

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12486

Exam Date: 4/26/2013

1. Current Owner: MICHAEL H KLING
13070 HORSESHOE BEND RD
BOISE ID 83714-9647
(208)939-6913

RUTH E KLING
13070 HORSESHOE BEND RD
BOISE ID 83714-9647
(208)939-6913
2. Accompanied by: Michael Kling
Phone No: Same
Address: Same
Relationship to Permit Holder:
3. SOURCE TRIBUTARY
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 SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SE1/4SE1/4 Sec. 34, Twp 05N, Rge 01E, B.M.
ADA County

Method of Determination: Arc Map (Aerial Photo); GPS – Latitude N.43°43.387', Longitude W.116°18.957'; Datum – NAD83.

2.

PLACE OF 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	
05N	01E	34																1.0	1.0

Total Acres: 1

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. 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.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion 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 Size</u>
N/A	Unknown	1.5	Unknown	Unknown	Unknown

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

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No field measurement. Irrigation system not operating during the field exam.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 1.5 / 115 + (2.31 \times 40) = 9.24 / 207.4 = 0.05 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.05 \text{ cfs} < 0.08 \text{ cfs } Q(\text{permit})$$

$$HP = 1.5$$

$$Z = 115'$$

$$P = 40 \text{ psi (Assumed)}$$

Appears that the current pumping system cannot attain the permit diversion rate of 0.08 cfs. However, since only 1 acre is irrigated, not 4 acres as stated on the permit, and the total irrigable area is less than 5 acres, recommend a diversion rate of 0.03 cfs.

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.0 \times 4.5 = 4.5 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \times 260 \times 1.9835 = 15.5 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 4.5 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A**G. NARRATIVE/REMARKS/COMMENTS****WATER SUPPLY SYSTEM:**

A ground water well with a 1.5 hp submersible pump diverts water for irrigation of approximately 1.0 acre of pasture, lawn, landscaping, and gardens.

IRRIGATION SYSTEM:

Irrigation of the pasture, lawn, landscaping, and gardens is accomplished by hoses and sprinklers. The hoses are attached to several frost free hydrants located throughout the property.

Note:

A well log could not be located. As stated on the Application for Permit, the right holder believes the well was drilled in 1977. Since no well drilling information was available, the right holder had the pump installer provide the following well and pump information: Well depth – 216'; Static Water Level – 27'; Pump Location – 115'.

Based on the well information provided by the pump installer, the right holder is not in compliance with Approval Condition No.5. Condition No.5 states that due to the shallow aquifer to the Boise River, the well shall be constructed and maintained with unperforated casing and sealed into the first significant confining layer located 200 feet or more below ground surface. Although well construction data is not available, it appears that based on the well depth and the location of the pump that the right holder is diverting ground water from the shall aquifer to the Boise River. However, since the total water appropriation is so minor (0.03 cfs), and that the total place of use is only 1.0 acre, it is believed that since the well has been in operation for approximately 36 years, it appears injury to prior water rights would not be likely.

However, if in the future the right holder or current owner of the property were to modify or improve the well and/or expand the place of use associated with this permit, the right holder shall comply with the drilling and well construction requirements stipulated in Condition No.5.

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

CONDITION OF APPROVAL NO.5 – See 'NOTE' in Section G. NARRATIVE/REMARK/COMMENTS.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.08	&/or	N/A
Beneficial Use Limit	0.08	&/or	N/A
System Measurement	0.05 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.03	&/or	N/A

