

Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE # # G-17036

ROUTED TO: WR's , Brook G.

TOWNSHIP/

RANGE-SECTION: T13S/R31E-10

CONDITIONS ATTACHED?: ☒ yes ☐ no

REMARKS OR FURTHER INSTRUCTIONS:

Reviewer: Don W. Allen

MEMO

Sept 4, 2008

FROM: GW: Donna Miller
(Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

✓ YES

· NO

8 YES

NO

8 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.**

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.

[illegible]

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PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO: Water Rights Section Date 9/4/2008

FROM: Ground Water/Hydrology Section Donn Miller
Reviewer's Name

SUBJECT: Application G- 17036 Supersedes review of none
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: Jeffrey and Barbara Riggs County: Grant

- A1. Applicant(s) seek(s) 1.25 cfs from one well(s) in the John Day Basin,
Upper Mainstem subbasin Quad Map: John Day
- A2. Proposed use: irrigation of 115 acres 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	To be built	1	CRB	1.25	T13S/R31E-S10 NE NE	20'S, 620'W fr NE cor S 10
2						
3						
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	3985	~200	~250	---	300+/-	~200 to 300+/-	600' max +/-	N/A	unknown	---	---	-

Use data from application for proposed wells.

A4. **Comments:** The proposed well construction is variable. However, it is clear that the applicant wishes to develop the basalt and is prepared to go to ~600' to do so. The applicant seems to expect a depth like 300' total. The watermaster assisted the applicant and formulated the well specs for the application. I am using the variability in the proposed construction to help get to yes per Division 9 rule constraints. As conditioned, I estimate that the SWL will be about 300 feet.

- A5. ☐ Provisions of the John Day 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: the proposed development will not obtain water from the alluvium which is an administrative constraint
- A6. ☐ Well(s) # _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
Name of administrative area: _____
Comments: NA

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:
- ☒ The permit should contain condition #(s) 7C, March and 7F;
 - ☐ The permit should be conditioned as indicated in item 2 below.
 - ☒ 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: Essentially little is known about the ground water resources in the Columbia River Basalt at this location. The best source would be the applicants' own domestic well but they don't know its depth or SWL. That well is about 1000' away. Other well logs aren't much help but do indicate the potential for low yields at depths of a few hundred feet. It appears to me that the applicants will be exploring for water at this location and the desired yield is unlikely.

There are springs nearby on the topo map that are the perennial sources for both Little Beech Creek and Davis Creek. I am estimating the SWL for the proposed well from those common levels at the spring clusters. I believe that those features are significant.

7K WELL CONSTRUCTION

The well shall be continuously cased and continuously sealed to a minimum depth of 350 feet below land surface. The well may not be completed in such a manner that it allows ground water to be developed from less than 350 feet below land surface. If during well construction, it becomes apparent that the well can be constructed to eliminate interference with nearby shallow wells or hydraulically connected streams in a manner other than specified in this permit, the permittee can contact the Department Hydrogeologist for this permit or the Ground Water/Hydrology Section Manager to request approval of such construction. The request shall be in writing, and shall include a rough well log and a proposed construction design for approval by the Department. The request can be approved only if it is received and reviewed prior to placement of any permanent casing and sealing material. If the well is constructed first and then the request made, requested modification will not be approved. The new well depth and construction specifications will be incorporated into any certificate issued for this permit.

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	CRB	☒	☐
		☐	☐
		☐	☐
		☐	☐
		☐	☐

Basis for aquifer confinement evaluation: deep bedrock and basalt usually have confined aquifers

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?			Potential for Subst. Interfer. Assumed?	
						YES	NO	ASSUMED	YES	NO
1	1	Davis Creek	3820	3960	1400+	☐	☒	☐	☐	☒
1	2	Trib of Little Beech Creek	3820	3920	1700+	☐	☒	☐	☐	☒
1	3	Parker Spring	3960	3940	1100	☐	☒	☐	☐	☒
1	4	Big Springs of L Beech Cr	3820	3830	2900	☐	☒	☐	☐	☒
1	5	Davis Creek Springs	3820	3820	2900	☐	☒	☐	☐	☒
1	6	Little Beech @ 1+ mile	3730	3730	5280+	☐	☒	☐	☐	☒
1	7	Davis @ 1+ mile	3670	3670	5280+	☐	☒	☐	☐	☒
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: The presence of perennial surface water occurs in this dissected upland environment at the level of 3820' to 3830' at the springs. Well construction must case off those sources. Connection beyond a mile is probably avoided if development is below 350 feet. That is rather conventional in the CRB. The spring clusters are the perennial sources for Little Beech Creek and Davis Creek.

Water Availability Basin the well(s) are located within: Beech Creek and Above Beech Creek

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?
1	1	☐	☐	MF212B	30 to 118	☐	61 to 364	☐		☐
1	2	☐	☐	MF203A	8 to 44	☐	1.37 to 35.8	☐		☐
1	3	☐	☐	none	none	☐	---	☐		☐
1	4	☐	☐	MF203A	8 to 44	☐	1.37 to 35.8	☐		☐
1	5	☐	☐	MF212B	30 to 118	☐	61 to 364	☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐

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: NA

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
NA		%	%	%	%	%	%	%	%	%	%	%	%
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: NA

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 Little is known about the resource that the applicant seeks to develop much less the interaction with surface water. It is reasonable to assume that ground water flows to the nearby springs and creeks eventually. The exact point/areas of discharge are unclear but again it is reasonable to look at the major spring clusters that are within a mile and create the perennial base flow of the creeks. These creeks, Little Beech and Davis, are in different water availability basins.

Within the variability of well construction found in the application, I have reviewed the application based on a deep well construction. I conclude that the gw/sw analysis can only be favorable by doing that. Basically, I am thinking that a well must be at least 600 feet total depth and develop water deeper than 350 feet below land surface. This would seem to avoid connection within a mile of either creek and its major springs. The construction concept seeks to develop water that has a maximum head of about 3635' amsl. There is still the possibility that such a well could interfere with the creeks in unfavorable ways.

Protecting the springs is very important. I am assuming that avoiding the connection with the creeks within a mile will allow us to deem the resulting environment as not hydraulically connected. Ultimately, I think that there is a connection at some undefined locations on the creeks. This is consistent with the way that reviewers characterize the CRB and its confined aquifer nature, allowing a separation with surface water.

