

State of Idaho
Department of Water Resources
Water Right License
WATER RIGHT NO. 41-07084

PRIORITY: May 07, 1990

Maximum Diversion Rate: 0.10 CFS
Maximum Diversion Volume: 18.3 AF

It is hereby certified that:

JUDY M MILLER 3706 REGISTER RD AMERICAN FALLS ID 83211-5515

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated May 07, 1990, and has submitted Proof of Beneficial Use on December 30, 1991. An examination confirms water is diverted from:

SOURCE:
GROUND WATER

and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL DIVERSION VOLUME</u>
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF
IRRIGATION	03/15 to 11/15	0.10 CFS	17.6 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.1 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 7, Twp 09S, Rge 30E, B.M. POWER County

PLACE OF USE: DOMESTIC AND 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	
09S	30E	7					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	
09S	30E	7					3.9												3.9

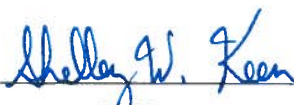
Total Acres: 3.9

CONDITIONS OF APPROVAL

1. This right when combined with all other rights shall provide no more than 0.03 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the place of use.
2. Domestic use is for 1 homes. Irrigation of lawn, garden and landscaping associated with the home is authorized under the irrigation component of this right.
3. The use of water under this right shall not give rise to any claim against the holder of a senior water right based upon the theories of forfeiture, abandonment, adverse possession, waiver, equitable estoppel, estoppel by laches or customary preference.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed this 15th day of March, 2018.


SHELLEY W. KEEN
Water Rights Section Manager

State of Idaho
Department of Water Resources
Attachment to Water Right License
41-7084

This map depicts the DOMESTIC and STOCKWATER 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.

