ť0:		Water 1	Rights S	ection				Dat	e <u>July 31,</u>	2003		
FROM	•	Ground	l Water/	Hydrology	Section	Mich	ael Zwart					
							ewer's Name					
SUBJE	CT:	Applica	ation G-	16026		Su	persedes re	view of	N/A			
										Date of Re	vicw(s)	
OAR 69 welfare, to deter the pres	90-310-1 safety at mine whe	30 (1) <i>Th</i> <i>nd health</i> ether the p criteria. T	e Depart as descr presumpt This revi	<i>ibed in ORS</i> ion is establ ew is based	<i>537.525.</i> I ished. OAF upon avai	at a propos Department & 690-310- lable infor	ed groundwa t staff review 140 allows th mation and	ground wat ne proposed agency pol	ensure the press er applications in use be modified icies in place at Janet L. Stauf	under OA l or condi t the time	R 690-31 tioned to	0-140 meet
		075	5×			1.00						
A1.												
	I	<u>_ower D</u>	<u>eschutes</u>			subb	asin Qu	ad Map: <u> </u>	ufur West			
A2.	Propose	d use:	Irr	igation, 50	acres (P)	Seas	onality:	March 1 (o October 31			
A3.	Well an	d aquifer	data (ati	tach and nu	mber logs	for existin	g wells; ma	rk propose	l wells as such	under log	gid):	
Well	Logid Proposed Proposed Aquifer* Rate(cfs)					1	Location	Le	ocation, metes a			ole:
1	WASC	51141		CRB	0.624		<u>R-S QQ-Q)</u> E 32 SW-N	w	2250' N, 1200' 790' E fr V			
2												
3												
4												
5												
* Alluvii	ım, CRB,	Bedrock										
Well	Well Elev ft msl	First Water ft bls	SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval	Casing Intervals	Liner Intervals	Perforations Or Screens	Well Yield	Draw Down	Test Type
1	1675	564	200	4/13/03	584	0-18	0-23.5	None	None	200+	380	Air
				<u> </u>								
				[
										<u> </u>		
Use data	from app	ication fo	r drodosec	l d wells.						1		
A4. <u>into the</u>	Comme	nts: <u>Well</u> nav allov	<u>penetra</u> v commi	tes about 2' ngling, sinc	<u>e the SWL</u>	is up with		<u>s Formatio</u>	ve basalt. The n. Well WASC			

A5. Provisions of the <u>Deschutes</u> Basin rules relative to the development, classification and/or management of ground water hydraulically connected to surface water \square are, or \boxtimes are not, activated by this application. (Not all basin rules contain such provisions.) Comments: ____

A6. 🔲 Well(s) # ___

Well(s) # _____, ____, ____, ____, ____, tap(s) an aquifer limited by an administrative restriction. Name of administrative area: ______, _____, _____, tap(s) an aquifer limited by an administrative restriction.

Comments: _____

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

- **B**1. Based 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 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;
 - will not or will likely be available in the amounts requested without injury to prior water rights. * This finding Ь. is limited to the ground water portion of the injury determination as prescribed in OAR 690-310-130;
 - will not or will likely to be available within the capacity of the ground water resource; or c.
 - 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) 7E
 - The permit should be conditioned as indicated in item 2 below. ii.
 - iii. The permit should contain special condition(s) as indicated in item 3 below;

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

- **Condition** to allow ground water production from no shallower than ______ ft. below land surface; b.
- c. ground
- 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:

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	Basalt of the Columbia River Basalt Group		
ſ			

Basis for aquifer confinement evaluation: ____ Deep water-bearing zones within this aquifer are typically confined in this

<u>area.</u>

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.

Weli	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	Fifteen Mile Creek	1475	1540	1700		
1	2	Eightmile Creek	1475	1200	8250		

Basis for aquifer hydraulic connection evaluation: ____ The deep water-bearing zone is below the bed of the creeks.

Identify the Water Availability Sub-Basin the well(s) are located within:

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?
							;			

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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.

S\ #		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 sec	tion 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), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

Well	istributed SW#	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	<i>%</i>	- mpi %	- 141 dy - 160 dy		501	Mug %	3cp %	<u>%</u>	NOV	1)CC %
-		%	%	- %				%	70		<i>%</i>	70 %	70
Wall O	as CFS				,,,	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		70	<i></i>	10	70	70	70
	ence CFS												
Interier	ence CFS								,				
Distri	buted Well	s								÷			
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
	ence CFS												
	1	%	%	%	%	%	%	%	%		70	%	%
Well O	as CFS												
	ence CFS												
Interfer		%	%	%			%	%	%			~	
W-II 0			70	70	70	7/0	70	%0		%	%	%	%
-	as CFS												
Interfer	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfer	ence CFS											_	
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfer	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfer	ence CFS												

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(A) = Total Interf.												
(B) = 80 % Nat. Q							i –					
(C) = 1 % Nat. Q												
(D) = (A) / (B)	%	%	%	%	%	%	%	%	%	%	%	%
(E) = (A) / (C)	%	%	%	%	%	%	%	%	%	%	- %	%

(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) = total interference divided by 80% flow as a percentage (e.g., 22%, not 0.22), (E) = total interference divided by 1% flow as percentage. Basis for impact evaluation: ______ This section does not apply.