References Used: topo, logs, file G-17036, USGS Mineral Investigations Field Studies Map MF 51

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: NA 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) _____

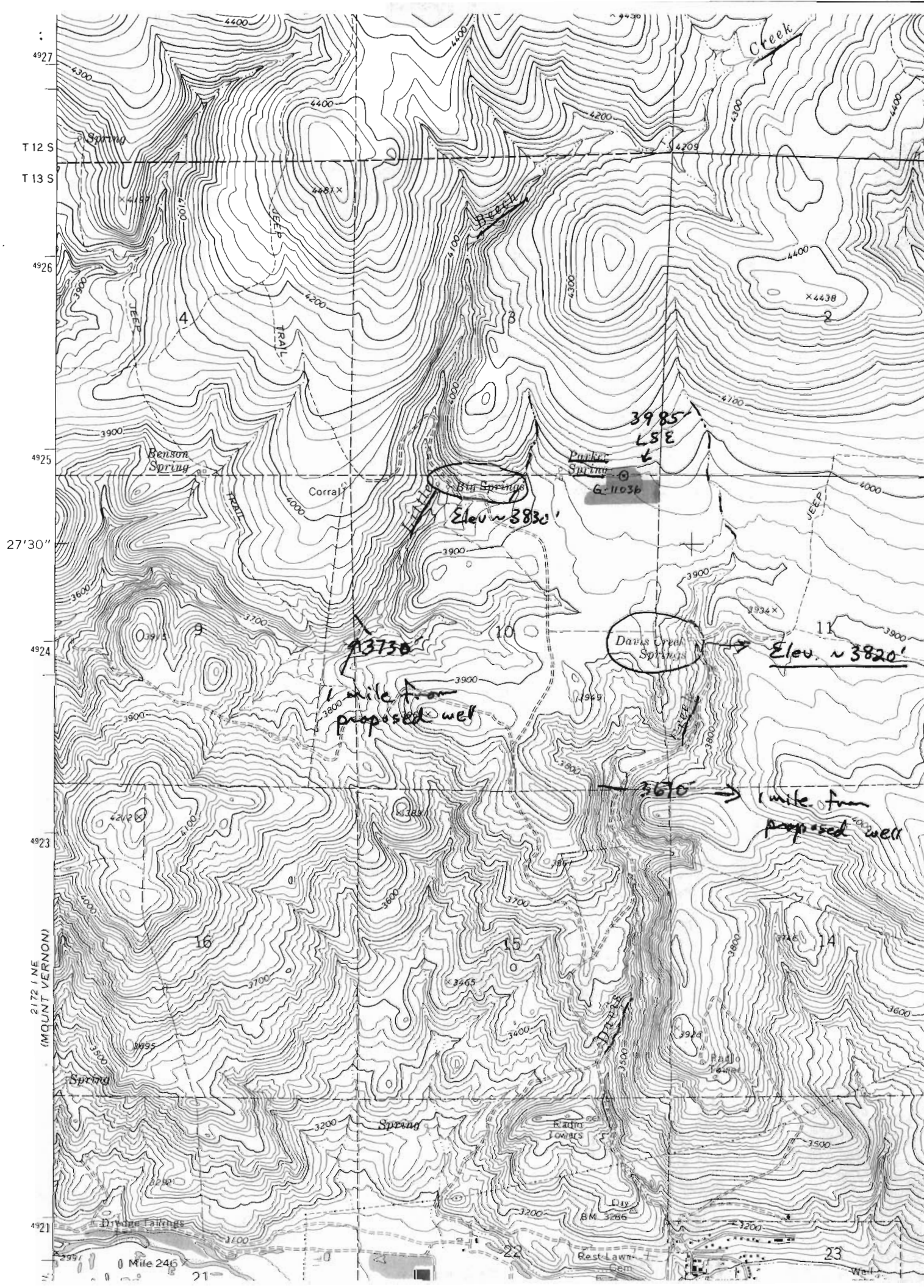
D3. THE WELL construction deficiency:

- 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 Availability Analysis

BEECH CR> JOHN DAY R- AT MOUTH
JOHN DAY BASIN
Water Availability as of 7/14/2008

WAB per
website location
interactive

Watershed ID #: 203
Date: 7/14/2008

Exceedance Level: 80%
Time: 2:10 PM

Water Availability

Select any Watershed for Details

Nesting Order	Watershed ID #	Stream Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	209	JOHN DAY R> COLUMBIA R- AT MOUTH	Yes	No	No	Yes	Yes	No	No	No	No	No	No	No
2	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	No	No	Yes	Yes	No	No	No	No	No	No	No
3	211	JOHN DAY R> COLUMBIA R- AB N FK JOHN DAY R	No	No	No	Yes	Yes	No	No	No	No	No	No	No
4	212	JOHN DAY R> COLUMBIA R- AB S FK JOHN DAY R	No	No	No	Yes	Yes	No	No	No	No	No	No	No
5	203	BEECH CR> JOHN DAY R- AT MOUTH	No	No	No	No	No	No	No	No	No	No	No	No

Limiting Watersheds

Monthly Streamflows in Cubic Feet per Second
Storage at 50% Exceedance in Acre-Feet

Month	Limiting Watershed ID #	Stream Name	Water Available?	Net Water Available
Jan	203	BEECH CR> JOHN DAY R- AT MOUTH	No	-25.10
Feb	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-162.00
Mar	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-598.00
Apr	203	BEECH CR> JOHN DAY R- AT MOUTH	No	-9.69
May	203	BEECH CR> JOHN DAY R- AT MOUTH	No	-18.30
Jun	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-993.00
Jul	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-315.00
Aug	209	JOHN DAY R> COLUMBIA R- AT MOUTH	No	-451.00
Sep	209	JOHN DAY R> COLUMBIA R- AT MOUTH	No	-439.00
Oct	209	JOHN DAY R> COLUMBIA R- AT MOUTH	No	-275.00
Nov	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-128.00
Dec	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-72.50
Storage Acre-Feet at 50%	203	BEECH CR> JOHN DAY R- AT MOUTH	Yes	2,630.00

Detailed Reports for Watershed ID #209

JOHN DAY R> COLUMBIA R- AT MOUTH
JOHN DAY BASIN
Water Availability as of 7/14/2008

Watershed ID #: 209
Date: 7/14/2008

Exceedance Level: 80%
Time: 2:10 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	626.00	20.10	606.00	1,710.00	500.00	48.20
Feb	1,050.00	27.90	1,020.00	3,320.00	1,000.00	-95.60
Mar	1,680.00	49.10	1,630.00	3,580.00	2,000.00	-533.00
Apr	2,920.00	157.00	2,760.00	7,150.00	2,000.00	489.00
May	3,020.00	319.00	2,700.00	6,900.00	2,000.00	456.00
Jun	1,440.00	293.00	1,150.00	1,440.00	2,000.00	-921.00
Jul	470.00	269.00	201.00	0.00	500.00	-299.00
Aug	246.00	197.00	49.10	0.00	500.00	-451.00
Sep	194.00	133.00	60.50	0.00	500.00	-439.00
Oct	283.00	57.80	225.00	0.00	500.00	-275.00
Nov	393.00	14.80	378.00	91.70	500.00	-122.00
Dec	513.00	18.00	495.00	1,090.00	500.00	-41.40
Storage Acre-Feet at 50%	1,370,000.00	94,400.00	1,270,000.00	1,520,000.00	753,000.00	521,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	7.79	0.00	6.00	0.72	0.57	2.53	2.51	0.00	20.10
Feb	15.60	0.00	6.00	0.72	0.57	2.53	2.51	0.00	27.90
Mar	22.20	14.60	6.00	0.72	0.57	2.53	2.51	0.00	49.10
Apr	30.50	114.00	6.00	0.72	0.57	2.53	2.51	0.00	157.00
May	30.60	276.00	6.00	0.72	0.57	2.53	2.50	0.00	319.00
Jun	16.20	260.00	11.30	0.72	0.57	2.53	2.50	0.00	293.00
Jul	4.19	248.00	11.30	0.72	0.57	2.53	1.75	0.00	269.00
Aug	1.99	178.00	11.30	0.72	0.57	2.53	1.75	0.00	197.00
Sep	1.59	115.00	11.30	0.72	0.57	2.53	1.75	0.00	133.00
Oct	2.22	44.00	6.00	0.72	0.57	2.53	1.76	0.00	57.80
Nov	3.27	0.00	6.00	0.72	0.57	2.53	1.76	0.00	14.80
Dec	5.70	0.00	6.00	0.72	0.57	2.53	2.51	0.00	18.00