30E



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

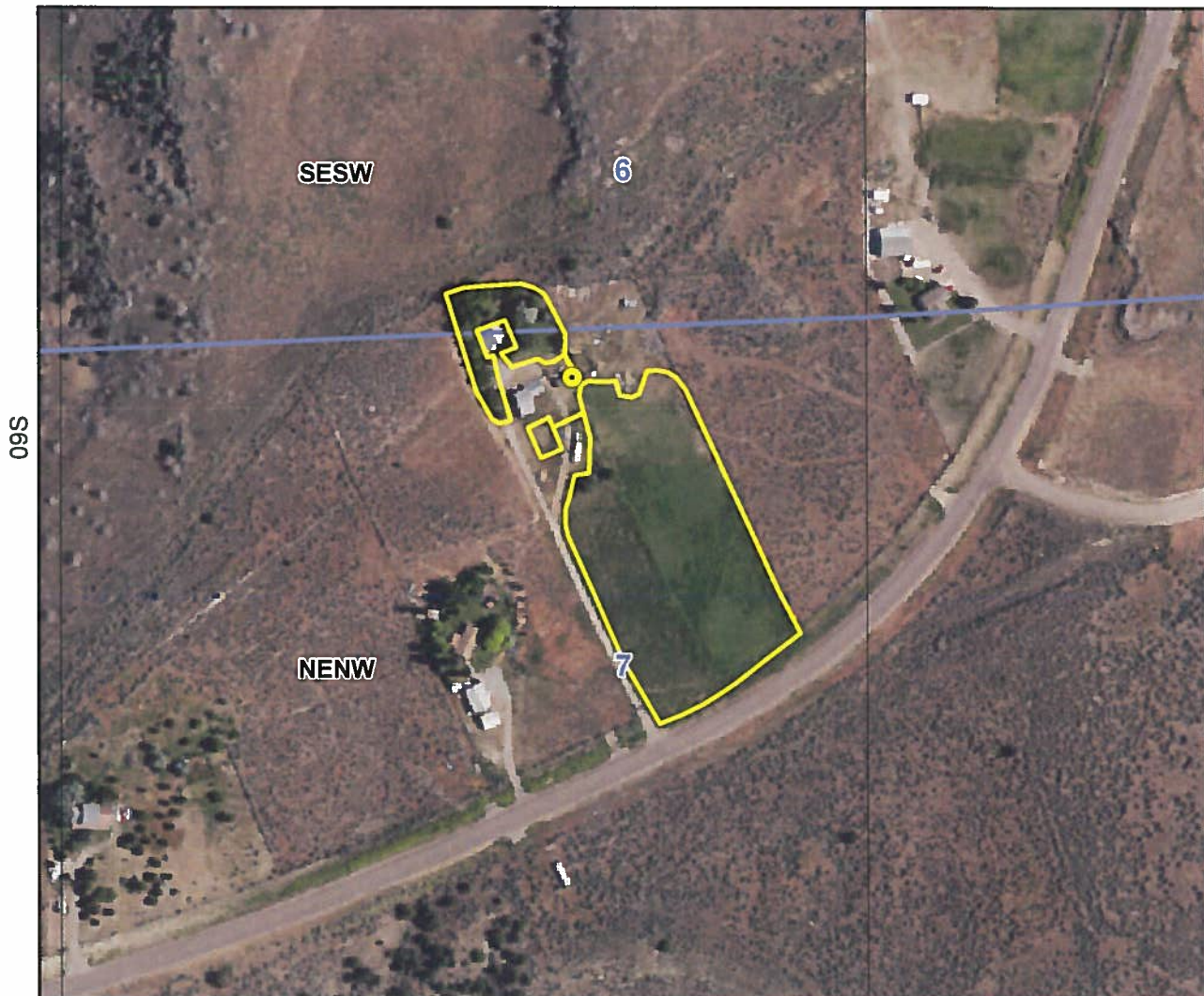
0 0.035 0.07 0.14 Miles



State of Idaho
Department of Water Resources
Attachment to Water Right License
41-7084

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.

30E



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

0 0.035 0.07 0.14 Miles





State of Idaho

DEPARTMENT OF WATER RESOURCES

322 E FRONT ST STE 648 PO BOX 83720 • BOISE, ID 83720-0098

Phone: (208)287-4800 • Fax: (208)287-6700 • Website: www.idwr.idaho.gov

C.L. "Butch" Otter
Governor

Gary Spackman
Director

March 21, 2018

JUDY M MILLER
3706 REGISTER RD
AMERICAN FALLS ID 83211-5515

RE: License No. 41-7084

Issuance of License

Dear Water Right Holder(s):

The Department of Water Resources ("Department") has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review all the conditions of approval listed on your license. The conditions may include ongoing requirements, such as maintenance of a measuring device or implementation of mitigation, as well as information about how your water use may be administered, such as regulation by a watermaster in a water district. Also enclosed is a copy of the approved application for amendment.

The license is a PRELIMINARY ORDER issued by the Department pursuant to Rule 730 of the Department's Rules of Procedure (IDAPA 37.01.01.730). It can and will become a final order without further action by the Department unless a party petitions for reconsideration, files exceptions, or requests a hearing as described in the enclosed information sheet.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Water right forms are available from any office of the Department or on the Department's website at idwr.idaho.gov

If you have any questions concerning the enclosed information, please contact me at (208) 287-4951.

Sincerely,

Pamela S Skaggs
Water Rights Supervisor

Enclosure(s)

CERTIFICATE OF SERVICE

I hereby certify that on March 22, 2018, I served a true and correct copy of Water Right License No. 41-7084 by U.S. Mail, postage prepaid, to the following:

JUDY M MILLER (Current Owner)
3706 REGISTER RD
AMERICAN FALLS ID 83211-5515



Darla Block
Technical Records Specialist I

EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) The petition for reconsideration is disposed of; or
- (b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 41-07084

RECEIVED

MAR 14 2018

DEPARTMENT OF
WATER RESOURCES

PRIORITY: May 07, 1990

Maximum Diversion Rate: 0.10 CFS
Maximum Diversion Volume: 18.3 AF

Comes now

JUDY M MILLER 3706 REGISTER RD AMERICAN FALLS ID 83211-5515

and represents to 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. 41-07084, and requests that the permit be changed as follows:

SOURCE:
GROUND WATER

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL DIVERSION VOLUME</u>
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF
IRRIGATION	03/15 to 11/15	0.10 CFS	17.6 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.1 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE¼NW¼ Sec. 7, Twp 09S, Rge 30E, B.M. POWER County

PLACE OF USE: DOMESTIC AND STOCKWATER

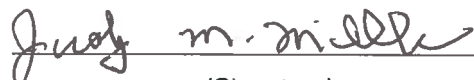
Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09S	30E	7					X												

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	
09S	30E	7					3.9												3.9

Total Acres: 3.9

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 12 day of March, 2018.


(Signature)

State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 41-07084

FOR DEPARTMENT USE ONLY

Preliminary check by TR Fee = 100.00 Received by TR # C104780 Date 3/14/2018

ACTION OF THE DEPARTMENT OF WATER RESOURCES

The Idaho Department of Water Resources hereby approves the above Application for Amendment for Permit No. 41-07084 with the following:

CONDITIONS OF APPROVAL

1. This right when combined with all other rights shall provide no more than 0.03 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the place of use.
2. Domestic use is for 1 homes. Irrigation of lawn, garden and landscaping associated with the home is authorized under the irrigation component of this right.
3. The use of water under this right shall not give rise to any claim against the holder of a senior water right based upon the theories of forfeiture, abandonment, adverse possession, waiver, equitable estoppel, estoppel by laches or customary preference.

This amendment is issued pursuant to the provisions of Section 42-211, Idaho Code.

Signed this 15th day of March, 2018.



SHELLEY W. KEEN
Water Rights Section Manager

State of Idaho
Department of Water Resources

Attachment for Application to Amend a Permit

41-7084

This map depicts the DOMESTIC and STOCKWATER 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.



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

0 0.035 0.07 0.14 Miles

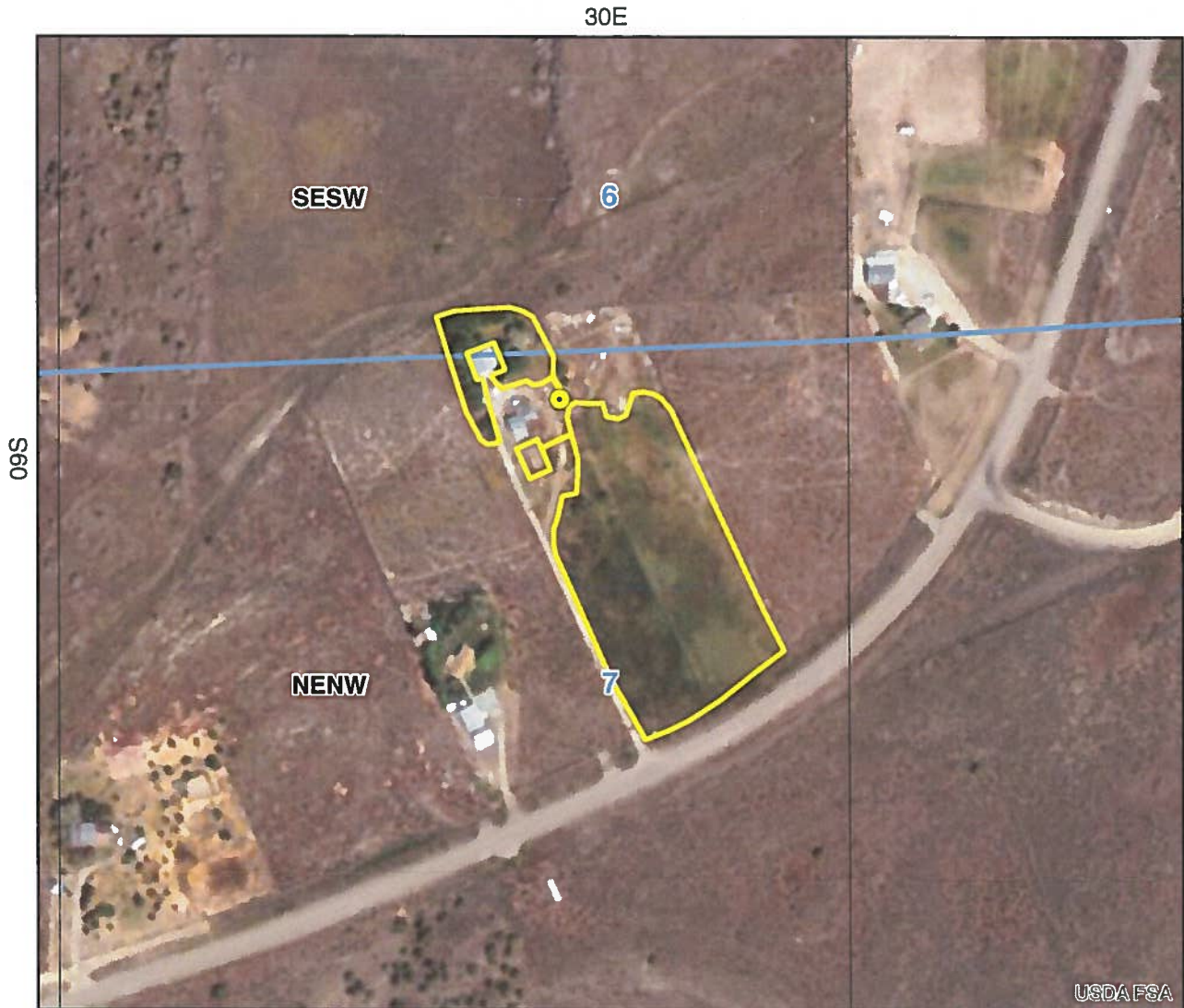


State of Idaho
Department of Water Resources

Attachment for Application to Amend a Permit

41-7084

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.



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

0 0.035 0.07 0.14 Miles





State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

March 01, 2018

JUDY MILLER
37056 REGISTER RD
AMERICAN FALLS ID 83211-5515

RE: Water Right Permit No. 41-7084

Dear Ms. Miller:

The Idaho Department of Water Resources (Department) 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 has 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.

The original permit holder, Kenneth L. Zimmer, stated in the application for permit for water right 41-7084 that the point of diversion or well was located in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 7 in Township 9 South, Range 30 East. The field examiner found that the well for this permit was located on your property in the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 7 in Township 9 South, Range 30 East. The change of ownership information you sent confirms that this property and the well are located in the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 7 in Township 9 South, Range 30 East.

