



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
Director

October 24, 2014

WILLIAM H COX
2610 SW 9TH AVE
PARMA ID 83660

RE: Water Right Permit No. 63-33178

Dear Permit Holder:

The Department of Water Resources is reviewing the permit referenced above prior to issuing a water right license. By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit. The examiner who verified your water use reported that certain elements of the permit have been developed differently than described on your permit. Changes that do not increase the authorized use of water under the permit can be requested and approved in accordance with Section 42-211, Idaho Code. Before a license can be issued, your permit must be amended to depict your water use as it was actually developed.

Based on the examiner's report, the following elements were developed differently than described on your permit:

✓ **Points of Diversion** – One of the wells is in NESW, Sec. 36, 7N, 5W

The enclosed Application for Amendment form depicts the elements of the water right as they will appear on the license when it is issued. Please review the amendment form carefully. If you concur with the information presented, please sign the form and return it with the \$100.00 filing fee within 14 days.

If you have any questions, please call me at 334-2190.

Sincerely,

KAY WALKER
Sr. Water Resource Agent

Enclosures: Amendment Application & Irrigation Layout

State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT

(For Licensing Purposes)
WATER RIGHT NO. 63-33178

Date of Priority: April 07, 2009

Maximum Diversion Rate: 0.48 CFS
Maximum Diversion Volume: 109.4 AF

Comes now WILLIAM H COX
2610 SW 9TH AVE
PARMA ID 83660 and represents to the Director of the Idaho Department
of Water Resources that he is the owner and holder of Permit to Appropriate the Public Waters of the
State of Idaho No. 63-33178, and requests that the permit be changed as follows:

Source: GROUND WATER

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.04 CFS	1.2 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.2 AF
IRRIGATION	03/01 to 11/15	0.48 CFS	108.0 AF

LOCATION OF POINTS OF DIVERSION:

GROUND WATER NW1/4SW1/4 Sec. 36, Twp 07N, Rge 05W, B.M., PAYETTE County
GROUND WATER NE1/4SW1/4 Sec. 36, Twp 07N, Rge 05W, B.M., PAYETTE County

PLACE OF USE: DOMESTIC

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N 05W 36											X						

PLACE OF USE: STOCKWATER

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N 05W 36									X	X							

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	
07N 05W 36									14.0	10.0							24.0

Total Acres: 24

Permit holder asserts that no one will be injured by such change and that such change will be made at
permit holder's own risk. Signed this _____ day of _____, 2014.

(Signature)

State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 63-33178

FOR DEPARTMENT USE ONLY

Preliminary check by _____ Fee = _____ Received by _____ # _____ Date _____

ACTION OF THE DEPARTMENT OF WATER RESOURCES

I, STEVE LESTER, of the Department of Water Resources hereby approve the
above Application for Amendment for Permit No. 63-33178 with the following:

CONDITIONS OF APPROVAL

1. Domestic use is for 1 home.
2. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the lands above.
3. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to use power records to determine the amount of water diverted and shall annually report the information to the Department.
4. This right does not grant any right-of-way or easement across the land of another.
5. When ordered by the Director, the right holder shall provide mitigation acceptable to the Director to offset depletion of lower Snake River flows needed for migrating anadromous fish. The amount of water required for mitigation, which is to be released into the Snake River or a tributary for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this right. Any order of the Director issued in accordance with this paragraph shall be in conformance with applicable rules allowing the right holder due process as the need for mitigation and the amount of mitigation are determined.

Witness my hand this _____ day of _____, 2014.

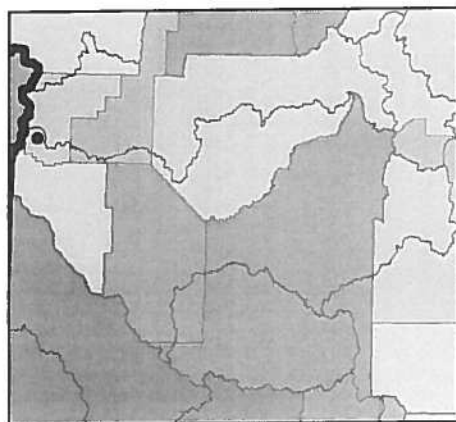
STEVE LESTER
Interim Western Region Manager



Idaho Department of Water Resources

Water Right
63-33178
(IRRIGATION)

-  Point of Diversion
-  Place of Use
-  State Outline
-  Townships
-  PLS Sections
-  Quarter Quarters



Payette County
IDWR Basin 63

Prepared by Walker, Kay

2009 Aerial Photography



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33178

Exam Date: 9/18/2014

1. Current Owner: WILLIAM H COX
2610 SW 9TH AVE
PARMA ID 83660
(208) 631-6151
2. Accompanied by: WILLIAM COX
Phone No: (208) 631-6151
Address: SEE ABOVE
Relationship to Permit Holder: PERMIT HOLDER

3. **SOURCE**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Within Black Canyon Irrigation Service area; however no surface water system in place to deliver water.
2. Other water rights with the same point of diversion: None

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

GROUND WATER	NE1/4SW1/4	Sec. 36, Twp 07N, Rge 05W, B.M.	PAYETTE County
GROUND WATER	NW1/4SW1/4	Sec. 36, Twp 07N, Rge 05W, B.M.	PAYETTE County

Method of Determination: Site Visit, GPS

2. **PLACE OF USE:** DOMESTIC

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
07N 05W 36										X							

STOCKWATER

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
07N 05W 36									X	X							

IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
07N 05W 36									14	10							24

Method of Determination: 2013 Aerial Photography w/ field verification.