H. 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	0.030 CFS	4.5 AFA
	<u>Totals:</u>	0.030 CFS	4.5 AFA

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

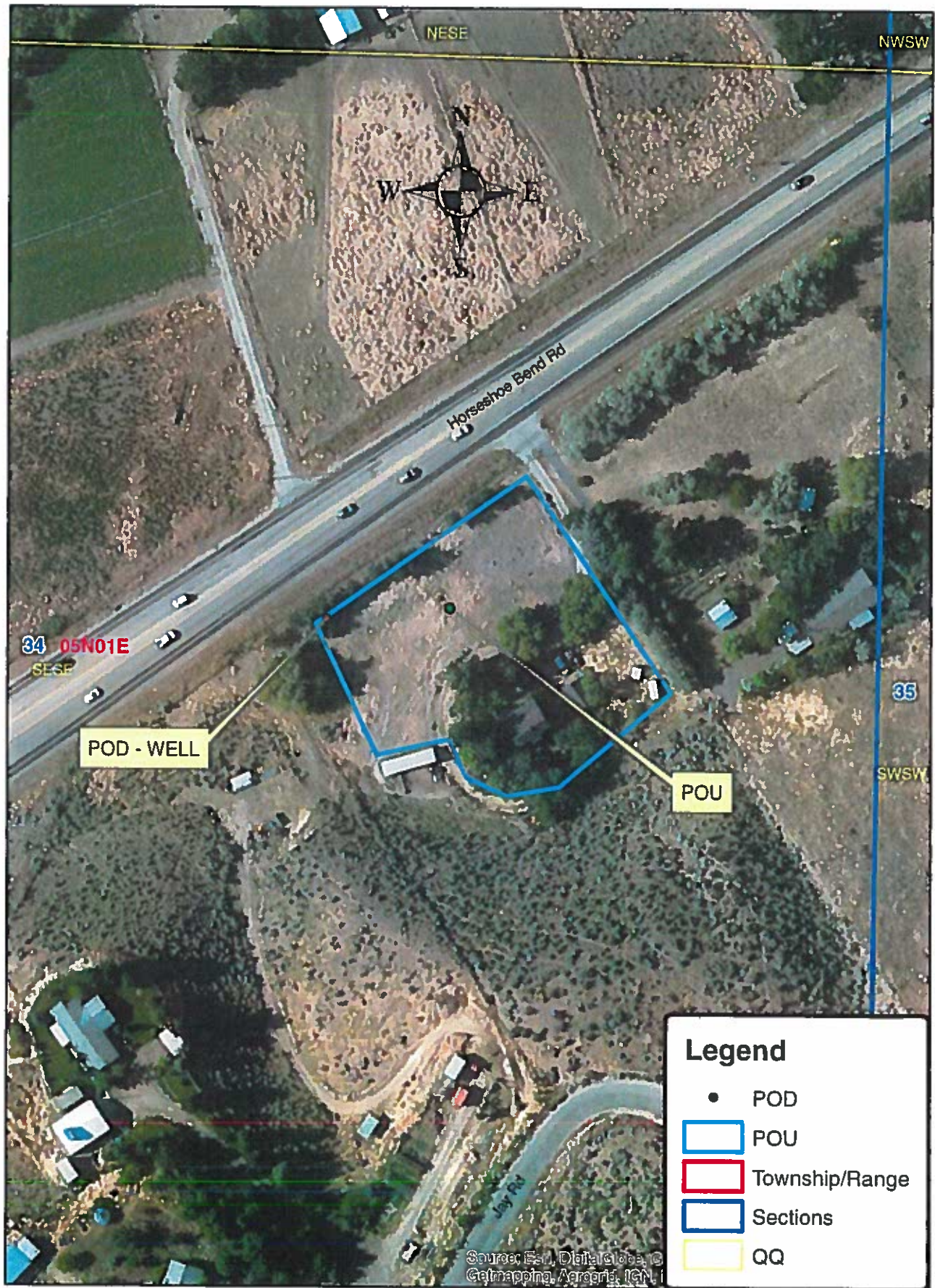
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 6/28/13

