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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COMPLETION
DEPARTMENT OF
WATER RESOURCES
FOR SUBMITTING PROOF OF BENEFICIAL USE

FOR OFFICE USE ONLY	
Amt. of Fee \$:	50.00
Receipt No.	N 025769
Receipt By:	JB
Date Received:	9/24/10

The Idaho Department of Water Resources considers this form a statement by the permit holder(s) that development of a water right has been **completed** and that water has been applied to beneficial use to the extent described below. **This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner.** Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an Assignment of Permit form. If you wish to relinquish your permit because you have not established the authorized use of the water and are not applying for an extension, please notify the Department in writing.

- Permit No.: 87-10040 Telephone No.: 208-885-6288
- Name of Permit Holder(s): UNIVERSITY of IDAHO, Clogherd Billington
- Mailing Address: FINANCE & ADMIN P.O. Box 443162 City: MOSCOW
State: ID Zip: 83844-3162 Email: _____
- Source of Water: GROUND If **GROUND WATER** (well), Date Drilled: mo. ____ / yr. ____
Well Driller: UNKNOWN - see attached Drilling Permit Number: _____
- Extent of use(s) completed (as authorized by the water right permit):
Domestic (No. of households): .04 Stockwater (No. and type of stock): .04
Irrigation (No. of acres): _____ Other: FIRE PROTECTION .12 INDUSTRIAL .12
- Total rate of diversion or storage volume for which proof is submitted: .12 cfs OR _____ acre-feet.
- Compliance with a measuring device requirement, lockable controlling device requirement, and/or other conditions of permit: **Refer to the approval conditions on your permit and respond accordingly. The Department will not issue a license if permit conditions are not met.**

Measuring Device: Is a measuring device required?

Yes ☒	No ☐
Yes ☒	No ☐

If yes, has the measuring device been installed?

Lockable Controlling Device: Is a lockable device required to control the diversion?

Yes ☐	No ☒
Yes ☐	No ☐

If yes, has the lockable device been installed?

Other Conditions of Permit: Do the approval conditions on your permit require you to submit additional information in connection with your proof of beneficial use? If yes, list the conditions below and attach documents with the required information.

Completed?

Yes ☐	No ☒
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- Fee Enclosed: \$ 50 See fee schedule on back of the instructions for filing proof of beneficial use.
Proofs filed without an appropriate fee, will be considered incomplete.
- Person to contact to accompany the Department representative during field examination of the water system.
Name: MICHAEL HOLTMAUS Telephone Number: 208-885-6288
Mailing Address: P.O. Box 442281 City: MOSCOW
State: ID Zip: 83844-2281 Email: mikeh@uidaho.edu

The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder: [Signature] WATER SYSTEMS MGR. Date: 9/10/2010
(Include your title, if on behalf of company or organization)

Mail to: Idaho Department of Water Resources, PO Box 83720, Boise, ID 83720-0098

Existing Well was used instead of drilling new well, all property crosses two sections. Old well was located in 37N 05W 3, driller is unknown, well was on property when acquired by the University of Idaho. New well was to be drilled 38N 05W 34. Ralston Hydrologic Services Inc. was hired to evaluate existing well, report is attached.

The coordinates for the existing well are;

UTM zone 11

504210E

5159101N

2737 ft elevation (handheld GPS elevations are not very accurate)

Lat/Lon

Lat 46 35 08N

Lon 116 56 42W

Here are better coordinates from a Trimble GPS unit. These numbers are more accurate but take a lot longer to get. It takes three separate setups of five plus hours each. All that data is sent off to NOAA and they send back the corrected coordinates. The numbers look the same if you drop off everything after the decimal.

UTM grid coord. Zone 11

Northing 5159100.666

Easting 504210.273

Elevation 836.628 2744.809 Feet

NAD_83(CORS96)

deg min sec

Latitude 46 35 7.64759

Longitude 116 56 42.15806

ISPCS grid coord. Zone 1103 ID W

Northing 547207.538

Easting 708415.621

Elevation 836.628

The last coordinates are Idaho State Plane coordinates. You won't find them on your handheld GPS, but it is the system that is preferred for local surveys. Remember that both UTM and state plane coordinates are grid coordinates.

The wellhead is 1.5 meters (5') east of the new pump house.

The well is located in T37N R5W S3 and is approximately 23 meters (75') south of the township line between T37N and T38N.

***RHS* Ralston Hydrologic Services, Inc.**

GROUND WATER CONSULTING AND EDUCATION

1122 East B Street, Moscow, ID USA 83843

Voice and FAX 208-883-0533, E-mail ralston@moscow.com

MEMORANDUM

To: Larry Chinn and Don Thill, University of Idaho

From: Dale Ralston, RHS

Subject: Examination of the Existing Well at the Kambitsch Farm

Date: October 31, 2005

The purpose of this memo is to provide you with the results of the aquifer test that was conducted on the existing residential well at the Kambitsch Farm site on October 28, 2005. The field test consisted of measuring the depth to water prior to, during and after the well was pumped at an approximately constant rate. I measured the depth to water using a Solinst electric tape that is accurate of about 0.01 feet. Don Thill and Roy Patten measured the discharge of the well from a field faucet by noting the time required to fill a 4.25 gallon bucket. The calculated discharge rate was about 20 gpm (gallons per minute) with an estimated accuracy of about plus or minus 2 gpm.

The static depth to water was about 8.5 feet below the top of the steel casing prior to the start of the test (Figure 1). Water level decline was relatively fast at the start of pumping and then became slower with time. This water-level pattern is typical of a pumping well. The maximum measured drawdown (water level change from the original static) was about 12.2 feet after 30 minutes of pumping. The water level in the well recovered rapidly when the pump was turned off with a slower rate of recovery at later time. Again, this water-level pattern is typical of a well after it has been turned off. The water level in the well was about 1.4 feet lower than the original static about 50 minutes after the pump was turned off.

Figure 2 shows a plot of drawdown versus the log of time for the pumping portion of the test. According to well hydraulics theory, this plot should approximate a straight line in the absence of changes in well discharge and changes in aquifer conditions (boundaries). The plot in Figure 2 shows a clear linear relationship and can be used to predict drawdown in the well for longer pumping periods.

The results of the aquifer test indicate that a pumping rate of about 20 gpm can be maintained for an extended period of time (up to 12 hours) as long as it is followed by a recovery (non-pumping) period of at least the same length. Pumping the well at higher rates (30 or 40 gpm) should result in drawdown values near 25 feet for 30 gpm and 40 feet for 40 gpm (for about 30 minutes of pumping).

A number of steps need to be taken if the existing well is to be used for additional farm uses. These are listed below.

- A water sample should be taken to determine both the common ions (particularly iron and manganese) plus any contaminants (particularly nitrate). The purpose of this is to determine the suitability of the water for planned uses.
- The existing pump should be removed from the well and both the pump and the well examined. The existing pump needs to be examined for wear and compared to anticipated yield and pressure requirements. The well should be sounded and the completion (such as casing depth and presence of any screen) determined using a borehole television device. The borehole television log is not needed if a driller's log for the well is found.
- If the well is to be used, I recommend placement of a house over the well that would include all well controls and surface tanks. A new water line to the house would need to be installed plus a water line to the new facility.
- Water right information for the well needs to be evaluated with respect for the additional place and type of water use. Some changes in the water right may be required.

Please contact me if you have any questions with respect to the information included in this memo. Thank you.