

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 63-337681. Owner Jerome WandersPhone No. 208-989-6507Current address PO Box 175, Caldwell, ID 836062. Examiner's name Cody ParkerEXAM DATE 09/20/20183. Accompanied by Jerome Wanders

Email _____

Address _____

Relationship to permit holder same

Phone No. _____

4. Source Ground water

tributary to _____

B. OVERLAP REVIEW1. Other water rights with the same place of use Nampa-Meridian ID shares2. Other water rights with the same source and point of diversion none**C. DIVERSION AND DELIVERY SYSTEM**

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
			NE	SE	13	03N	04W	Canyon	GPS, digital PLS map

2. Place(s) of Use:

Method of determination Site visit, aerial imagery, digital PLS map

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N	04W	13													38	38	31	37	144

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
 ☒ Aerial photo attached (required for irrigation of 10+ acres)
 ☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Tag No. D0064583	GE	100	HNJ824444		10"

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. **Measurements:** _____

Theoretical only _____

E. NARRATIVE/REMARKS/COMMENTS

The point of diversion is a 16-inch well located at N43 35'44.3" by W116 45'09.5". Water is diverted from the well using a 100-hp motor powering a pump of unknown make. The water is diverted through a ten-inch pipe to the north less than 100 ft. to an open discharge into a vault. The water is then diverted from the vault using a booster pump through more ten-inch line to the pivot center and to risers for hand lines at the corners of the fields.

I estimated the theoretical diversion rate based on the drawdown reported on the well drillers report. In reality the drawdown at the developed diversion rate is likely less than shown. However, the theoretical rate shows that the well is capable of producing the BU Standard so I have used the standard for the licensed rate.

The groundwater is used to supplement surface water shares from the local irrigation district. I got the impression that the groundwater has not been needed or used since the system was developed. The supplemental use conditions will be updated on the license. Condition WB7 will also be updated to reflect a slightly lower annual volume.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

Theoretical: $8.8 \times 0.7 \times 100 \text{ hp} / (190 \text{ ft} + 2.31 \times 0 \text{ psi}) = 3.24 \text{ cfs}$

Permit = 2.90 cfs

BU Standard: $= 0.02 \text{ cfs/acre} \times 144 \text{ acres} = 2.88 \text{ cfs}$ (recommended)

Fee Limit: 3.00 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 144 \text{ acres} \times 4.5 \text{ afa/acre} = 648 \text{ afa}$$

$$V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 2.88 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 1485.2 \text{ afa}$$

$$V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} = 648 \text{ afa}$$

2. Volume Calculations for Other Uses:

No other uses

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion	Annual Volume
	From	To	Q (cfs)	V (afa)
Irrigation	03/01	11/15	2.88 cfs	648 afa
Totals:			2.88 cfs	648 afa

2. Recommended Amendments

☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1☒ None☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

Field Examiner's Signature

Date

9-28-18

Reviewer

Date

9/28/18

SEAL

State of Idaho
Department of Water Resources
Beneficial Use Field Report
63-33768

IRRIGATION



0 0.075 0.15 0.3 Miles

-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections



System Diagram

Notes

Total irrigated area is 144 acres.

BU standard diversion rate = 144 acres x 0.02 cfs/acre = 2.88 cfs

Diversion Volume = 144 acres x 4.5 afa/acre = 648 afa

Estimated diversion rate:

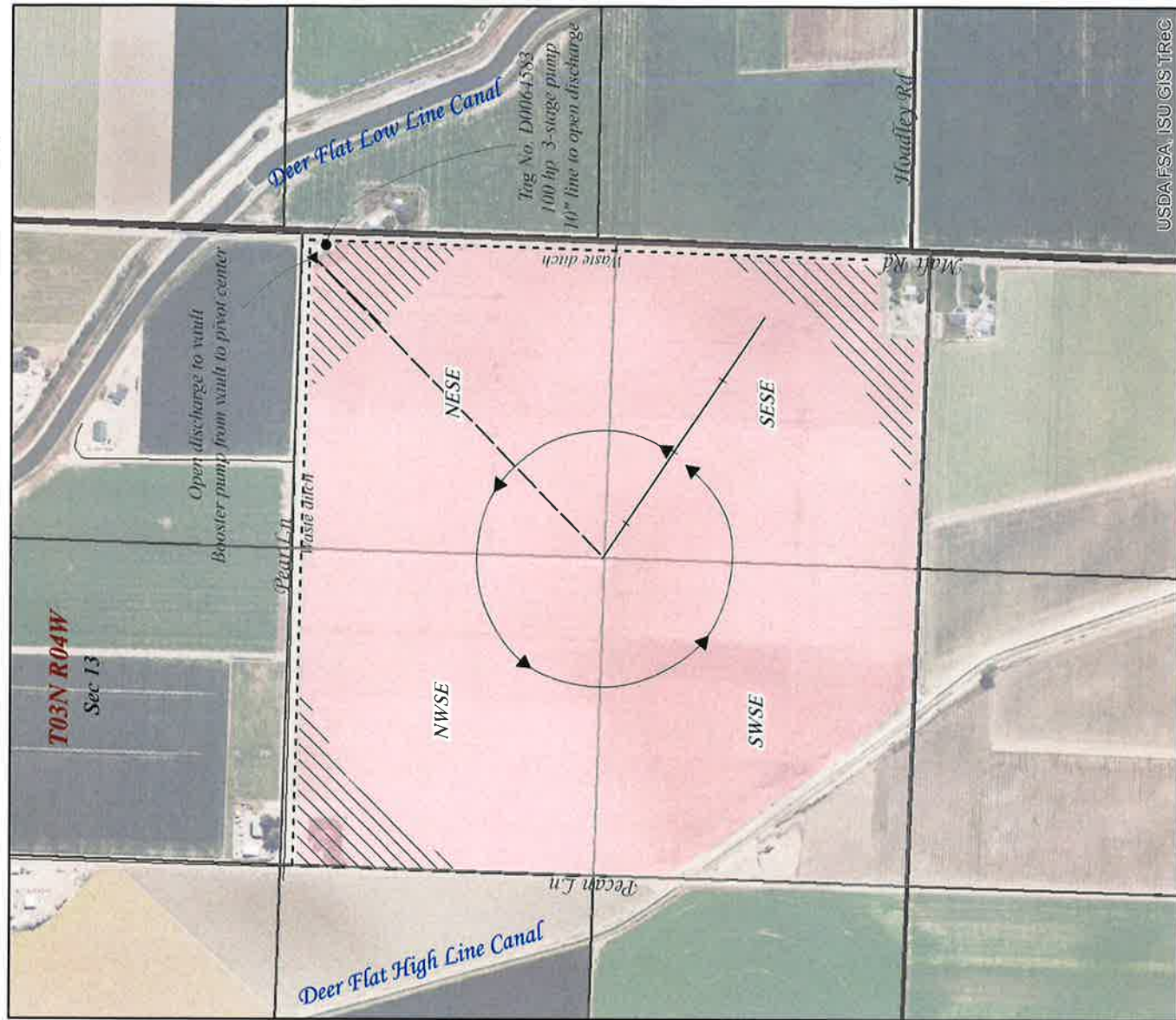
$$Q = \frac{8.8 \times 0.7 \times 100 \text{ hp}}{190 \text{ ft} + (2.31 \times 0 \text{ psi})} = 3.24 \text{ cfs}$$

Groundwater use is supplemental to Nampa-Meridian Irrigation District water

1.7 acres in the northwest corner of the POU are no longer irrigated. Instead a house has been developed at that location (see 2017 imagery). However, the area was irrigated during the development period and has therefore been included in the Place of Use

LEGEND

- Point of diversion
 - ▲ Vault and booster pump
 - Pivot
 - Waste ditch
 - - - 10" steel mainline
 - Irrigated acreage
 - /// Hand-line irrigation
- N
- 0 0.125 0.25 Miles



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT



Figure 1. The well with a 100-hp motor. Water is moved through a 10-inch line from the well to the open discharge.



Figure 2. Tag showing the specifications for the GE motor.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT



Figure 3. Metal tag no D0064583



Figure 4. Irrigated area after harvest for the season.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT



Figure 5. Open discharge from 10-inch line to vault.



Figure 6. The spec tag for the booster pump used to charge the pivot.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

Place of use comparison

03N04W13

Basin/Sequ	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
63-10013A	PLATT, W	GROUND IRRIGATION							32											32
63-10013E	PLATT, W	GROUND IRRIGATION																		31
63-11535	WOOD F/	GROUND IRRIGATION																		100
63-136	BARKER	BOISE RT' IRRIGATION		31	X	X	X	38	X	X	X	X	X	X	X	X	X	X	X	
63-137B	BARKER	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-198AJ	DAVIS, TI	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-198B	DAVIS, TI	MORES C IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-199B	DAVIS, TI	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-199B	DAVIS, TI	MORES C IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-200A	BARKER	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-200B	DAVIS, TI	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-200B	DAVIS, TI	MORES C IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2106	UNITED S	FIVEMILE IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2109	UNITED S	MASON C IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-233K	AMERICA/	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2388A	UNITED S	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2392B	DRAINAC	WASTE W IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2392F	BOISE PR	WASTE W IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-251A	UNITED S	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2968	FARWES	GROUND IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-30181	DAVIS, TI	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-30181	DAVIS, TI	MORES C IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-301A	UNITED S	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-302A	UNITED S	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-32695A	NAMPA &	GROUND IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-32695E	NAMPA &	GROUND IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-33251	BOISE PR	INDIAN C IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-33253	BOISE PR	TENMILE IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-33632	LORIMER	GROUND IRRIGATION																		31
63-33633	JONES, LI	GROUND IRRIGATION																		31
63-33634	SUNNY S	GROUND IRRIGATION																		31
63-33739	NAMPA &	SPRINGS IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-33768	SPF WAT	GROUND IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-373A	UNITED S	BOISE RT' IRRIGATION		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	144

