

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

**A. GENERAL INFORMATION**Permit No: **02-10455**

Exam Date: 07/02/13

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)?   X   Y    N
- Irrigation of 5 acres or less
  - Storage of up to 14.6 AF for stockwater purposes only
  - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
  - Other < >

2. Current Owner: Name: **Holzhausen Family Trust**Owner of Record Correct?   X   Y    NAddress of Record Correct?   X   Y    N

If No: Address

3. Beneficial Use Fees have been paid:
- X
- Y
- 
- N Receipt No: C0

4. **SOURCE****TRIBUTARY**

Snake River

Columbia River

Method of Determination: Owner sent pictures of the pont of diversion and GIS provides additional proof of the source of water being use.d

Change in Source:    Y   X   N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:
- X
- NO Overlap

| Water Right No. | Source | Purpose of Use | Basis |
|-----------------|--------|----------------|-------|
|                 |        |                |       |
|                 |        |                |       |

Comments: There are no water rights that actually overlap the place of use. Water rights 02-4020 and 02-7426 are used on the adjacent fields, but they do not actually go onto property where this permit is located. The shape files that were created in the Snake River Basin Adjudication (SRBA) make it look as though a portion of these water rights do encroach upon the property in this permit, but if compare the 1987 aerial photography and the current ESRI photography, you can see that there is an issue with the registration of these two maps. Taking this into consideration, there is no actual overlapping water rights on the ground being irrigated by this water right.

2. Other water rights with the same point of diversion:
- X
- NO Overlap

| Water Right No. | Source | Purpose of Use | Basis |
|-----------------|--------|----------------|-------|
|                 |        |                |       |
|                 |        |                |       |

Comments: There are no other water rights diverted from this point of diversion.

**C. DIVERSION AND DELIVERY SYSTEM****1. LOCATION OF POINT(S) OF DIVERSION:**

| Source      | Govt. Lot | ¼ | ¼  | ¼  | Sec. | Twp. | Rge. |      | County        |
|-------------|-----------|---|----|----|------|------|------|------|---------------|
| Snake River | 2         |   | NW | NE | 35   | 1S   | 2W   | B.M. | Owyhee County |

Method of Determination: **The owner supplied photos and an aerial photo showing the location of the point of diversion and place of use. The ESRI aerial photography was used to confirm point of diversion location.**

Change in POD? ☒ N Amendment Required? ☐ N

**2. PLACE OF USE:** Use: Irrigation

| TWP           | RGE | Sec   | NE |     |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|---------------|-----|-------|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|               |     |       | NE | NW  | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 1S            | 2W  | 35    |    | 4.9 |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4.9    |
|               |     | Lot # |    | 2   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
| Total Acres = |     |       |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4.9    |

Method of Determination: **The owner supplied aerial photos and photos showing the irrigated area. The owner states that they mostly irrigate between the river and the house, but in the ESRI images, you can clearly see land that has been prepared for irrigation. I contacted the owner with a shape file I thought was irrigated, and the owner sent a second email showing exactly what was irrigated. We don't have aerial photography that can prove what was irrigated in 2012, so I am recommending the information that was sent by the owner.**

Change in POU? ☒ N Amendment Required? ☐ N

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

Indicate weir size/pipe as applicable.

☒ 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 |
|------------------------------------------|------------|-----|------------------|-----------|-----------------------------------|
| River Pump                               | Baldor     | 7.5 | F1102111045      | Paco      | RS1320051307DLM                   |

\*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 |
|-------------------------|------|------|-----------|------------|------|-------------|
| none                    |      |      |           |            |      |             |
|                         |      |      |           |            |      |             |

2. Measurements: **This is an in-house exam, so no field examination was made. The owner supplied the pump make and model and the pressure at the pump. From the photos supplied by the owner, the lift on the pump is not more than 5 feet.**

E

**FLOW CALCULATIONS**  X   Additional Computation Sheets Attached

Measured Method:

Measurement = 0.234 cfs (see attached sheet)

Standard Rate per acre at 0.03 cfs per acre =  $4.9 \times 0.03 = 0.147$  cfs

Permit allowed = 0.15 cfs

License recommend for 0.15 cfs.