Reviewer _____ Date _____

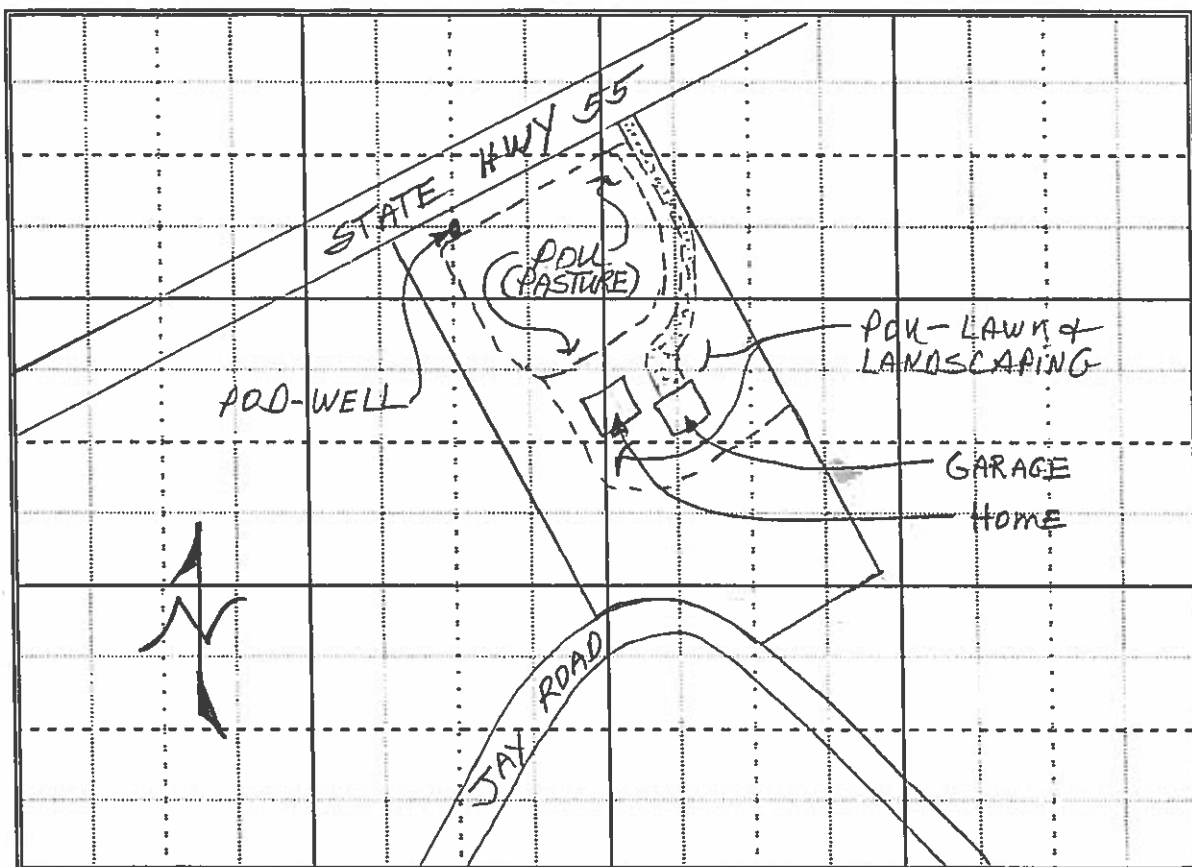
63-12486

ESRI AERIAL PHOTO - 2012



0 40 80 160 240 320
Feet

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" = NTS

- ☐ 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

FIELD EXAM PHOTOS

Water Right Permit: 67-15007

Field Exam Date: 4-26-13

PLS: SE1/4, SE1/4 Section 34, T.5N, R.01E.

Field Examiner: RC



Point of Diversion: View northerly of the ground water irrigation well located in the northwest corner of the right holder's property.



Place of Use: View easterly of the pasture area adjacent to State Highway 55. Hoses are attached to randomly located irrigation risers (frost free hydrants) around the pasture area for sprinkler irrigation.