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

Application #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RN80601A	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69
RN80602A	5.29	10.30	8.65	19.60	19.90	2.90	0.00	0.00	0.00	0.00	0.00	3.06
RN80603A	8.99	21.70	51.00	95.10	87.00	37.50	0.00	0.00	0.00	0.00	0.00	4.62
RN80604A	23.50	47.10	45.40	104.00	106.00	14.40	0.00	0.00	0.00	0.00	0.00	16.60
RN80605A	10.30	22.20	34.50	19.20	3.54	14.40	0.00	0.00	0.00	0.00	0.00	5.45
Total	57.60	117.70	164.05	273.50	245.94	82.10	0.00	0.00	0.00	0.00	0.00	36.42

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF209A	CERTIFICATE	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
SY90605A	SWW	500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00
Maximum		500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00

Detailed Reports for Watershed ID #210

JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN
JOHN DAY BASIN
Water Availability as of 7/14/2008

Watershed ID #: 210

Exceedance Level: 80%

Date: 7/14/2008

Time: 2:10 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second
Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	556.00	15.70	540.00	1,670.00	500.00	-7.10
Feb	953.00	19.70	933.00	3,240.00	1,000.00	-162.00
Mar	1,560.00	28.90	1,530.00	3,460.00	2,000.00	-598.00
Apr	2,710.00	102.00	2,610.00	7,080.00	2,000.00	354.00
May	2,860.00	195.00	2,660.00	6,890.00	2,000.00	423.00
Jun	1,270.00	195.00	1,080.00	1,440.00	2,000.00	-993.00
Jul	420.00	235.00	185.00	0.00	500.00	-315.00
Aug	242.00	182.00	60.20	0.00	500.00	-440.00
Sep	203.00	124.00	79.40	0.00	500.00	-421.00
Oct	280.00	52.80	227.00	0.00	500.00	-273.00
Nov	384.00	12.30	372.00	83.10	500.00	-128.00
Dec	473.00	14.50	458.00	1,070.00	500.00	-72.50
Storage Acre-Feet at 50%	1,250,000.00	71,400.00	1,180,000.00	1,500,000.00	753,000.00	437,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	4.73	0.00	5.02	0.72	0.57	2.34	2.38	0.00	15.70
Feb	8.69	0.00	5.02	0.72	0.57	2.34	2.38	0.00	19.70
Mar	12.30	5.57	5.02	0.72	0.57	2.34	2.38	0.00	28.90
Apr	19.90	71.30	5.02	0.72	0.57	2.34	2.38	0.00	102.00
May	20.10	164.00	5.02	0.72	0.57	2.34	2.37	0.00	195.00
Jun	10.00	170.00	9.33	0.72	0.57	2.34	2.37	0.00	195.00
Jul	2.64	218.00	9.33	0.72	0.57	2.34	1.62	0.00	235.00
Aug	1.26	166.00	9.33	0.72	0.57	2.34	1.62	0.00	182.00
Sep	1.05	108.00	9.33	0.72	0.57	2.34	1.62	0.00	124.00
Oct	1.56	41.00	5.02	0.72	0.57	2.34	1.63	0.00	52.80
Nov	2.05	0.00	5.02	0.72	0.57	2.34	1.63	0.00	12.30
Dec	3.51	0.00	5.02	0.72	0.57	2.34	2.38	0.00	14.50

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

Application #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RN80601A	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69
RN80602A	5.29	10.30	8.65	19.60	19.90	2.90	0.00	0.00	0.00	0.00	0.00	3.06
RN80603A	8.99	21.70	51.00	95.10	87.00	37.50	0.00	0.00	0.00	0.00	0.00	4.62
RN80604A	23.50	47.10	45.40	104.00	106.00	14.40	0.00	0.00	0.00	0.00	0.00	16.60
Total	47.30	95.50	129.55	254.30	242.40	67.70	0.00	0.00	0.00	0.00	0.00	30.97

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF210A	CERTIFICATE	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
SY90604A	SWW	500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00
Maximum		500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00

Detailed Reports for Watershed ID #211

JOHN DAY R> COLUMBIA R- AB N FK JOHN DAY R
JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 211

Exceedance Level: 80%

Date: 7/14/2008

Time: 2:10 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	263.00	10.70	252.00	302.00	120.00	123.00
Feb	388.00	13.40	375.00	519.00	160.00	198.00
Mar	546.00	16.00	530.00	777.00	160.00	345.00
Apr	813.00	54.30	759.00	1,130.00	160.00	563.00
May	717.00	96.70	620.00	934.00	160.00	431.00
Jun	387.00	122.00	265.00	409.00	120.00	132.00
Jul	181.00	168.00	13.20	0.00	60.00	-46.80
Aug	118.00	131.00	-13.50	0.00	60.00	-73.50
Sep	95.60	89.60	5.97	0.00	60.00	-54.00
Oct	154.00	38.00	116.00	0.00	60.00	56.00
Nov	206.00	8.89	197.00	27.70	120.00	77.10
Dec	240.00	9.75	230.00	212.00	120.00	104.00
Storage Acre-Feet at 50%	403,000.00	46,000.00	357,000.00	259,000.00	81,800.00	271,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	4.36	0.00	3.65	0.51	0.10	0.89	1.19	0.00	10.70
Feb	7.01	0.00	3.65	0.51	0.10	0.89	1.19	0.00	13.40
Mar	9.67	0.00	3.65	0.51	0.10	0.89	1.19	0.00	16.00
Apr	13.60	34.30	3.65	0.51	0.10	0.89	1.19	0.00	54.30
May	12.10	78.20	3.65	0.51	0.10	0.89	1.19	0.00	96.70
Jun	7.40	105.00	7.31	0.51	0.10	0.89	1.19	0.00	122.00
Jul	2.77	155.00	7.31	0.51	0.10	0.89	1.19	0.00	168.00
Aug	1.46	120.00	7.31	0.51	0.10	0.89	1.19	0.00	131.00
Sep	1.23	78.40	7.31	0.51	0.10	0.89	1.19	0.00	89.60
Oct	2.04	29.60	3.65	0.51	0.10	0.89	1.19	0.00	38.00
Nov	2.54	0.00	3.65	0.51	0.10	0.89	1.19	0.00	8.89
Dec	3.41	0.00	3.65	0.51	0.10	0.89	1.19	0.00	9.75

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

Application #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RN80601A	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69
Total	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF211A	CERTIFICATE	120.00	160.00	160.00	160.00	160.00	120.00	60.00	60.00	60.00	60.00	120.00	120.00
Maximum		120.00	160.00	160.00	160.00	160.00	120.00	60.00	60.00	60.00	60.00	120.00	120.00

Detailed Reports for Watershed ID #212

JOHN DAY R> COLUMBIA R- AB S FK JOHN DAY R
JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 212

Exceedance Level: 80%

Date: 7/14/2008

Time: 2:10 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	166.00	4.75	161.00	0.00	80.00	81.20
Feb	210.00	5.09	205.00	0.00	118.00	86.90
Mar	288.00	5.51	282.00	0.00	118.00	164.00
Apr	433.00	31.10	402.00	0.00	118.00	284.00
May	433.00	63.10	370.00	0.00	118.00	252.00
Jun	261.00	83.70	177.00	0.00	80.00	97.30
Jul	129.00	120.00	9.37	0.00	50.00	-40.60

Aug	88.60	93.50	-4.86	0.00	30.00	-34.90
Sep	64.70	63.30	1.39	0.00	30.00	-28.60
Oct	108.00	26.10	81.90	0.00	50.00	31.90
Nov	143.00	4.56	138.00	0.00	80.00	58.40
Dec	156.00	4.69	151.00	0.00	80.00	71.30
Storage Acre-Feet at 50%	235,000.00	30,700.00	204,000.00	0.00	57,300.00	149,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	0.65	0.00	1.99	0.40	0.10	0.81	0.81	0.00	4.75
Feb	0.98	0.00	1.99	0.40	0.10	0.81	0.81	0.00	5.09
Mar	1.41	0.00	1.99	0.40	0.10	0.81	0.81	0.00	5.51
Apr	1.97	25.00	1.99	0.40	0.10	0.81	0.81	0.00	31.10
May	2.05	56.90	1.99	0.40	0.10	0.81	0.81	0.00	63.10
Jun	1.42	76.20	3.97	0.40	0.10	0.81	0.81	0.00	83.70
Jul	0.54	113.00	3.97	0.40	0.10	0.81	0.81	0.00	120.00
Aug	0.27	87.10	3.97	0.40	0.10	0.81	0.81	0.00	93.50
Sep	0.22	57.00	3.97	0.40	0.10	0.81	0.81	0.00	63.30
Oct	0.40	21.60	1.99	0.40	0.10	0.81	0.81	0.00	26.10
Nov	0.45	0.00	1.99	0.40	0.10	0.81	0.81	0.00	4.56
Dec	0.58	0.00	1.99	0.40	0.10	0.81	0.81	0.00	4.69

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

There are no Reservations for this Watershed

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF212A	CERTIFICATE	80.00	118.00	118.00	118.00	118.00	80.00	50.00	30.00	30.00	50.00	80.00	80.00
Maximum		80.00	118.00	118.00	118.00	118.00	80.00	50.00	30.00	30.00	50.00	80.00	80.00

Detailed Reports for Watershed ID #203

BEECH CR> JOHN DAY R- AT MOUTH
JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 203

Date: 7/14/2008

Exceedance Level:

Time: 2:10 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	5.50	0.61	4.89	0.00	30.00	-25.10
Feb	13.40	0.62	12.80	0.00	44.00	-31.20
Mar	21.90	0.62	21.30	0.00	44.00	-22.70
Apr	35.80	1.49	34.30	0.00	44.00	-9.69
May	28.30	2.59	25.70	0.00	44.00	-18.30
Jun	11.40	3.25	8.15	0.00	30.00	-21.80
Jul	3.15	4.49	-1.34	0.00	15.00	-16.30
Aug	1.50	3.61	-2.11	0.00	8.00	-10.10
Sep	1.37	2.58	-1.21	0.00	8.00	-9.21
Oct	1.54	1.35	0.19	0.00	8.00	-7.81
Nov	3.00	0.61	2.39	0.00	15.00	-12.60
Dec	4.65	0.61	4.04	0.00	30.00	-26.00
Storage Acre-Feet at 50%	16,600.00	1,360.00	15,400.00	0.00	19,200.00	2,630.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	0.00	0.00	0.00	0.00	0.08	0.02	0.51	0.00	0.61
Feb	0.01	0.00	0.00	0.00	0.08	0.02	0.51	0.00	0.62
Mar	0.01	0.00	0.00	0.00	0.08	0.02	0.51	0.00	0.62
Apr	0.02	0.86	0.00	0.00	0.08	0.02	0.51	0.00	1.49
May	0.02	1.96	0.00	0.00	0.08	0.02	0.51	0.00	2.59
Jun	0.01	2.63	0.00	0.00	0.08	0.02	0.51	0.00	3.25
Jul	0.00	3.88	0.00	0.00	0.08	0.02	0.51	0.00	4.49
Aug	0.00	3.00	0.00	0.00	0.08	0.02	0.51	0.00	3.61
Sep	0.00	1.97	0.00	0.00	0.08	0.02	0.51	0.00	2.58
Oct	0.00	0.74	0.00	0.00	0.08	0.02	0.51	0.00	1.35
Nov	0.00	0.00	0.00	0.00	0.08	0.02	0.51	0.00	0.61
Dec	0.00	0.00	0.00	0.00	0.08	0.02	0.51	0.00	0.61

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

There are no Reservations for this Watershed

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF203A	CERTIFICATE	30.00	44.00	44.00	44.00	44.00	30.00	15.00	8.00	8.00	8.00	15.00	30.00
Maximum		30.00	44.00	44.00	44.00	44.00	30.00	15.00	8.00	8.00	8.00	15.00	30.00

Water Availability Analysis

JOHN DAY R> COLUMBIA R- AB BEECH CR

JOHN DAY BASIN

Water Availability as of 7/14/2008

→ Pumping would likely influence Davis Creek flows too

Watershed ID #: 30620117

Date: 7/14/2008

Exceedance Level: ☒ 80%

Time: 3:14 PM

Water Availability

Select any Watershed for Details

Nesting Order	Watershed ID #	Stream Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	209	JOHN DAY R> COLUMBIA R- AT MOUTH	Yes	No	No	Yes	Yes	No	No	No	No	No	No	No
2	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	No	No	Yes	Yes	No	No	No	No	No	No	No
3	211	JOHN DAY R> COLUMBIA R- AB N FK JOHN DAY R	No	No	No	Yes	Yes	No	No	No	No	No	No	No
4	212	JOHN DAY R> COLUMBIA R- AB S FK JOHN DAY R	No	No	No	Yes	Yes	No	No	No	No	No	No	No
5	30620117	JOHN DAY R> COLUMBIA R- AB BEECH CR	No	No	No	Yes	Yes	No	No	No	No	No	No	No

Limiting Watersheds

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Limiting Watershed ID #	Stream Name	Water Available?	Net Water Available
Jan	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-7.10
Feb	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-162.00
Mar	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-598.00
Apr	30620117	JOHN DAY R> COLUMBIA R- AB BEECH CR	Yes	217.00
May	30620117	JOHN DAY R> COLUMBIA R- AB BEECH CR	Yes	166.00
Jun	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-993.00
Jul	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-315.00
Aug	209	JOHN DAY R> COLUMBIA R- AT MOUTH	No	-451.00
Sep	209	JOHN DAY R> COLUMBIA R- AT MOUTH	No	-439.00
Oct	209	JOHN DAY R> COLUMBIA R- AT MOUTH	No	-275.00
Nov	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-128.00
Dec	210	JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN	No	-72.50
Storage Acre-Feet at 50%	30620117	JOHN DAY R> COLUMBIA R- AB BEECH CR	Yes	85,300.00

Detailed Reports for Watershed ID #209

JOHN DAY R> COLUMBIA R- AT MOUTH

JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 209

Date: 7/14/2008

Exceedance Level: ☒ 80%

Time: 3:14 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	626.00	20.10	606.00	1,710.00	500.00	48.20
Feb	1,050.00	27.90	1,020.00	3,320.00	1,000.00	-95.60
Mar	1,680.00	49.10	1,630.00	3,580.00	2,000.00	-533.00
Apr	2,920.00	157.00	2,760.00	7,150.00	2,000.00	489.00
May	3,020.00	319.00	2,700.00	6,900.00	2,000.00	456.00
Jun	1,440.00	293.00	1,150.00	1,440.00	2,000.00	-921.00
Jul	470.00	269.00	201.00	0.00	500.00	-299.00
Aug	246.00	197.00	49.10	0.00	500.00	-451.00
Sep	194.00	133.00	60.50	0.00	500.00	-439.00
Oct	283.00	57.80	225.00	0.00	500.00	-275.00
Nov	393.00	14.80	378.00	91.70	500.00	-122.00
Dec	513.00	18.00	495.00	1,090.00	500.00	-41.40
Storage Acre-Feet at 50%	1,370,000.00	94,400.00	1,270,000.00	1,520,000.00	753,000.00	521,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	7.79	0.00	6.00	0.72	0.57	2.53	2.51	0.00	20.10
Feb	15.60	0.00	6.00	0.72	0.57	2.53	2.51	0.00	27.90
Mar	22.20	14.60	6.00	0.72	0.57	2.53	2.51	0.00	49.10
Apr	30.50	114.00	6.00	0.72	0.57	2.53	2.51	0.00	157.00
May	30.60	276.00	6.00	0.72	0.57	2.53	2.50	0.00	319.00
Jun	16.20	260.00	11.30	0.72	0.57	2.53	2.50	0.00	293.00
Jul	4.19	248.00	11.30	0.72	0.57	2.53	1.75	0.00	269.00
Aug	1.99	178.00	11.30	0.72	0.57	2.53	1.75	0.00	197.00
Sep	1.59	115.00	11.30	0.72	0.57	2.53	1.75	0.00	133.00
Oct	2.22	44.00	6.00	0.72	0.57	2.53	1.76	0.00	57.80
Nov	3.27	0.00	6.00	0.72	0.57	2.53	1.76	0.00	14.80
Dec	5.70	0.00	6.00	0.72	0.57	2.53	2.51	0.00	18.00

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

Application #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RN80601A	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69
RN80602A	5.29	10.30	8.65	19.60	19.90	2.90	0.00	0.00	0.00	0.00	0.00	3.06
RN80603A	8.99	21.70	51.00	95.10	87.00	37.50	0.00	0.00	0.00	0.00	0.00	4.62
RN80604A	23.50	47.10	45.40	104.00	106.00	14.40	0.00	0.00	0.00	0.00	0.00	16.60
RN80605A	10.30	22.20	34.50	19.20	3.54	14.40	0.00	0.00	0.00	0.00	0.00	5.45
Total	57.60	117.70	164.05	273.50	245.94	82.10	0.00	0.00	0.00	0.00	0.00	36.42

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF209A	CERTIFICATE	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
SY90605A	SWW	500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00
Maximum		500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00

Detailed Reports for Watershed ID #210

JOHN DAY R> COLUMBIA R- AB HEIDTMANN CAN
JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 210

Exceedance Level: 80%

Date: 7/14/2008

Time: 3:14 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	556.00	15.70	540.00	1,670.00	500.00	-7.10
Feb	953.00	19.70	933.00	3,240.00	1,000.00	-162.00
Mar	1,560.00	28.90	1,530.00	3,460.00	2,000.00	-598.00
Apr	2,710.00	102.00	2,610.00	7,080.00	2,000.00	354.00
May	2,860.00	195.00	2,660.00	6,890.00	2,000.00	423.00
Jun	1,270.00	195.00	1,080.00	1,440.00	2,000.00	-993.00
Jul	420.00	235.00	185.00	0.00	500.00	-315.00
Aug	242.00	182.00	60.20	0.00	500.00	-440.00
Sep	203.00	124.00	79.40	0.00	500.00	-421.00
Oct	280.00	52.80	227.00	0.00	500.00	-273.00
Nov	384.00	12.30	372.00	83.10	500.00	-128.00
Dec	473.00	14.50	458.00	1,070.00	500.00	-72.50
Storage Acre-Feet at 50%	1,250,000.00	71,400.00	1,180,000.00	1,500,000.00	753,000.00	437,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	4.73	0.00	5.02	0.72	0.57	2.34	2.38	0.00	15.70
Feb	8.69	0.00	5.02	0.72	0.57	2.34	2.38	0.00	19.70
Mar	12.30	5.57	5.02	0.72	0.57	2.34	2.38	0.00	28.90
Apr	19.90	71.30	5.02	0.72	0.57	2.34	2.38	0.00	102.00
May	20.10	164.00	5.02	0.72	0.57	2.34	2.37	0.00	195.00
Jun	10.00	170.00	9.33	0.72	0.57	2.34	2.37	0.00	195.00
Jul	2.64	218.00	9.33	0.72	0.57	2.34	1.62	0.00	235.00
Aug	1.26	166.00	9.33	0.72	0.57	2.34	1.62	0.00	182.00
Sep	1.05	108.00	9.33	0.72	0.57	2.34	1.62	0.00	124.00
Oct	1.56	41.00	5.02	0.72	0.57	2.34	1.63	0.00	52.80
Nov	2.05	0.00	5.02	0.72	0.57	2.34	1.63	0.00	12.30
Dec	3.51	0.00	5.02	0.72	0.57	2.34	2.38	0.00	14.50

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

Application #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RN80601A	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69
RN80602A	5.29	10.30	8.65	19.60	19.90	2.90	0.00	0.00	0.00	0.00	0.00	3.06
RN80603A	8.99	21.70	51.00	95.10	87.00	37.50	0.00	0.00	0.00	0.00	0.00	4.62
RN80604A	23.50	47.10	45.40	104.00	106.00	14.40	0.00	0.00	0.00	0.00	0.00	16.60
Total	47.30	95.50	129.55	254.30	242.40	67.70	0.00	0.00	0.00	0.00	0.00	30.97

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF210A	CERTIFICATE	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
SY90604A	SWW	500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00
Maximum		500.00	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	500.00	500.00	500.00	500.00	500.00	500.00

Detailed Reports for Watershed ID #211

JOHN DAY R> COLUMBIA R- AB N FK JOHN DAY R
JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 211

Date: 7/14/2008

Exceedance Level: 80%

Time: 3:14 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	263.00	10.70	252.00	302.00	120.00	123.00
Feb	388.00	13.40	375.00	519.00	160.00	198.00
Mar	546.00	16.00	530.00	777.00	160.00	345.00
Apr	813.00	54.30	759.00	1,130.00	160.00	563.00
May	717.00	96.70	620.00	934.00	160.00	431.00
Jun	387.00	122.00	265.00	409.00	120.00	132.00
Jul	181.00	168.00	13.20	0.00	60.00	-46.80
Aug	118.00	131.00	-13.50	0.00	60.00	-73.50
Sep	95.60	89.60	5.97	0.00	60.00	-54.00
Oct	154.00	38.00	116.00	0.00	60.00	56.00
Nov	206.00	8.89	197.00	27.70	120.00	77.10
Dec	240.00	9.75	230.00	212.00	120.00	104.00
Storage Acre-Feet at 50%	403,000.00	46,000.00	357,000.00	259,000.00	81,800.00	271,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	4.36	0.00	3.65	0.51	0.10	0.89	1.19	0.00	10.70
Feb	7.01	0.00	3.65	0.51	0.10	0.89	1.19	0.00	13.40
Mar	9.67	0.00	3.65	0.51	0.10	0.89	1.19	0.00	16.00
Apr	13.60	34.30	3.65	0.51	0.10	0.89	1.19	0.00	54.30
May	12.10	78.20	3.65	0.51	0.10	0.89	1.19	0.00	96.70
Jun	7.40	105.00	7.31	0.51	0.10	0.89	1.19	0.00	122.00
Jul	2.77	155.00	7.31	0.51	0.10	0.89	1.19	0.00	168.00
Aug	1.46	120.00	7.31	0.51	0.10	0.89	1.19	0.00	131.00
Sep	1.23	78.40	7.31	0.51	0.10	0.89	1.19	0.00	89.60
Oct	2.04	29.60	3.65	0.51	0.10	0.89	1.19	0.00	38.00
Nov	2.54	0.00	3.65	0.51	0.10	0.89	1.19	0.00	8.89
Dec	3.41	0.00	3.65	0.51	0.10	0.89	1.19	0.00	9.75

