

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22613
Exam Date: 3/7/2018

1. Current Owner:

ROBERT And/Or DARLENE MAXWELL 10888 N IOWA AVE PAYETTE ID 83661 (208) 250-8858

2. Accompanied by: DARLENE MAXWELL

Phone No: (208) 250-8858

Address: 10888 N IOWA AVE PAYETTE ID 83661

Relationship to Permit Holder: OWNER

3. **SOURCE:**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE
2. Other water rights with the same point-of-diversion: NONE

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

GROUND WATER SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 23, Twp 09N, Rge 05W, B.M. PAYETTE County

Method of Determination: Field exam, aerial imagery, and GPS unit.

2.

PLACE OF USE: COMMERCIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09N	05W	23						X											

Method of Determination: Field exam, aerial imagery, and GPS unit.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X Indicate weir size/pipe as applicable.

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

X Aerial Photo Attached (required for irrigation of 10+ acres).

X

X Photo of Diversion and System Attached

4.

Well Tag No.	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0019750	UNKNOWN	5	UNKNOWN	UNKNOWN	UNKNOWN

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
None	None	None	None	None	None	None

2. Measurements: Instantaneous flow rate was calculated using the sprinklers system ratings and use associated by each house (450 pots). All eight houses are irrigated at the same time. A flow regulator is installed by the chemical treatment barrels and will not divert more than 50 gpm to the pots.

E. FLOW CALCULATIONS

Measured Method: See attached spreadsheet.

X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Commercial:

V_{I.R.} = Drip system and use calculations included on the attached spreadsheet = 1.4 AF

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Commercial season}) \times 1.9835 = 0.13\text{cfs} \times 365 \text{ days} \times 1.9835 = 94.1 \text{ AF}$$
$$V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} = 1.4 \text{ AF}$$
G. NARRATIVE/REMARKS/COMMENTS

System Description:

An 8" well with a 5 Hp pump delivers water to a pump house where water is mixed with varying chemicals and transported to eight (8) plant house that each contain 450 pots. All eight houses are watered at once. Water delivery varies throughout the year as outlined on the attached spreadsheet detailing the rate and volume calculations. Water is also used on a drip system to the north of the property. The drip line has two sets that run 12 hours each. The flow rate for the drip line is 0.12 gallons per hour, therefore, minimal. As such, the drip line system was not included in final calculations. However, the drip line watering activity is included in this license as a portion of the place of use. This is activity is not considered irrigation in the traditional sense because it a research based activity for growing potatoes. There are four (4) hose bib hydrants located on the system that are used to clean the plant houses and hand water when applicable.

Conditions:

Conditions 26A and 046 were removed and not forwarded to licensing. Condition 121 was updated to 103 and forwarded to licensing. The explanatory commercial use condition was also forwarded to licensing.

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>
COMMERCIAL	01/01 to 12/31	0.13 CFS	1.4 AF
	<u>Totals:</u>	0.13 CFS	1.4 AF

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

 Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION

Field Examiner's Name TK Date 10/22/2018

Reviewer: [Signature] Date: 10/22/18

Drip Zone
32 Beds - 150' each
3 gpm / 100'
0.12 gph 8psi

Drip Zone
32 beds - 150 each

hyd.

40

P.H.

24

* hydrant

P.H

Plant House
500 pots

P. A.

④ Pump

PH

Plant House
500 pots

P.V

P. H.

Control	Test
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
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55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

06/05/20



State of Idaho
Department of Water Resources
Point of Diversion and Place of Use
Water Permit No. 65-22613



0 0.03 0.06 0.12 Miles

Legend



Well



Commercial Use



Flow Rate and Volume Calculations

Permit No. 65-22613

Rate

Pots/House	# of Houses	Total Pots	Gal./Pot	Gal. Used	Time (min.)	GPM	cfs
450	8	3,600	0.75	2,700	45	60	0.13

Volume

	# of Houses	# of Hours (hrs.)	Total Time	GPM*	Total Gal.	AF
Initial Cleaning	8	3	24	14	20,160	0.06
Initial Potting	Gal./Pot	# of Applications	# of Pots	Total Gal.	AF	
	2	1	3,600	7,200	0.02	
Pre Transfer to House	Gal./Pot	# of Applications	# of Pots	Total Gal.	AF	
	1.5	1	3,600	5,400	0.02	
May to mid July	Gal./Pot	Times/Week	# of Minutes	# of Weeks	Total Gal./Pot	Total Pots
	1.5	3	45	10	45	3,600
						162,000
	Gal./Pot	Times/Week	# of Minutes	# of Weeks	Total Gal./Pot	Total Pots
	0.75	3	45	16	36	3,600
						129,600
mid July to mid October	Gal./Pot	Times/Week	# of Minutes	# of Weeks	Total Gal./Pot	Total Pots
	0.75	3	15	16	36	3,600
						129,600
Dust Abatement	Gal./Month	# of Months	Total Gal.	AF		
	60	12	720	0.002		

Total Volume 1.40

*Maximum flow rate for a 3/4" garden hose

Skinner, Aaron

From: Darlene Maxwell <D.Maxwell@bejoseeds.com>
Sent: Tuesday, August 21, 2018 3:58 PM
To: Skinner, Aaron
Subject: RE: Field Exam for Water Right Permit 65-22615

Hi Aaron,

Thank you – Yes the work projects went smoothly this past week, although the smoke was not a delight trying to evaluate onions in the fields.

Thank you for your patience – Finally, with your reminder, we hopefully have the remaining info you:

1. Operating psi for the drip system to the 8 houses
The houses operate at 40 psi.
2. Any well pump information
The has 1 8" casing and is a t the depth of about 95"
It tested at 60 gpm +
We have a 5 hp submersible pump
3. Flow meter information and highest gpm reading recorded
The small flo- tank is locked at no higher than 55 psi
The most used is ~~15 gpm~~ 50 gpm b/c of regulator
4. Dust and weed control information
 - a. How often water is applied
 - b. How much water is applied for each application
Weed and dust control is done with close to 60 gal once a month

Arron - To help clarify the Startup operation and Watering zone program:

1. All house mats are washed at the beginning of each season – using a $\frac{3}{4}$ " hose, it takes about 3 hours for each of the 8 houses to clean
Initially, at potting in May, all pots with only soil are wet to saturation (about 2 gals each) by hand (8 houses – 450 pots /house : 3600 pots) (1 time)
All pots, now with transplants, are wet again to saturation, about 1.5 gal each, by hand before going into the houses (1 time)
2. The House watering systems start from Early May and goes through to the third week of October
Each house (450 pots) is first on one cycle program of 45 minutes or 1.5 gals/pot from May – mid July (All on a time clock, Sorry we did not see this in the main area of the barn – I can send a photo if needed) 3 times/week
From mid -July to mid- October, all of the houses now cycle twice: first on the 45 minute program during Early morning and again later in the afternoon for a 15 minute cycle. 3 times/week

I hope this helps Aaron, and again, thank you for all of your help.

Best Regards,
Darlene

From: Skinner, Aaron [mailto:Aaron.Skinner@idwr.idaho.gov]
Sent: Tuesday, August 21, 2018 9:12 AM
To: Darlene Maxwell <D.Maxwell@bejoseeds.com>
Subject: RE: Field Exam for Water Right Permit 65-22615

Hi Darlene,

Hope the weekend treated you well and the business group function was a success. Any luck on gathering information? Keep me in the loop.

Best,

Aaron Skinner
Idaho Department of Water Resources
Water Resource Agent, Sr.
(208) 334-2190
aaron.skinner@idwr.idaho.gov

From: Darlene Maxwell [<mailto:D.Maxwell@bejoseeds.com>]
Sent: Wednesday, August 15, 2018 7:10 AM
To: Skinner, Aaron <Aaron.Skinner@idwr.idaho.gov>
Subject: Re: Field Exam for Water Right Permit 65-22615

Hi Aaron,
Wow- That just slipped by - sorry. Basically involved with a business group until late Friday. I will try to have the info to you this coming Monday.
Regards, Darlene

Sent from my iPhone

On Aug 13, 2018, at 3:21 PM, Skinner, Aaron <Aaron.Skinner@idwr.idaho.gov> wrote:

Hi Darlene,

I've held off on progressing through my recommendations in hopes to receive information on the questions in the email below. Have you or Robert had a chance to find any answers? Any help is appreciated.

Thank you,

Aaron Skinner
Idaho Department of Water Resources
Water Resource Agent, Sr.
(208) 334-2190
aaron.skinner@idwr.idaho.gov

From: Skinner, Aaron
Sent: Wednesday, March 07, 2018 2:26 PM
To: 'd.maxwell@bejoseeds.com' <d.maxwell@bejoseeds.com>
Subject: Field Exam for Water Right Permit 65-22615

Darlene,

Thanks again for meeting with us today and providing the documents that you did. Below are a few questions we talked about during the exam we would like clarity on.

1. Operating psi for the drip system to the 8 houses
2. Any well pump information
3. Flow meter information and highest gpm reading recorded
4. Dust and weed control information
 - a. How often water is applied
 - b. How much water is applied for each application

Please let me know if you have questions.

Thanks,

Aaron Skinner
Idaho Department of Water Resources
Water Resource Agent
(208) 334-2190
aaron.skinner@idwr.idaho.gov

Overlap Analysis for Permit No. 65-22613 POD

[illegible]

Overlap Analysis for Permit No. 65-22613

[illegible]

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

776897

Office Use Only			
Inspected by			
Twp	Rge	Sec	
	1/4	1/4	1/4
Lat	:	Long	:
	:		:

1. WELL TAG NO. D 0019750
 DRILLING PERMIT NO. _____
 Other IDWR No. WR 65-22613

2. OWNER:
 Name Rob Maxwell
 Address 10888 N Iowa
 City Payette ID State ID Zip 83661

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N W E S	☒	Twp. <u>9</u>	North ☐ or South ☐
		Rge. <u>5</u>	East ☐ or West ☒
		Sec. <u>23</u>	<u>SW</u> 1/4 <u>NW</u> 1/4 <u>NW</u> 1/4
		Gov't Lot _____	County <u>Payette</u>
Lat: _____ Long: _____		Address of Well Site <u>Same</u>	
(Give at least: name of road + Distance to Road or landmark)		City _____	

Li. _____ Blk. _____ Sub. Name _____

4. USE:

- ☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation
☐ Thermal ☐ Injection ☒ Other Commercial water Rt

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/FILTER PACK			AMOUNT	METHOD
Material	From	To	<u>Feet</u> or Pounds	
<u>benzite</u>	<u>0</u>	<u>30</u>	<u>25</u>	<u>over bone</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 65
 Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8</u>	<u>2</u>	<u>65</u>	<u>250</u>	<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations Torch
 Screens _____ Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>4 1/2</u>	<u>5 1/2</u>	<u>1/4 x 1/4</u>	<u>108</u>	<u>8</u>	<u>Steel</u>	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

32 ft. below ground Artesian pressure _____ lb.
 Depth flow encountered _____ ft. Describe access port or control devices: well cap

11. WELL TESTS:

- ☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
<u>100</u>	<u>4 1/2</u>	<u>36.5</u>	<u>4 hr</u>

Water Temp. 58° Bottom hole temp. 54°

Water Quality test or comments: clar

Depth first Water Encounter 32

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>12</u>	<u>0</u>	<u>11</u>	<u>Sandy Silty brown</u>		
<u>5</u>	<u>11</u>	<u>38</u>	<u>clay & silty sand</u>		
<u>8</u>	<u>38</u>	<u>40</u>	<u>Loose Silty Sand brown</u>	☒	
<u>40</u>	<u>40</u>	<u>45</u>	<u>Silty Sand & gravel</u>	☒	
<u>45</u>	<u>45</u>	<u>58</u>	<u>gravel & sand - white - MC</u>	☒	
<u>58</u>	<u>58</u>	<u>62</u>	<u>gravel & Silty Sand brown</u>	☒	
<u>62</u>	<u>62</u>	<u>64</u>	<u>Orange brown Silty Clay</u>		
<u>64</u>	<u>64</u>	<u>68</u>	<u>clay blue</u>		

RECEIVED

MAY 07 2002

WATER RESOURCES
WESTERN REGION

Completed Depth 68 (Measurable)
 Date: Started 4-3-02 Completed 4-19-02

13. DRILLER'S CERTIFICATION

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

Company Name HAINES WATER WELL DRILLING Firm No. 491
4127 GOOD LANE
 Firm Official NEW PLYMOUTH ID 83655
 and 5-6-02
 Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

December 27, 2017

COPY

ROBERT MAXWELL AND/OR
DARLENE MAXWELL
10888 N. IOWA AVENUE
PAYETTE, ID 83661

RE: Scheduling Field Exam for Water Right Permit No. 65-22613

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use in order to issue a water right license.

The above-referenced permit authorizes **0.14 cfs** of **GROUND WATER** for **COMMERCIAL** use. **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but have ceased using the water and you currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

Please contact me within the next thirty (30) days at (208) 334-2190 to either schedule an examination or submit a relinquishment form. If the Department does not received a response by January 29, 2018 your permit will become void.

Sincerely,

Aaron Skinner
Water Resource Agent
Idaho Department of Water Resources
Phone: (208) 334-2190
Email: aaron.skinner@idwr.idaho.gov

Enclosures: Relinquishment of Permit form
Water Permit Report and Map