**F. VOLUME CALCULATIONS**

## 1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.9 \times 4.5 = 22.05 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.13 \times 229 \times 1.9835 = 59$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 22 \text{ af}$$

## 2. Volume Calculations for Other Uses:

**G. PURPOSE OF USE**Irrigation   X   Y        N # Stock                      Domestic # of Homes                     

Other: &lt; &gt;

Change in Purpose of Use?        Y        NMethod of Determination: Aerial photos and photos were sent in by the owner that show that the use had been accomplished.If Yes: From Use                      To Use                      Amount                      CFS                      AFA                     **H. NARRATIVE/REMARKS/COMMENTS**

This permit was done as an in-office field exam. The owner supplied aerial photos and pictures of the pump and land being irrigated. Please see his letter dated October 12, 2013 to view the photos and maps. With the maps and photos supplied, an in-office field exam seems reasonable.

I did struggle a bit with the place of use, but the owner sent in a map that does seem reasonable.

The Owner requested a waiver of the measurement device condition in a letter dated September 18, 2013. I spoke with Corbin Knowles, watermaster Water District 2, about this request. Mr. Knowles reviewed the request, and sent an email dated September 20, 2013 agreeing to waive the measurement device requirement. As a result of Mr. Knowles email, I changed the measurement condition 01J to 01M. Condition 121 was changed to 103 per standard practices.

Have conditions of permit approval been met?   X   Yes        No

**I. RECOMMENDATIONS****1. Recommended Amounts**

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| Irrigation            | 03/01 to 11/15       | 0.15 CFS              | 22 AF                |
| <u>Totals:</u>        |                      | 0.15 CFS              | 22 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    ☐ None

Other: <   >

**J. AUTHENTICATION – DANIEL A. NELSON – STAFF HYDROLOGIST**

Field Examiner's Name  Date 10-23-2013

Reviewer \_\_\_\_\_ Date \_\_\_\_\_

State of Idaho  
Department of Water Resources

Field Exam

2-10455

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

02W

01S



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

0 0.025 0.05 0.1 Miles



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

6

Water Right No.: 02-10455  
 Examiner: Dan Nelson  
 Date of Field Exam: 10/18/2013

| P/D No.:           | Option 1 | OPTION 2 | OPTION 3 |       |
|--------------------|----------|----------|----------|-------|
| PUMP HORSEPOWER    | 7.5      | 7.5      | 7.5      |       |
| BOOSTER HORSEPOWER | 0        | 0        | 0        |       |
| PUMPING LEVEL      | 5        | 5        | 5        |       |
| DISCHARGE PRESSURE | 80       | 80.25    | 85       |       |
| FRICTION           | 0        | 8        | 8        |       |
|                    |          |          |          | AVE   |
| RATE OF FLOW (cfs) | 0.24     | 0.23     | 0.22     | 0.23  |
| (gpm)              | 109.3    | 104.5    | 99.0     | 104.3 |

The above calculates the formula = 
$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.

**Examiners Notes:**

The applicant supplied the pump horsepower and psi. I estimated the lift based on the pictures that the applicant supplied.

[illegible]

**Nelson, Dan**

---

**From:** Gary Holzhausen [gary.holzhausen@gmail.com]  
**Sent:** Wednesday, October 23, 2013 2:03 PM  
**To:** Nelson, Dan  
**Subject:** Irrigated area  
**Attachments:** Irrigated Acres 2-10455\_10-23-13.pdf

Hello Dan,

This email is in response to yours of October 18.

I looked at your map and modified the boundaries of the irrigated area to include all of the land that has been irrigated on our parcel. The new map is attached. The irrigated area is bounded by red lines. It includes the entire parcel, except for the area covered by the house, the driveway, and the parking area to the south and west of the house.

I hope this gives you the information you need. Feel free to call me or email if I can assist further.

Gary Holzhausen  
831-239-0975



## Nelson, Dan

---

**From:** Nelson, Dan  
**Sent:** Friday, October 18, 2013 11:13 AM  
**To:** 'Gary Holzhausen'  
**Subject:** RE: Your letter of September 18  
**Attachments:** Irrigated Acres 2-10455.pdf

Gary,

I am still struggling a bit with the irrigated acres. I want to make sure that I give you everything that you irrigate, because after this permit is licensed you will be bound by the lands marked. I found a maximum of 4.3 acres that could be irrigated.