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

Application #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RN80601A	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69
Total	9.52	16.40	24.50	35.60	29.50	12.90	0.00	0.00	0.00	0.00	0.00	6.69

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF211A	CERTIFICATE	120.00	160.00	160.00	160.00	160.00	120.00	60.00	60.00	60.00	60.00	120.00	120.00
Maximum		120.00	160.00	160.00	160.00	160.00	120.00	60.00	60.00	60.00	60.00	120.00	120.00

Detailed Reports for Watershed ID #212

JOHN DAY R> COLUMBIA R- AB S FK JOHN DAY R

JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 212

Date: 7/14/2008

Exceedance Level: 80%

Time: 3:14 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	166.00	4.75	161.00	0.00	80.00	81.20
Feb	210.00	5.09	205.00	0.00	118.00	86.90
Mar	288.00	5.51	282.00	0.00	118.00	164.00
Apr	433.00	31.10	402.00	0.00	118.00	284.00
May	433.00	63.10	370.00	0.00	118.00	252.00
Jun	261.00	83.70	177.00	0.00	80.00	97.30
Jul	129.00	120.00	9.37	0.00	50.00	-40.60

Aug	88.60	93.50	-4.86	0.00	30.00	-34.90
Sep	64.70	63.30	1.39	0.00	30.00	-28.60
Oct	108.00	26.10	81.90	0.00	50.00	31.90
Nov	143.00	4.56	138.00	0.00	80.00	58.40
Dec	156.00	4.69	151.00	0.00	80.00	71.30
Storage Acre-Feet at 50%	235,000.00	30,700.00	204,000.00	0.00	57,300.00	149,000.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	0.65	0.00	1.99	0.40	0.10	0.81	0.81	0.00	4.75
Feb	0.98	0.00	1.99	0.40	0.10	0.81	0.81	0.00	5.09
Mar	1.41	0.00	1.99	0.40	0.10	0.81	0.81	0.00	5.51
Apr	1.97	25.00	1.99	0.40	0.10	0.81	0.81	0.00	31.10
May	2.05	56.90	1.99	0.40	0.10	0.81	0.81	0.00	63.10
Jun	1.42	76.20	3.97	0.40	0.10	0.81	0.81	0.00	83.70
Jul	0.54	113.00	3.97	0.40	0.10	0.81	0.81	0.00	120.00
Aug	0.27	87.10	3.97	0.40	0.10	0.81	0.81	0.00	93.50
Sep	0.22	57.00	3.97	0.40	0.10	0.81	0.81	0.00	63.30
Oct	0.40	21.60	1.99	0.40	0.10	0.81	0.81	0.00	26.10
Nov	0.45	0.00	1.99	0.40	0.10	0.81	0.81	0.00	4.56
Dec	0.58	0.00	1.99	0.40	0.10	0.81	0.81	0.00	4.69

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

There are no Reservations for this Watershed

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF212A	CERTIFICATE	80.00	118.00	118.00	118.00	118.00	80.00	50.00	30.00	30.00	50.00	80.00	80.00
Maximum		80.00	118.00	118.00	118.00	118.00	80.00	50.00	30.00	30.00	50.00	80.00	80.00

Detailed Reports for Watershed ID #30620117

JOHN DAY R> COLUMBIA R- AB BEECH CR
JOHN DAY BASIN

Water Availability as of 7/14/2008

Watershed ID #: 30620117

Date: 7/14/2008

Exceedance Level: 80%

Time: 3:14 PM

Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second

Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Available
Jan	126.00	3.99	122.00	0.00	80.00	42.00
Feb	165.00	4.22	161.00	0.00	118.00	42.80
Mar	234.00	4.45	230.00	0.00	118.00	112.00
Apr	364.00	28.50	335.00	0.00	118.00	217.00
May	343.00	59.00	284.00	0.00	118.00	166.00
Jun	195.00	78.80	116.00	0.00	80.00	36.20
Jul	113.00	113.00	0.14	0.00	50.00	-49.90
Aug	70.60	88.20	-17.60	0.00	30.00	-47.60
Sep	61.20	59.70	1.55	0.00	30.00	-28.50
Oct	96.80	24.20	72.60	0.00	50.00	22.60
Nov	113.00	3.83	109.00	0.00	80.00	29.20
Dec	125.00	3.94	121.00	0.00	80.00	41.10
Storage Acre-Feet at 50%	181,000.00	28,600.00	152,000.00	0.00	57,300.00	97,100.00

Detailed Report of Consumptive Uses and Storages

Consumptive Uses and Storages in Cubic Feet per Second

Month	Storage	Irrigation	Municipal	Industrial	Commercial	Domestic	Agricultural	Other	Total
Jan	0.59	0.00	1.99	0.51	0.03	0.66	0.22	0.00	3.99
Feb	0.81	0.00	1.99	0.51	0.03	0.66	0.22	0.00	4.22
Mar	1.05	0.00	1.99	0.51	0.03	0.66	0.22	0.00	4.45
Apr	1.52	23.60	1.99	0.51	0.03	0.66	0.22	0.00	28.50
May	1.73	53.90	1.99	0.51	0.03	0.66	0.22	0.00	59.00
Jun	1.24	72.20	3.97	0.51	0.03	0.66	0.22	0.00	78.80
Jul	0.47	107.00	3.97	0.51	0.03	0.66	0.22	0.00	113.00
Aug	0.27	82.50	3.97	0.51	0.03	0.66	0.22	0.00	88.20
Sep	0.26	54.00	3.97	0.51	0.03	0.66	0.22	0.00	59.70
Oct	0.35	20.40	1.99	0.51	0.03	0.66	0.22	0.00	24.20
Nov	0.42	0.00	1.99	0.51	0.03	0.66	0.22	0.00	3.83
Dec	0.53	0.00	1.99	0.51	0.03	0.66	0.22	0.00	3.94

Detailed Report of Reservations for Consumptive Use

Reserved Streamflow in Cubic Feet per Second

There are no Reservations for this Watershed

Detailed Report of Instream Requirements

Instream Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF212B	CERTIFICATE	80.00	118.00	118.00	118.00	118.00	80.00	50.00	30.00	30.00	50.00	80.00	80.00
Maximum		80.00	118.00	118.00	118.00	118.00	80.00	50.00	30.00	30.00	50.00	80.00	80.00

STATE OF OREGON
COUNTY OF GRANT

CERTIFICATE OF WATER RIGHT

Parker
Spring?