- 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. D The permit should contain condition #(s)_
 - ii. The permit should contain special condition(s) as indicated in "Remarks" below;

C6. SW / GW Remarks

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Date: July 31, 2003

D. <u>W</u>	ELL CONSTRUCTION, OAR 690-200
D1.	Well #:1 Logid:WASC 51141
D2.	THE WELL does not meet current well construction standards based upon: a.
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)
<u>occurs</u> portio Dalles	THE WELL construction deficiency is described as follows: <u>The well develops basalt of the Columbia River Basalt</u> o under confined conditions. The casing and seal do not extend into the basalt. The "sandstone" of the Dalles Formation is to a depth of 273 feet, but is not reported as water bearing. The static water level of 200 feet is within the exposed lower n of the Dalles Formation in the well bore. Commingling may occur by allowing basalt ground water to move into the Formation, or the reverse. However, if the Dalles Formation is non water bearing, commingling may not occur. I defer forcement staff to make the call as to whether a deficiency exists. See nearby log WASC 50985 for deeper casing/seal.
D5.	 THE WELL a. a. was, or a 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. Route to the Enforcement Section. I recommend withholding issuance of the permit until evidence of well reconstruction
D0. K	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).

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Water Resources Department

MEMO	July 31 - 2003
то	Application G-16026
FROM	GW: Michael Zwart (Reviewer's Name)
SUBJECT	Scenic Waterway Interference Evaluation
Yes	The source of appropriation is within or above a Scenic Waterway.
Yes	Use the Scenic Waterway condition (Condition 7J).

PREPONDERANCE OF EVIDENCE FINDING: (Check box only if statement is true)

At this time the Department is unable to find that there is a preponderance of evidence that the proposed use of ground water will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife.

FLOW REDUCTION: (To be filled out only if <u>Preponderance of Evidence</u> box is not checked)

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	N ov	Dec
_				AR		·		1			



ABANI	DON :	0			
RECONDITIO		õ			
REPAI		Ō			
CONVERS	ION:	0			
DEEPENII	NGS:	2			
NEW CONSTRU	UCT:	11			
COMMUNITY	USE:	0			
DOMESTIC	USE:	7			
INDUSTRIAL	USE:	0			
INJECTION	USE:	0			
IRRIGATION	USE:	8			
THERMAL	USE:	0			
LIVESTOCK	USE:	0			
-	*****	****	* * * * * * * * * * *	* * * * * * * * * * * *	******

PERMITTED WELLS WITHIN 1 MILE OF APPLICATION G 16026

\$RECNO	APP	LICATION	PEI	RMIT	CLAIM		LOC-QQ	USE CODE
1		0	G	4130		0	1.00513.00E30NWNE	IS
1		0	S	33396		0	1.00S13.00E30NWNE	IR
1	S	6904	S	4319		0	1.00S13.00E30NWNE	IR
1	G	4378	G	4130		0	1.00S13.00E30NWNE	IS
1	S	44644	S	33396		0	1.00S13.00E30NWNE	IR
2	G	6143	G	5820		0	1.00S13.00E30SWSE	IS
3							1.00S13.00E32SWNW	
4	G	1903	G	1741		0	1.00S13.00E31SWSE	IS
4	G	1903	G	1741		0	1.00S13.00E31SWSE	IR
4	G	2839	G	2647		0	1.00S13.00E31SWSE	IR
4	G	2839	G	2647		0	1.00S13.00E31SWSE	IR
4		0	S	1041		0	1.00S13.00E31SWSE	IR
4		0	S	1041		0	1.00S13.00E31SWSE	IR
4	S	54189	S	40564		0	1.00S13.00E31SWSE	IR
4	G	7348	G	6778		0	1.00S13.00E31SWSE	IS
4	G	9785	G	8959		0	1.00S13.00E31SWSE	IS
5	G	11483	G	10615		0	1.00S13.00E32SESE	IS
5	G	12273	G	11691		0	1.00S13.00E32SESE	IR
6	G	15299	G	15094		0	2.00S13.00E 3SWNW	IR
6	G	15299	G	15094		0	2.00S13.00E 3SWNW	TC
7	G	15299	G	15094		0	2.00S13.00E 4NWSE	TC
7	G	15299	G	15094		0	2.00S13.00E 4NWSE	IR
7	G	1104	G	951		0	2.00S13.00E 4NWSE	IR
7	G	2541	G	2352		0	2.00S13.00E 4NWSE	IR

NO CONDITIONED WELLS WITHIN 1 MILE OF APPLICATION G 16026

APPLICATION G 16026 FALLS WITHIN THESE QUAD(S)

DUFUR WEST

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