Place of Use: View southeasterly of a portion of the landscaping southerly of the home. Irrigation risers are randomly located within the landscaped areas for connecting hoses for sprinkler irrigation.

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. 63-12486

1. Owner Michael H. & Ruth E. Kling Phone No. (208) 939-6913
 Current address 13070 Horseshoe Bend Road, Boise, ID 83714-9647
2. Examiner's name Rick Collingwood EXAM DATE 4/26/13
3. Accompanied by Mike Kling Email michael.h.kling@gmail.com
 Address Same
 Relationship to permit holder _____ Phone No. SAME
4. Source Ground Water tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use NONE
2. Other water rights with the same source and point of diversion NONE

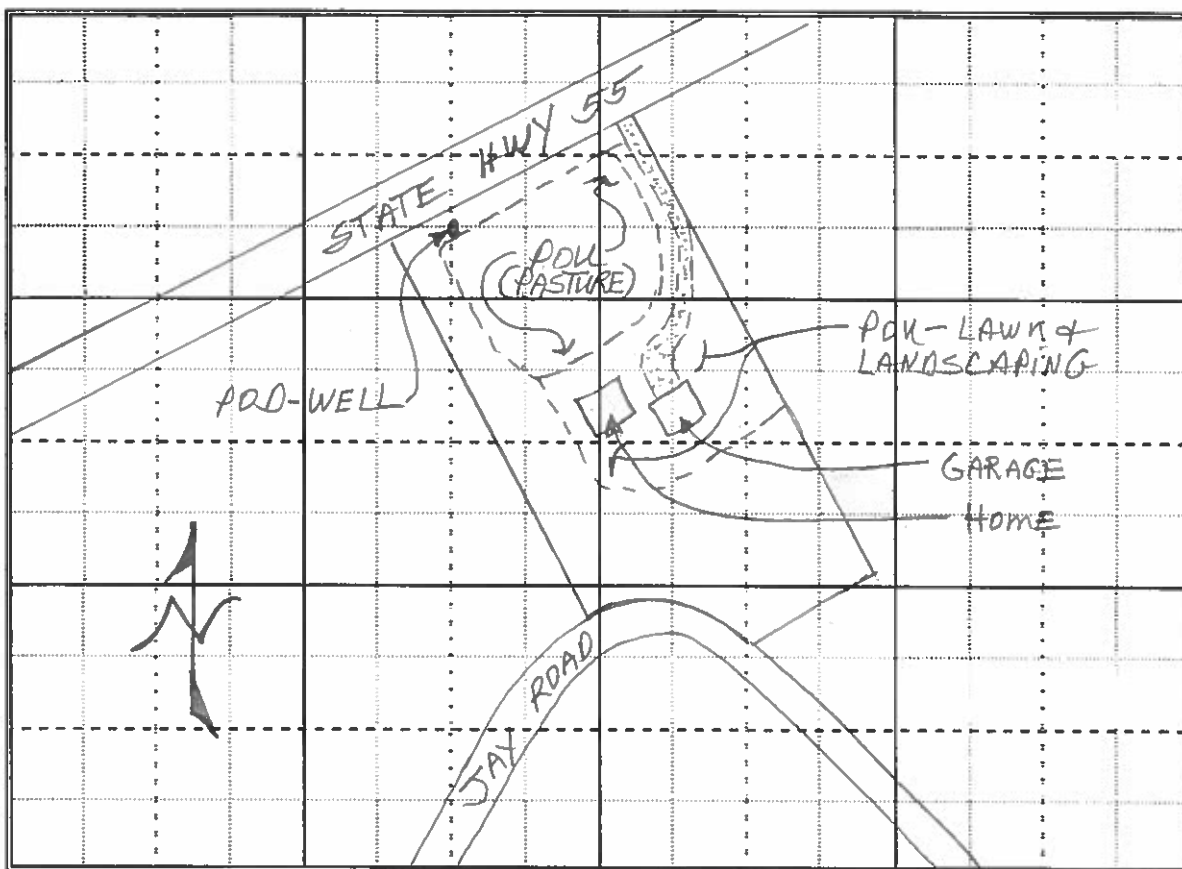
C. DIVERSION AND DELIVERY SYSTEM**1. Point(s) of Diversion:**