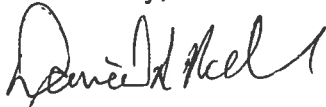
The only way available to rectify this situation is to amend the permit prior to issuing the water right license. If we do not receive the amendment form and the accompanying \$100.00 fee for this amendment, we cannot move forward with licensing this permit. Unfortunately, if we do not receive this amendment, we will be required to take steps to void the permit.

Please note that the ownership of this amendment is in your name. This amendment is considered a draft until it signed by both you and the authorized Department staff member. The change of ownership that you submitted will be formally changed on the water right at the time the water right license is issued. Unfortunately, we cannot officially change the ownership of the water right until the license is issued.

The enclosed Application for Amendment form depicts the elements of the water right as they will appear on the license when issued. Please review the amendment form carefully. If you concur with the information presented, please sign and return the form with the \$100.00 filing fee within 14 days or by March 15, 2018.

If you have any questions, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel A. Nelson", with a stylized flourish at the end.

Daniel A. Nelson
Analyst 3
Water Right Section
Idaho Department of Water Resources
Telephone # (208) 287-4856
Email – dan.nelson@idwr.idaho.gov

Enclosure(s): Application for Amendment with map
 Receipt for Change of Ownership Submittal

MEMORANDUM

TO: File 41-7084

FROM: Daniel Nelson – Staff Hydrologist

DATE: February 5, 2018

SUBJECT: Licensing Review of Water Right 41-7084

This permit was field examined by Southern Region Staff. There are a couple of issues that need to be addressed.

Place of Use:

The irrigation place of use was marked as most of the tax parcel. At the time of the field examination, aerial imagery was not adequate to show actual irrigated ground. A review of aerial photos show that approximately 3.9 acres were actually irrigated instead of the 4.5 acres recommended by the field examiner. The entire tax parcel is only 4.7 acres, so it is obvious that 4.5 acres could not have been irrigated in 1999. I am recommending that 3.9 acres be licensed for irrigation. I contacted the permit holder and the current property owner to confirm the amount of land being irrigated. The property owner confirmed that the 3.9 acres designated in the license review map is accurate. Please see the attached conversation memo dated 2/27/2018.

The place of use for the domestic and stockwater use should reflect the entire tax parcel. This will provide any changes as needed.