This Is to Certify, That JOHN J. SILVERS
of John Day, State of Oregon, has made proof
to the satisfaction of the STATE ENGINEER of Oregon, of a right to the use of the waters of
Series of springs on Beech Creek watershed
a tributary of John Day River for the purpose of
Irrigation
under Permit No. 11115 of the State Engineer, and that said right to the use of said waters
has been perfected in accordance with the laws of Oregon; that the priority of the right hereby
confirmed dates from November 8, 1935;

that the amount of water to which such right is entitled and hereby confirmed, for the purposes
aforesaid, is limited to an amount actually beneficially use^d for said purposes, and shall not exceed
0.05 cubic foot per second measured at the point of diversion from the stream,

or its equivalent in case of rotation.
The point of diversion is located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 3, Township 13 South, Range
31 East, W. M.

The amount of water used for irrigation, together with the amount secured under any other
right existing for the same lands, shall be limited to one-fortieth of one cubic foot per second
~~per acre~~, for each acre irrigated prior to June 1, and thereafter one-eightieth of
one cubic foot per second for each acre irrigated, or its equivalent, shall not
exceed one acre foot per acre during any month prior to June 1, nor exceed a total
during the irrigation season from April 1 to September 30 of each year of four
acre feet per acre, and shall
conform to such reasonable rotation system as may be ordered by the proper state officer.

A description of the place of use under the right hereby confirmed, and to which such right
is appurtenant, is as follows:

4 acres in the SW $\frac{1}{4}$ SE $\frac{1}{4}$,
Section 3,
Township 13 South, Range 31 East, W. M.

The right to the use of the water for the purposes aforesaid is restricted to the lands or place of
use herein described.

After the expiration of fifty years from the date of this certificate or on the expiration of any
federal power license issued in connection with this right, and after not less than two years' notice in
writing to the holder hereof, the State of Oregon, or any municipality thereof, shall have the right to
take over the dams, plants and other structures and all appurtenances thereto which have been con-
structed for the purpose of devoting to beneficial use the water rights specified herein, upon condition
that before taking possession the State or municipality shall pay not to exceed the fair value of the
property so taken, plus such reasonable damages, if any, to valuable, serviceable and dependable prop-
erty of the holder of this certificate, not taken over, as may be caused by the severance therefrom of
the property taken in accordance with the provisions of section 47-508, Oregon Code 1930.

WITNESS the signature of the State Engineer, affixed

this 20th day of June, 1936.

CHAS. E. STRICKLIN

State Engineer

GRAN 50864

For Official Use Only by The Oregon Water Resources Department:

Received Date:

County Well Log ID #

Well Identification Tag #

"GRAN 50864"

20711

WELL IDENTIFICATION APPLICATION FORM

INSTRUCTIONS ARE IN THE ACCOMPANYING "DEAR LANDOWNER" LETTER. FOR SHARED WELLS PLEASE SEE THE 3RD PARAGRAPH FROM THE TOP IN THE LETTER. Your ID Tag will be mailed out in approximately 10 days from the date we receive your application.)

****BUYER OR CURRENT LANDOWNER** (For the property that the well is located on. The Well ID tag will be sent to this address unless otherwise specified here.)

Landowner's or Buyer's Name: Jeffrey and Barbara RiggsMailing Address: P.O. Box 122City: Dayville State: OR Zip: 97825 Phone: (541) 987-2194****WELL LOCATION:**County: Grant Well # n/a (If multiple wells exist on same property-is: well #1, #2, etc.)Township: 13S North or South, Range: 31E East or West, Section: 3 SW 1/4 SE 1/4
(circle one) (circle one) (If known)Tax Lot #: 1037 Type of Well: water supply? domestic monitoring? n/a
(Not the same as the tax acct. #) (Ex: domestic or irrigation use) (Ex: monitoring water for contaminants)Address of Well: no site address Lat/Long: 44° 27.7064' N 118° 57.9932' W
(Number) (Street) (City) (Zip)(Optional): Does this well have a formal water right associated with it? Yes: _____ No: X
(If unknown you may want to contact the Water Rights Group at 503-986-0945 for research)

If Yes: Application #: _____ Permit #: _____ Certificate #: _____

(Optional): Latitude 44° 27.7064' N Longitude 118° 57.9932' W (May sometimes be obtained from Well Log Report)

****WELL INFORMATION:** (Important note: If attaching a well log you obtained from our web-site please be certain that you have the correct log. Simply matching the tax lot number isn't enough. See attached instructions for assistance. If a well report is not available please complete as much of the following as possible, at a minimum the prior landowner names going back until around the time the well would have been drilled. Prior landowner names can be obtained from the County Assessor - see instructions.)

Start Card # from well log report if known: unknown Approx. Well Construction Date: unknownWell Constructor if known: unknown

Name of Land Owner at Time of Construction (or prior landowners, going back in time to when well was constructed - contact your county assessor for list)

Richard S. PageWell Depth (in feet): ? Static Water Level (in feet): ? Diameter of Exposed Well Casing (in inches): ?

Please Return Completed Form to: Well ID Program, Oregon Water Resources Department
725 Summer St. NE, Suite A, Salem, OR 97301-1271, or fax to 503-986-0902 (App #)

RECEIVED

JAN 18 2007

WATER RESOURCES DEPT.
SALEM, OREGON

GRAN 50928

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

WELL I.D. # L 93380

START CARD # 195156

Instructions for completing this report are on the last page of this form.

(1) LAND OWNER Bare Backhurst Well Number _____
Name Bare Backhurst
Address Box 463
City Fredericksburg State OR Zip 97740

(2) TYPE OF WORK ☒ New Well
☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment ☐ Conversion

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

(4) PROPOSED USE
☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other _____

(5) BORE HOLE CONSTRUCTION Special Construction: ☐ Yes ☒ No
Depth of Completed Well 120 ft.
Explosives used: ☐ Yes ☒ No Type _____ Amount _____

BORE HOLE			SEAL			Sacks or Pounds
Diameter	From	To	Material	From	To	
10	0	22	PORTLAND CEMENT	0	22	11 SACKS
12	22	120				

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☒ Other Box in
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER				Steel	Plastic	Welded	Threaded
Diameter	From	To	Gauge				
Casing: 16	0	22	.25	☒	☐	☐	☐
Liner: 4.5	10	120	.25	☐	☒	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☒ None
Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS

☒ Perforations Method Saw Cut
☐ Screens Type 188 Material PVC

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
90	110	1/8"	4	4.5	4.5	☐	☒

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
30	100%	120	1hr

Temperature of water 55 Depth Artesian Flow Found 90
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 (legal description)
County Grant
Tax Lot 1009 Lot _____
Township 13 N or S Range 31 E or W WM
Section 14 1/4 _____ 1/4 _____
Lat 44° 26' 04" or _____ (degrees or decimal)
Long 118° 58' 12" or _____ (degrees or decimal)
Street Address of Well (or nearest address) State Cr Rd.

(10) STATIC WATER LEVEL
12 ft. below land surface. Date 19-Dec-07
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch Date _____

(11) WATER BEARING ZONES

Depth at which water was first found 89

From	To	Estimated Flow Rate	SWL
89	107	30	12

(12) WELL LOG Ground Elevation 3337

Material	From	To	SWL
Topsoil & Silt	0	4	
Fractured Black Sand + Gray Clay	4	86	12
SAND + GRAVEL	86	107	
White Quartz	107	120	
Brown Clay Gravel			

RECEIVED

MAR 06 2008

WATER RESOURCES DEPT
SALEM OREGON

Date Started 15 Dec 07 Completed 15 Dec 07

(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.

WWC 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.

