

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-22395

Exam Date: 9/12/2013

1. Current Owner: CRAIG JOHNSON
16327 MAPLEWILD AVE SW
BURIEN WA 98166
(206) 299-5600

And

SHAWN UNDERWOOD
16327 MAPLEWILD AVE SW
BURIEN WA 98166

2. Accompanied by: David Yasenik and Email communication with Craig Johnson, permit holder

Phone No: 208-721-2037

Address: NA

Relationship to Permit Holder: Property caretaker

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Home is served by Ketchum municipal water supply
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

L3 NW1/4SE1/4

Sec. 13, Twp 04N, Rge 17E, B.M.

BLAINE County

Method of Determination: ArcMap aerial photography

2.

PLACE OF USE: HEATING

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
04N	17E	13														X			
																L 3			

COOLING same as HEATING

Method of Determination: ArcMap aerial photography

3. _____ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ___X___ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ___X___ Aerial Photo Attached (required for irrigation of 10+ acres).
- ___X___ Photo of Diversion and System Attached

4.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
D0050423	Production well				
D0050422	Injection well				

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
NA						

2. Measurements:

No measurement made per Beneficial Use Rules. Diversion rate is under 0.24 cfs.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

NA

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: NA

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses:

Volume was calculated based on the number of days that the permit holder said he used the system for each purpose, multiplied by the flow rate, multiplied by the conversion factor from cfs to AF.

Heating: 242 days x 0.07 cfs x 1.9835 AF/day = 33.6 AF

Cooling: 30 days x 0.07 cfs x 1.9835 AF/day = 4.2 AF

Total: 37.8 AF

G. NARRATIVE/REMARKS/COMMENTS

The field exam for permit 37-22395 was conducted on September 12, 2013, with David Yasenik, the property caretaker, present. Water for the system is extracted from a shallow well and pumped through a closed loop heat pump system for one home and a garage/accessory dwelling unit. The water is then injected back into the aquifer via another shallow well.

I amended the permit to include cooling after receiving an Email from Mr. Johnson that indicated that the system was used for a limited amount of cooling in the summer.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
HEATING	01/01 to 12/31	0.070 CFS	33.60 AF
COOLING	01/01 to 12/31	0.070 CFS	4.20 AF
<u>Totals:</u>		0.070 CFS	37.80 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Jim Burt Date 9-12-2013

Reviewer David Yasenik Date 10/7/13



View of main house

Garage/Accessory dwelling unit





Production well

Injection well



IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

RECEIVED

DEC 08 2008

DEPT. OF WATER RESOURCES
SOUTHERN REGION

Office Use Only			
Well ID No.			
Inspected by			
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat:	:	Long:	:

1. WELL TAG NO. D0050423

DRILLING PERMIT NO. 854265 appl. - 906861

Water Right or Injection Well No. 37-22395

2. OWNER:

Name Johnson Craig

Address 16327 Maple Wild Ave Southwest

City Burien State WA Zip 98166

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 04 North ☒ or South ☐Rge. 17 East ☒ or West ☐

Sec. 13 1/4 NW 1/4 SE 1/4

Gov't Lot County Blaine

Lat: 43 : 40 : 734 Long: 114 : 22 : 533

Address of Well Site 220 Busse Elie

City Ketchum

(Give at least name of road + Distance to Road or Landmark)

Lt. 7-A Blk. Sub. Name Wild Rose

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other Heat Pump

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite	0	20	18Sks	Overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 31'Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1 1/2	31'	25	Steel	☒	☐	☒	☐

Length of Headpipe Length of Tailpipe

Packer ☐ Y ☐ N Type

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method

Screen Type & Method of Installation

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

6 ft. below ground Artesian pressure lb.

Depth flow encountered ft. Describe access port or control devices:

12. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
40			1 Hour

Water Temp. Bottom hole temp.

Water Quality test or comments:

Depth first Water Encounter

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10	0	10	Boulders & Soil		X
10	10	20	Clay & Gravel		X
6	20	31	Clay & Gravel & Sand	X	

Completed Depth 31' (Measurable)

Date: Started 11-21-08 Completed 11-24-08

14. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Wood River Drilling & Firm No. 265

Principal Driller Ken Smith Pump, Inc. Date 12-5-08

and Driller or Operator II Bill McFarlane Date 12-5-08

Operator I Date

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES