·	¥	-/	y'	√′	<u>√</u>	ν'
$(\mathbf{E}) = (\mathbf{A}$	/ 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.

olication G- <u>17536</u> continued	Date: March 8, 2012
Basis for impact evaluation:	
Dasis for impact evaluation.	
	-
. 690-09-040 (5) (b) The potential to impair or detrimenta Rights Section.	ally affect the public interest is to be determined by the W
 ✓ If properly conditioned, the surface water source(s) can be a under this permit can be regulated if it is found to substantial i. ✓ The permit should contain condition #(s) 7J 	ly interfere with surface water:
ii. The permit should contain special condition(s) as	s indicated in "Remarks" below;
SW / GW Remarks and Conditions	
References Used: Local well logs; local reviews; Geologic M	lap of the Canyon City Quadrangle, Northeastern Orego
by Brown and Thayer, 1966; Preliminary Geologic Map of the	e MIL Vernon Quaurangie, Oregon, by Inayer, 1956.

App	licat	ion G- <u>175</u>	36	continued		,	Date: March 8, 2	012	
D. <u>Y</u>	WEI	LL CONS	STRUCTION.	OAR 690-200					
D1.		Well #: _	11	Lo	ogid: <u>GRAN 500</u>	81			
D2.		a.	eview of the wel ield inspection b eport of CWRE	l log; y	construction standar				;
D3.		a.	commingles wate permits the loss of permits the de-water	th threat under Dir r from more than of artesian head; atering of one or n	ivision 200 rules; one ground water res	servoirs;			
D4.		THE WE	LL construction	n deficiency is de	escribed as follows:	I have no is	ssues with the cons	struction of thi	is well.
D5.		THE WE	LL a.		s not constructed according to most recent		andards in effect at	the time of	
			b. 🛚	I don't know if	it met standards at th	e time of const	truction.		
D6.					ommend withholding by the Enforcement S				onstruction
TH	IS S	ECTION	TO BE COM	IPLETED BY	ENFORCEMENT	PERSONN	EL		
D7.		Well cons	truction deficien	cy has been corre	ected by the following	g actions:			
			E-formation of Co	tion Cinnatural					, 200
			Enforcement Sec						
D8.		Route to	Water Rights S	Section (attach w	ell reconstruction le	gs to this pag	e).		

WATER RESOURCES DEPARTMENT

MEM	(O						March 8, 200 2					
TO: FROM:		Application G-17536 GW: Mike Zwie. + (Reviewer's Name)										
SUBJECT: Scenic Waterway Interference Evaluation												
_ <i>\</i> /	YES The source of appropriation is within or above a Scenic Waterway NO											
	YES Use the Scenic Waterway condition (Condition 7J) NO											
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 inScenic Waterway by the following amounts expressed as a proportion of the consumptive use by												
which surface water flow is reduced.												
lan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

GRAN RECEIVED WELL I.D. # LOBS35

STATE OF OREGON

OCT 3 1 1996

WATER SUPPLY WELL REPORT (START CARD) #_76270 (as required by ORS 537.765) Instructions for completing this report are on the last page of WATER RESOURCES DEPT. SALEM. OREGON (9) LOCATION OF WELL by legal description: Well Number County Grant Latitude Longitude N or S Range_ E or W. WM. City Mt. Vernon Block (2) TYPE OF WORK Subdivision ☐ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment Street Address of Well (or nearest address) 4 miles west of Mt. Vernon on (3) DRILL METHOD: (10) STATIC WATER LEVEL: A Kotary Air Rotary Mud Cable Date 10-9-96 Other ft. below land surface. (4) PROPOSED USE: lb. per square inch. Artesian pressure Date (11) WATER BEARING ZONES: Industrial Domestic Community ☐ Irrigation Thermal Other Injection Livestock (5) BORE HOLE CONSTRUCTION: Depth at which water was first found ____ Special Construction approval Yes No Depth of Completed Well 154 ft. Explosives used Yes No Type _ Amount From Estimated Flow Rate HOLE SEAL. 107 From Material Sacks or pounds Diameter From To Bentonite 0 32 sacks (12) WELL LOG: How was seal placed: Method Ground Elevation ben tonite Diher OKA SWL Backfill placed from Material Material From То Gravel placed from ft. to Size of gravel soil with boulders (6) CASING/LINER: ith gravel 7/ Welded 107 To Gauge Steel Plastic Diameter 107 154 clay wit ИR 4 H \Box Liner: Final location of shoe(s) (7) PERFORATIONS/SCREENS: Perforations Method Material Screens Турс Telc/pipe Casing Lines size Number Diameter П 10-9-96 Completed (8) WELLTESTS: Minimum testing time is 1 hour (unbonded) Water Well Constructor Certification: Flowing Air Bailer Artesian I certify that the work I performed on the construction, alteration, or abandonment Pump 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 Drill stem at Time Yleid gal/min Drawdown 50 1514 1 hr. and belief. WWC Number Signed (bonded) Water Well Constructor Certification: Temperature of water Depth Artesian Flow Found Yes By whom I accept responsibility for the construction, alteration, or abandonment work Was a water analysis done? performed on this well during the construction dates reported above. All work Did any strata contain water not suitable for intended use? 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. Salty Muddy Odor Colored Other Depth of strata:

Signed 4