WWC Number 712 Date 15 Dec 07

Signed [Signature]

"nearby"

RECEIVED

DEC 06 2002

STATE OF OREGON
WATER SUPPLY WELL REPORT

(as required by ORS 537.765)

WATER RESOURCES DEPT

Instructions for completing this report are on the last page of this form.

WELL I.D. # L 53259
START CARD # 152153

(1) LAND OWNER

Name Robert + Kay Louise Thompson
Address 4700 Patterson Bridge Rd
City John Day State OR Zip 97845

(2) TYPE OF WORK

☒ New Well ☐ Deepening ☐ Alteration (repair/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 88 ft.
Explosives used ☐ Yes ☒ No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	
10" + 0"	61	61	Portland C	0	61	56 Sacks
6"	61	88	#6 mix			

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:	6"	+1	61	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	5"	28	88	188	☒	☐	☒	☐
					☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☒ None
Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

From		To		Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
48		88		1/4"	350	5"		☐	☒
								☐	☐
								☐	☐
								☐	☐

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

	Pump	Bailer	Air	Flowing
Yield gal/min				Artesian
Drawdown				
Drill stem at				
Time				
	100	60	70	1 hr.

Temperature of water 56 Depth Artesian Flow Found _____Was a water analysis done? ☒ No ☐ Yes By whom _____Did any strata contain water not suitable for intended use? ☒ No ☐ Too little☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other _____

Depth of strata: _____

(9) LOCATION OF WELL by legal description:

County Grant Latitude _____ Longitude _____
Township 13 N or S Range 31 E or W. WM.
Section 16 SW 1/4 SE 1/4
Tax Lot 1016 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) Patterson Rd

(10) STATIC WATER LEVEL:

_____ ft. below land surface. Date 11-23-02
Artesian pressure _____ lb. per square inch Date 11-23-02

(11) WATER BEARING ZONES:

From	To	Estimated Flow Rate	SWL
61	75	100	1

(12) WELL LOG:

Material	From	To	SWL
Brown Top Soil	0	2	
Tan clay Hard	2	50	
gray clay w/ Black gravel + sand	50	61	
Med Hard			
Black + green gravel and sand	61	75	1
Coil seams mix			
Water Bearing			
gray clay Med Hard	75	88	

Date started 11-14-02 Completed 11-18-02

(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 _____ WWC Number _____ 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. 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 John Marcell WWC Number 1006 Date 11-23-02

NOTICE TO WATER WELL CONTRACTOR

The original and first copy
of this report are to be
filed with the

STATE ENGINEER, SALEM, OREGON
within 30 days from the date
of well completion

WATER WELL REPORT

STATE OF OREGON

(Please type or print)
(Do not write above this line)

State Well No. 385

State Permit No. 13/31-14

(1) OWNER:

Name Paul Trowbridge
Address John Day Oregon

(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 ☒

12" Diam. from 0 ft. to 290 ft. Gage 250
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

PERFORATIONS:

Perforated? ☐ Yes ☒ No.

Type of perforator used

Size of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to 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) WATER LEVEL: Completed well.

Static level water level ft. below land surface Date July 7 '69
Artesian pressure lbs. per square inch Date

(9) WELL TESTS:

Drawdown is amount water level is
lowered below static level

Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Id: gal./min. with ft. drawdown after hrs.
" " " "

Bailer test none gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

(10) CONSTRUCTION:

Well seal—Material used puddled clay
Depth of seal 20 ft.
Diameter of well bore to bottom of seal 16 in.
Were any loose strata cemented off? ☐ Yes ☒ No Depth
Was a drive shoe used? ☐ Yes ☒ No
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:
Gravel placed from ft. to ft.

(11) LOCATION OF WELL:

County GRANT Driller's well number
1/4 1/4 Section 19 T. 13 R. 31 W.M.
Bearing and distance from section or subdivision corner

(12) WELL LOG:

Diameter of well below casing 12"

Depth drilled 300 ft. Depth of completed well 300 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 as drilling proceeds. Note drilling rates.

MATERIAL	From	To	SWL
brown soil	0	2	2
brown clay	2	20	20
streak of rock black	20	22	22
brown sandstone	22	118	118
large boulders	118	122	122
brown sandstone	122	140	140
medium gravel + little	140	124	124
water			120

brown clay	124	200	
blue claystone water	200	220	100
blue clay cavey	220	240	
blue clay with streaks	240	300	
of coal from 6" to			

12" thick
water has been cased off 300
well is abandon
will deepen at
later date

iron cap is welded
on top of casing

Work started June 3 1969 Completed July 7 1969
Date well drilling machine moved off of well July 7 1969

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] Earl Skinner Date Aug 19, 1969
(Drilling Machine Operator)

Drilling Machine Operator's License No. 608

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 SKINNER & SONS
(Person, firm or corporation) (Type or print)

Address CRAVE ORE. 97732

[Signed] Catherine Skinner
(Water Well Contractor)

Contractor's License No. 372 Date 8-24, 1969

"Nearby"

GRAN 50890

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

WELL I.D. # L 87518

START CARD # 190258

Instructions for completing this report are on the last page of this form.

(1) LAND OWNER Well Number _____
Name Russ Reimers
Address PO Box 117
City CANYON CITY State OR Zip 97820

(2) TYPE OF WORK ☒ New Well
☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment ☐ Conversion

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

(4) PROPOSED USE
☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other _____

(5) BORE HOLE CONSTRUCTION Special Construction: ☐ Yes ☒ No
Depth of Completed Well 379.5 ft.
Explosives used: ☐ Yes ☒ No Type _____ Amount _____

BORE HOLE			SEAL			Sacks or Pounds
Diameter	From	To	Material	From	To	
10"	0	38	Bentonite	0	38	15
6"	38	341.5				

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☒ Other Pump

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

Casing		Liner		Gauge		Steel		Plastic		Welded		Threaded	
Diameter	From	To	Diameter	From	To								
6" + 2'	0	38	5"	19.5	379.5	180							

Drive Shoe used ☐ Inside ☒ Outside ☐ None
Final location of shoe(s) 38'

(7) PERFORATIONS/SCREENS
☒ Perforations Method Factory CUTs
☐ Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
302	322	1/4x4	175	5			
342	362	1/4x4	175	5			

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Boiler ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
6	360	360	2 hr

Temperature of water 59 Depth Artesian Flow Found _____
Was a water analysis done? ☒ Yes By whom _____

Did any strata contain water not suitable for intended use? ☒ Yes ☐ No
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other _____
Depth of strata: _____

(9) LOCATION OF WELL (legal description)
County Grant
Tax Lot 110 Lot _____
Township 13 N or S Range 31 E or W WM
Section 1 NE 1/4 SE 1/4

Lat _____ " or _____ (degrees or decimal)
Long _____ " or _____ (degrees or decimal)

Street Address of Well (or nearest address) Marysville Rd
1/2 mile from Rd

(10) STATIC WATER LEVEL
207 ft. below land surface. Date 6-28-07
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch Date _____

Depth at which water was first found		Estimated Flow Rate		SWL
From	To	From	To	
304	353	6		207

Ground Elevation		SWL	
Material	From	To	SWL
clay + boulders	0	12	
tan clay	12	223	
gray clay	223	304	
gray clay	304	353	
gray clay	353	379.5	

Date Started 6-26-07 Completed 6-28-07

(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.

WWC 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.

WWC Number 1606 Date 7-2-07

Signed John Maxwell

JUL 05 2007