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- X 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 Aerial Photo Attached (required for irrigation of 10+ acres).
- X Photo of Diversion and System Attached

4. <u>Well or Diversion</u>				<u>Pump Serial No. or Discharge</u>	
<u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Size</u>
(well A) <u> N/A </u>	<u> unknown </u>	<u> 5 hp </u>	<u> unknown </u>	<u> unknown </u>	<u> unknown </u>
(well B) <u> D0007430 </u>	<u> unknown </u>	<u> 5 hp </u>	<u> unknown </u>	<u> unknown </u>	<u> unknown </u>

D. FLOW MEASUREMENTS

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

2. Measurements: No measurement could be made.

E. FLOW CALCULATIONS

 Additional Computation Sheets Attached

Method: Theoretical HP Equation:

HP = 5 HP (both wells)

PSI = 35 (estimate from permit holder on both wells, also one of the wells had a gauge that read about that pressure)

Z = feet in vertical lift from water to land surface

Well A:

$Q = (8.8 \times 0.7 \times \text{HP}) / [Z + (2.31 \times \text{PSI})] = (8.8 \times 0.7 \times 5) / [92 + (2.31 \times 35)] = \mathbf{0.24 \text{ cfs}}$ est. capacity of pumping system

Well B:

$Q = (8.8 \times 0.7 \times \text{HP}) / [Z + (2.31 \times \text{PSI})] = (8.8 \times 0.7 \times 5) / [92 + (2.31 \times 35)] = \mathbf{0.24 \text{ cfs}}$ est. capacity of pumping system

Theoretical HP Equation est. capacity of pumping system = **0.48 cfs**

Permitted Rate = **0.66 cfs**

Beneficial Use Limit = **0.48 cfs** irrigation (24 acres found * 0.02 inch per acre standard)

0.04 cfs domestic

0.02 cfs stockwater

0.54 cfs

Proof of Beneficial Use fee paid = \$100.00 = up to **1.0 cfs**

Recommend Rate = 0.54 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 24 \text{ acres} \times 4.5 \text{ acre-feet per acre} = 108 \text{ acre-feet}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.48 \text{ cfs} \times 259 \text{ days} \times 1.9835 = 246.6 \text{ acre-feet}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 108 \text{ acre-feet}$$

2. Volume Calculations for Other Uses:

Domestic: 1 home plus yard = 1.2 acre-feet per annum

Stockwater: 15 head = 0.2 acre feet per annum

G. NARRATIVE/REMARKS/COMMENTS

SYSTEM DESCRIPTION:

System consists of two wells, 5 hp pumps in both. Well "A", closest to the house, supplies water through underground pipes for stockwater to some corrals behind the house, domestic water to the house, and irrigation of the pasture to the west of the house. Well "B", just north of the road provides irrigation water to the pastures both east of the house and to the north. It is important to note that the two wells have been/can be connected by a temporary line between both sets of mainlines (see black dashed line on system map) during times it is needed. Typically 3 lines of sprinklers (12 on a line) are run in one pasture at a time (not 3 lines per pasture, all 3 pastures at the same time). During my visit, I observed two lines running, one in the west pasture, one in the east.

A measurement could not be performed. A theoretical calculation was made for both wells. A well log was available for well "B", showing a static water level of 82'. A log was not available for well "A". Given the wells are only about 300' apart, the static water level of 82' seemed reasonable to use for well "A"'s calculation. Used the standard 10' drawdown number since log listed n/a for drawdown. Note the theoretical rate was 0.48 cfs but beneficial use limit was 0.54 cfs. Within 75%, recommend 0.54 cfs.

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>
DOMESTIC	01/01 to 12/31	0.04 CFS	1.2 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.2 AF
IRRIGATION	03/01 to 11/15	0.48 CFS	108.0 AF
<u>Totals:</u>		0.54 CFS	109.4 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Nicholas J. Ayala Date 10/23/14

Reviewer _____ Date _____

System Diagram



Legend

- Wells
- Mainlines
- Temporary Line
- ▨ Place of Use
- ▭ Township/Range
- ▭ Sections
- ▭ QQ



2013 imagery

FORWARD WHITE COPY TO WATER RESOURCES



Well "B" metal tag number D0007430



Well "A"



View of west pasture looking north/northwest



View of east pasture, foreground, and north pasture, background, where you can see the cows. Looking northeast



View of stockwater area behind house, looking north



View of house/yard, looking southwest