In the Department's mapping information, the parcel for this property appears to be in both the NENW of Section 7 and the SESW of Section 6. However, the warranty deeds supplied by the permit holder states the entire parcel is in the NENW of Section 7. The Power County website also shows the entire tax parcel in the NENW of Section 7. The Power County website also shows a different registration of the aerial photo and the Public Land Survey lines. The Department's Topographical maps match the PLS lines of the county and the tax parcel lines. Therefore, the shape files shown on the maps may look like they encroach on Section 6, but according to the surveys they don't. These shapes may need to be rectified in the future, but at this time, we should go with the actual surveyed information.

Diversion Rate:

The diversion rate was calculated by using a time fill measurement from a spigot near the home. No analysis was done on the sprinkler system to determine the flow rate that would be required to properly operate the irrigation system. Measuring a spigot on this type of system creates numerous possible errors, such as the pressure could have been extremely high, the spigot could have had a regulation system, the water measured could have been the flow from the pressure tanks without the pump running, and the measurement doesn't match the amount of water needed to operate a 20 sprinkler irrigation system. Therefore, I am very uncomfortable recommending the diversion rate measured by the field examiner.

I sent an additional information request to the permit holder and the current property owner in hopes that they could provide me with enough information to confirm or re-adjust the flow rate measured by the field examiner.

The property owner informed me that no more than 9 rainbird sprinklers are used at any one time. The permit holder also told me that the pump was a 5 Hp pump. The permit holder gave me permission to contact the pump installer, who confirmed the information given by the permit holder, and directed me to the pump curves on the pumping system. My analysis of the information given to me by permit holder and the pump installer suggests that the system operates around 40 to 45 gpm or 0.10 cfs. This also coincides with the diversion rate that would be needed to operate 9 rainbird sprinklers. Therefore, I am recommending 0.10 cfs for licensing of this permit. Please see the 2/27/2018 conversation memo, theoretical sheet, and 2 pump curves for additional information.

The diversion rate of 0.04 cfs recommended by the field examiner, complies with Administrative Memorandum #22 for in-house use only. The field examiner recommended 0.01 cfs for the stockwater diversion rate. This isn't even enough diversion rate to properly operate a spigot. Therefore, I am recommending the full diversion rate permitted for stockwater of 0.02 cfs, since it complies with Administrative Processing Memorandum # 3.

Volume:

The volume was calculated using the 4.5 acres found by the field examiner. Since the 4.5 acres was reduced to 3.9 acres, the irrigation volume should be reduced to 17.6 af. The field examiner didn't recommend a volume for the in-house use, so I am recommending the standard allowed by Administrative Processing Memo #22, that allows 0.6 af for domestic use for in-house use only. The stockwater use was also not calculated. The field examiner stated that 2 horse and 5 cattle were watered by the stockwater portion of the permit. In the 2/27/2018 conversation memo, the current property owner stated that the most livestock on the property has been 3 horses and 2 cows. According to the field examiner's handbook's "Non-Irrigation Water Requirements" table, horses and cattle both require 12 gallons per day (GPD). Assuming year round use, the stockwater use should be licensed for 0.1 afa $[(12 \text{ gpd} \times 5 \text{ head} \times 365 \text{ days}) / 325850 = 0.067 \text{ af}]$. Therefore, a total of 18.3 af can be authorized for the is permit (17.6 af irrig. + 0.6 af dom. + 0.1 af stock = 18.3 af total). A diversion rate of 0.10 cfs can supply adequate water for a total diversion volume of 18.3 af.

Conditions:

Condition 2 (057) will be replaced with R68. I kept condition 3 (048). I removed the stock numbers from condition 4 and changed it to condition 132. I removed conditions 1 (046) and 5 (049).

License Review Map for Permit 41-7084



The 2015 aerial photo above shows the irrigation place of use. I was able to find 3.9 acres being irrigated. The aerial photo below show the place of use for the domestic and stockwater. The domestic and stockwater includes the entire tax parcel.