Ident. No.	Gov't Lot	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks
			SE	SE	34	05N	01E	ADA	ARC MAP (Aerial Photo)
									GPS Lat N 43° 43.387'
									Long W 116° 18.957'

2. Place(s) of Use:Method of determination ARC MAP (Aerial Photo); TAX Lots

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	01E	34																1.0	1.0

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" = NTS

- ☐ 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
<u>N/A</u>	<u>Unknown</u>	<u>1.5</u>	<u>Unknown</u>	<u>Unknown</u>	<u>Unknown</u>

*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
<u>N/A</u>						

2. Measurements: No Field measurement. Irrigation system not operating during Field Exam.

E. NARRATIVE/REMARKS/COMMENTS

WATER SUPPLY SYSTEM:

A ground water well with a 1.5 hp pump provides water for irrigation of approximately 1.0 acre of pasture, lawn, landscaping, and gardens.

IRRIGATION SYSTEM:

Irrigation of the pasture, lawn, landscaping, and gardens is by ^{spinkler irrigation} ~~face~~ connected to the ~~pasture~~ ^{pasture} ~~free~~ ^{hydrant} located throughout the property.

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:

Measured Method: (Theoretical Horsepower Equation)

$$Q = \frac{8.8 \times 0.7 \times 1.5}{115 + (2.31 \times 40)} = \frac{9.24}{207.4} = 0.05 \text{ CFS}$$

$HP = 1.5$
 $Z = 115'$
 $P = 40 \text{ psi (Assumed)}$

$$Q(\text{theo}) = 0.05 \text{ CFS} < 0.08 \text{ CFS } Q(\text{permit})$$

Appears that the current pumping cannot obtain the permit diversion rate of 0.28 CFS. However, since only 1 acre is irrigated, not 4 acres as stated on the permit, recommend the allowable diversion rate of 0.03 CFS.

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.0 \times 4.5 = 4.5 \text{ AFA}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 0.02 \times 260 \times 1.9835 = 15.5 \text{ AFD}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 4.5 \text{ AFM}$$

2. Volume Calculations for Other Uses:

N/A

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Irrigation	3/1	11/15	0.03	4.5
		Totals:	0.03	4.5

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 _____

SEAL

Reviewer _____ Date _____

Site Investigation - Kling 5/28/14

3 Wells

1 - Irrigation 63-12486 (Permit)

2 - Domestic/Stock Water

Older Well (Smith, Previous Owner) - 63-22813
(10" casing) $\frac{1}{2}$ hp?

Kling - 63-30998

Kling - 63-31365

GPS.

LAT. N $43^{\circ} 43.364'$

Long. W. $116^{\circ} 18.930'$

Kling Well (2003)
(6" casing) $\frac{3}{4}$ hp. ?

GPS.

LAT. N. $43^{\circ} 43.361'$

Long W. $116^{\circ} 18.929'$

Wells are interconnected. Old well is used as backup for Kling (2003) well. System operated by VFD.



State of Idaho

DEPARTMENT OF WATER RESOURCES

WESTERN REGION, 2735 Airport Way, Boise, Idaho 83705-5082

Phone: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C. L. "BUTCH" OTTER

Governor

May 13, 2014

GARY SPACKMAN

Director

Michael H. & Ruth E. Kling
13070 Horseshoe Bend Road
Boise, ID 83714-9647

Re: Water Right Permits 63-12485 & 63-12486
Multiple Well Field Verification

Dear Michael:

Last summer, as we were processing Water Right Permits 63-12485 and 63-12486 for licensure, we discovered that there may exist multiple wells on your property. Since we were currently processing your two water right permits, and to assure that our information is correct and accurate, we would like to confirm exactly how many wells are located on your property and the beneficial use for each well.