I have attached a map that shows everything that is green or looks like it could be a garden or tilled ground. Does this map represent the land being irrigated? Please look it over and let me know if it looks right. If not please let me know what I missed.

Thank you for your time and patience.

Daniel A. Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone # (208) 287-4856  
Fax (208) 287-6700 (C/O Dan Nelson)

---

**From:** Gary Holzhausen [<mailto:gary.holzhausen@gmail.com>]  
**Sent:** Friday, October 18, 2013 8:09 AM  
**To:** Nelson, Dan  
**Subject:** Re: Your letter of September 18

Hello Daniel,

Thanks for your email. It is a pleasure working with DWR. You have all been very professional and helpful. I look forward to receiving the license.

Best regards, Gary

Sent from my iPhone

On Oct 18, 2013, at 6:35 AM, "Nelson, Dan" <[Dan.Nelson@idwr.idaho.gov](mailto:Dan.Nelson@idwr.idaho.gov)> wrote:

Hello Gary,

I just wanted to let you know that I received your package and everything looks great. Thank you. I will start working to prepare the license today. Hopefully, you should get your license in the next 2 to 4 weeks. Once I prepare the license I submit it to bureau manager who reviews and signs the license and returns it to you. We also may be sending an order addressing the measurement device requirement. I am going to recommend that the measurement condition be removed, but I don't know if that will require a separate order or if it can be done with the license. I will keep you informed on my findings.

Thank you again for all of our help and cooperation. I will do everything within my power to get this resolved as quickly as possible.

Daniel A. Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone # (208) 287-4856  
Fax (208) 287-6700 (C/O Dan Nelson)

---

**From:** Gary Holzhausen [<mailto:gary.holzhausen@gmail.com>]  
**Sent:** Thursday, October 03, 2013 2:02 PM  
**To:** Nelson, Dan  
**Subject:** Re: Your letter of September 18

Daniel,

Thanks for your reply. I will send them by surface mail. If the pictures aren't sharp enough on paper, I will send you duplicates by email.

Gary

On Thu, Oct 3, 2013 at 11:57 AM, Nelson, Dan <[Dan.Nelson@idwr.idaho.gov](mailto:Dan.Nelson@idwr.idaho.gov)> wrote:

Mr. Holzhausen,

You can email them or send them by regular mail. Either way will work. We have had some problems with our email lately, so if you choose to send them by email, I would appreciate a second email without attachments letting me know that you sent them. If you send a follow-up email, then I can let you know if I received them or not.

Thank you for your response. I look forward to hearing from you.

Daniel A. Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone # (208) 287-4856  
Fax (208) 287-6700 (C/O Dan Nelson)

---

**From:** Gary Holzhausen [mailto:[gary.holzhausen@gmail.com](mailto:gary.holzhausen@gmail.com)]  
**Sent:** Thursday, October 03, 2013 12:21 PM  
**To:** Nelson, Dan  
**Subject:** Your letter of September 18

Dear Daniel,

Thank you for your letter, which I received last week. I am putting together the answers to your questions now. Would you like me to send you this information on paper by surface mail? Or is an email submittal satisfactory? The photographs will probably be clearer if I email them to you.

Thank you and best regards,

Gary Holzhausen



Source: Esri, DigitalGlobe, GeoEye, AeroVista, USDA, USGS, AeroGRID, IGN, SRTM30, and the USGS Community

RECEIVED

OCT 17 2013

DEPARTMENT OF  
WATER RESOURCES

Gary Holzhausen  
13963 Guffey Lane  
Melba, ID 83641

October 12, 2013

Daniel A. Nelson  
Staff Hydrologist  
State of Idaho, Department of Water Resources  
322 East Front Street  
P.O. Box 83720  
Boise, ID 83720-0098

Re: Additional Information for Water Right License

Dear Daniel:

Following, and in the enclosed photographs, is the information you requested in your letter of September 18, 2013. The photographs are numbered Fig. 1, Fig. 2, etc. on the reverse side and are referenced below:

1. Our pump is a 7.5 HP centrifugal pump, driven by a 230 V single-phase electric motor rated at 37 Amps. The pump itself is manufactured by Grundfos CBS Inc. and sold by Paco Pumps, stock no. 3842243. I do not have pump curves. Figs. 1 and 2 show the motor and pump plates.
2. Figs. 3-8 show the pump, electrical panels and land being irrigated.
3. A 3-inch buried line runs along the western side of the property. There are 14 risers on this line. We run hand lines from these risers. We irrigate with one or two hand lines and move them as needed. We run a maximum of 10 impact sprinklers at one time. The sprinkler nozzles are a combination of 1/8" and 9/64" in diameter. The sprinklers are Rainbird brand. The buried irrigation line and the approximate property lines are shown on the satellite photo, Fig. 9.
4. There is a pressure gage at the pump. The pump discharge pressure is 80-85 psi. The elevation difference between the pump and the highest riser on the buried irrigation line is 50 ft.
5. The satellite photo, Fig. 9, is marked with the pump location and the location of the buried, 3-inch irrigation line. The 14 risers are evenly spaced between the point where the line makes a 45-degree bend (near the NW corner of the parcel) and the end of the line (near the SW corner of the parcel). The hand lines are positioned so that they run from west to east across the property. Most of the irrigation is being done between the house and the river.

I hope this information provides the answers you are looking for. If you need more information, please don't hesitate to call me at 831-239-0975 or email [gary.holzhausen@gmail.com](mailto:gary.holzhausen@gmail.com).

Sincerely,

A handwritten signature in blue ink that reads "Gary Holzhausen". The signature is fluid and cursive, with a long horizontal stroke at the end.

Gary Holzhausen, Trustee  
Holzhausen Family Trust

**BALDOR • RELIANCE**  
INDUSTRIAL MOTOR

|                |              |  |                |             |          |    |       |   |   |  |
|----------------|--------------|--|----------------|-------------|----------|----|-------|---|---|--|
| CAT. NO.       | WCL1509T     |  |                |             |          |    |       |   |   |  |
| SPEC.          | 37E284X77    |  |                |             |          |    |       |   |   |  |
| HP             | 7.5          |  |                |             |          |    |       |   |   |  |
| VOLTS          | 230          |  |                |             |          |    |       |   |   |  |
| AMPS           | 37           |  |                |             |          |    |       |   |   |  |
| R.P.M.         | 3450         |  |                |             |          |    |       |   |   |  |
| FRAME          | 213TCZ       |  | HZ             |             | 60       |    | PH    |   | 1 |  |
| SER. F.        | 1.15         |  | CODE           | G           | DES      | L  | CLASS | B |   |  |
| NEMA NOM. EFF. | 81           |  | %              |             | P.F.     | 82 |       | % |   |  |
| RATING         | 40C AMB-CONT |  |                |             |          |    |       |   |   |  |
| CC             |              |  | USABLE AT 208V |             | 39       |    | A     |   |   |  |
| BEARINGS       | OE 6309      |  |                |             | ODE 6206 |    |       |   |   |  |
| ENCL.          | OPEN         |  | SN             | F1102111045 |          |    |       |   |   |  |

BALDOR ELECTRIC CO. FT. SMITH, AR. MFG. IN U.S.A.  
NP1258L

# PACO® PUMPS

CAT#: 10-12709-030001-1711

STOCK#: 3842243

SER#: RS1320051307DLM

GPM: 80

TDH: 200

IMP DIA: 6.79"

MFG BY GRUNDFOS CBS INC

34014412





**EATON**

**⚠ DANGER**

DISCONNECT REQUIRE LOCKOUT-TAGOUT  
PROCEDURES PRIOR TO PERFORMING ANY  
MAINTENANCE OR REPAIR ON EQUIPMENT

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY  
RESULT IN SEVERE INJURY OR DEATH

**⚠ PELIGRO**

EL INTERRUPTOR DEBE SER  
DESCONECTADO Y ETIQUETADO  
ANTES DE EFECTUAR  
CUALQUIER MANTENIMIENTO O  
REPARACIÓN DEL EQUIPO

SI NO SIGUES ESTAS  
INSTRUCCIONES PUEDES  
SUFRIR LESIONES GRAVES  
O LA MUERTE





SERVICE DISCONNECT  
DESCONEXION DE ACOMETIDA



Main

Pump



220  
V.

GFI#2

GFI#1

IDAHO  
Building Safety  
Inspection Division

REMOVE