Irrigation entity water

Point of diversion comparison

03N04W13

Basin/Sequ	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
63-10013E	PLATT, W	GROUND WATER												X					
63-11535	WOOD F/	GROUND WATER		X															
63-21417	BISHOP, J	GROUND WATER			X														
63-21448	WOOD F/	GROUND WATER																	
63-21449	WOOD F/	GROUND WATER									X								
63-25908	HOLLEN	GROUND WATER								X									
63-26303	SOZA, BE	GROUND WATER							X										
63-26541	SMITH, JI	GROUND WATER										X							
63-26542	SMITH, JI	GROUND WATER										X							
63-2814	LORIMER	GROUND WATER											X						
63-2962	JONES, LI	GROUND WATER												X					
63-33600	J & R	FAR GROUND WATER												X					
63-33632	LORIMER	GROUND WATER												X					
63-33633	JONES, LI	GROUND WATER												X					
63-33634	SUNNY S	GROUND WATER												X					
63-33768	SPF WAT	GROUND WATER														X			
63-8062	WILLIAM	GROUND WATER												X					
63-8900	WILLIAM	GROUND WATER												X					

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0064583

Drilling Permit No. 963101 - 869160

Water right or injection well # 63-33768

2. OWNER: JEROME WANDERS

Name _____

Address 15051 KINGS ROW RD

City CALDWELL State ID Zip 83607

3. WELL LOCATION:

Twp. 03 North ☒ or South ☐ Rge. 04 East ☐ or West ☒

Sec. 13 1/4 NE 1/4 SE 1/4

Gov't Lot _____ County Canyon

Lat. 43 35.737 (Deg. and Decimal minutes)

Long. 116 45.162 (Deg. and Decimal minutes)

Address of Well Site Intersection of Malt Rd and Pear Ln

City Caldwell

Lot. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation ☐ Thermal ☐ Injection
☐ Other _____

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☐ Air Rotary ☐ Mud Rotary ☐ Cable ☒ Other Reverse Rotary

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
3/4" Bentonite	0	230	15 yds	Dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
16	+2	252	.375	Steel	☒	☐	☒
16	292	306	.375	Steel	☒	☐	☒
16	346	354	.375	Steel	☒	☐	☒

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____

Manufactured screen ☒ Y ☐ N Type Johnson Wire Wrap

Method of installation Lower in

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
252	292	.025		16	S.S.	
306	346	.025		16	S.S.	
354	374	.025		16	S.S.	

Length of Headpipe _____ Length of Tailpipe 5' w/plate

Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
#6-12 Sand	230	385	33,000 lbs	Dry pour

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 100 Static water level (ft) 78'

Water temp. (°F) 66° Bottom hole temp. (°F) _____

Describe access port 2" pipe on side

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
112	2100	330

Test method:

Pump	Bailer	Air	Flowing artesian
☒	☐	☐	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
24	0	5	Top soil		X
24	5	62	Burnt clay, caliche		X
24	62	65	Fine sand		X
24	65	79	Tan clay		X
24	79	89	White clay		X
24	89	100	Blue, red and grey clay		X
24	100	114	Gravel	X	
24	114	120	Brown clay		X
24	120	121	Blue clay		X
24	121	135	Brown clay		X
24	135	151	Blue, brown clay mix		X
24	151	157	Med-coarse sand, small gravel	X	
24	157	160	Brown clay		X
24	160	175	Blue clay		X
24	175	185	Hard grey clay		X
24	185	191	Blue clay		X
24	191	194	Fine-med blue sand	X	
24	194	225	Light to dark grey clay		X
24	225	235	Blue sticky clay		X
24	235	253	Light to dark sticky grey clay		X
24	253	261	Fine - med blue sand	X	
24	261	263	Sandy blue clay		X
24	263	280	Fine-med blue sand	X	
24	280	285	Blue clay		X
24	285	290	Fine-med blue sand	X	
24	290	307	Blue and dark grey clay		X
24	307	345	Fine-med blue sand, sm clay layer	X	
24	345	355	Blue sandy clay		X
24	355	373	Fine-coarse blue sand	X	
24	373	385	Blue, grey clay		X

Completed Depth (Measurable): 379'

Date Started: Jul 22, 2013

Date Completed: Oct 10, 2013

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 Riverside Inc

Co. No. 333

*Principal Driller [Signature] Date 11/8/13

*Driller _____ Date _____

*Operator I _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

RECEIVED

JAN 17 2014

WATER RESOURCES
WESTERN REGION