I contacted you last summer regarding the possibility of multiple domestic, stock water, and irrigation wells being located on your property. It appears that there may be as many as four (4) wells. This is highly unusual since one well is usually sufficient to serve one home. Due to our confusion on the number of wells, and what beneficial use was being provided by each well, I requested to schedule a time in which we could meet with you to locate each well, and to determine what beneficial use each well provides. As of today, you have not contacted our office to schedule a site visit.

In order to proceed with processing of your two water right permits, and to resolve the multiple well issue, please respond within the next thirty (30) days to schedule a time in which to conduct our field investigation. If I do not hear from you within thirty (30) days, I will assume you no longer have any interest in establishing these water rights, and I will proceed with action to void the permits. Alternately, you may relinquish the permits by completing and returning the enclosed forms to our office.

If you have any questions, you can contact me at (208) 334-2190, or by e-mail at rick.collingwood@idwr.idaho.org.

Sincerely,

A handwritten signature in black ink that reads "Rick Collingwood". The signature is written in a cursive, flowing style.

Rick Collingwood, P.E.
Water Resource Agent, Sr.

Collingwood, Rick

From: Michael Kling [michael.h.kling@gmail.com]
Sent: Monday, May 06, 2013 4:37 PM
To: Collingwood, Rick
Subject: Re: Water Right Permit No. 63-12486 - Field Exam

Hello Rick,

Sorry for the delay in getting this information to you. Burgess Pump has the following record from when they last serviced our Irrigation Well in 1998:

Total well depth: 216 feet
Static Level: 27 feet
Well Pump set at: 115 feet
Well Pump HP: 1.5
Well Pump Capacity: 10 gallons per minute.

If additional information is needed for the records - please let me know.

Thanks,
Mike Kling

On Mon, Apr 29, 2013 at 11:15 AM, Michael Kling <michael.h.kling@gmail.com> wrote:
Rick,

It was a pleasure to meet you last Friday afternoon. Thanks for spending the time getting to know our property and water sources during your inspection.

I will look for records as requested regarding the irrigation well near our spring. Specifically the pump HP, depth, and standing level of water in the well. As discussed, I believe Burgess Pump did some repair work on this well ~15 years ago so I will contact them to see if they kept a file.

Regarding our spring / seep for watering horses & cattle, we will have it excavated to improve flow to the surface. I understand that we will need to apply for a well permit if we need to dig 18 feet or deeper beyond its current depth.

If any of the above is not correct or if additional information is needed to complete the filing of our water right applications, please let me know.\

Best Regards,
Mike Kling

On Friday, April 26, 2013, Michael Kling <michael.h.kling@gmail.com> wrote:

> Hi Rick,

> If you can be earlier than 1:30 pm - come on over.

> Thanks,

> Mike Kling

> Cell [208-277-5668](tel:208-277-5668)

>

> On Thursday, April 18, 2013, Michael Kling <michael.h.kling@gmail.com> wrote:

>> Thank you Rick

>> See you next week.

>>

>> On Thursday, April 18, 2013, Collingwood, Rick <Rick.Collingwood@idwr.idaho.gov> wrote:

>>> Michael,



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

March 27, 2013

Michael H. & Ruth E. Kling
13070 Horseshoe Bend Road
Boise, ID 83714-9647

RE: Scheduling Field Exam for Water Right Permit No. 63-12486

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of April 8, 2013**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of 0.08 cfs of ground water for irrigation of 4.0 acres.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by April 5, 2013, to conduct the exam during the week of April 8, 2013.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink that reads "Rick Collingwood". The signature is written in a cursive, flowing style.

Rick Collingwood, P.E.
Water Resource Agent, Sr.