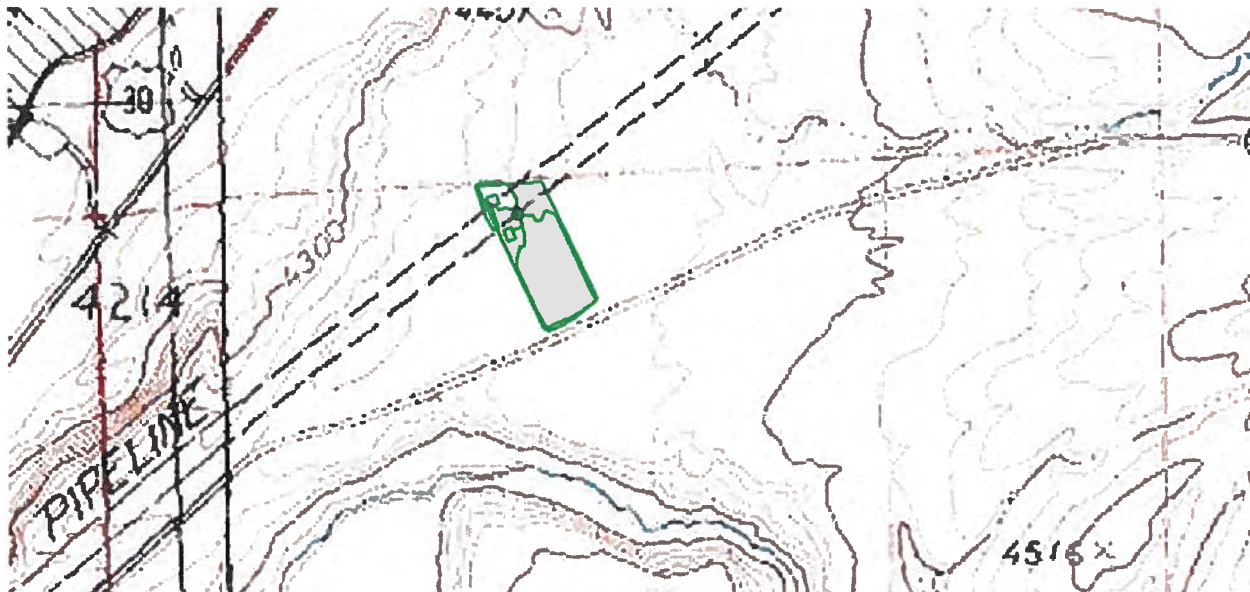


Permit 41-7084 Tax Parcel Data

The following is a screen shot of the tax parcel data from Power County for this parcel. As you can see from the aerial imagery, Power County has the entire tax parcel in the NENW. Their registration of the aerial photography is different from aerial photography in the Department. Therefore, I am recommending that the entire place of use for this permit be listed in the NENW Section 7 instead of being in both the SESW of Section 6 and the NENW of Section 7.



The following map shows that the tax parcel data and the shape file created matches the Topographical Map.



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 41-7084
 Reviewer: Dan Nelson
 Date of Review: 5/11/2016

P/D No.:

	Scenario 1	Scenario 2	Scenario 3	
PUMP HORSEPOWER	5	5	5	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	200	200	200	
DISCHARGE PRESSURE	40	50	60	
RATE OF FLOW (cfs)	0.11	0.10	0.09	0.10
	47	44	41	43.97

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.
 No Friction

Examiners Notes:

The property owner informed me that the well was a 5 Hp well. Local area well driller reports suggest a pumping water level between 167 feet and 205 feet with approximately 5 feet of drawdown. The next door neighbor's well has a static water level of 200 feet, and another neighbor recorded a drawdown of 5 feet. Therefore, I went with a pumping level of 205 feet to ensure that the most stress on the well was being addressed. This well also feeds the home, so I used a standard pressure of 40 to 60 psi. The permit holder stated that the system runs 9 rainbird sprinklers, but the owner did not know the nozzle size. If you divide 47 gpm by 9, you come up with a rate per nozzle of 5.22 gpm. When you allow for leaks, domestic use, and friction losses to the sprinklers, this would be within the range of the amount of water used by a 5/32 sprinkler nozzle. 5/32 sprinkler nozzles are pretty standard for this type of system. The pump curves for this pump also show the diversion rate should be between 40 and 45 gpm.

4" HIGH CAPACITY PUMPS - 45 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																		Shut-Off (ft)
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	
3	0																			
	10				55	52	53	49	46	42	38	27								
	20				52	48	45	41	37	32	26	21								
	30		54	51	48	44	40	36	32	27	22									
	40	54	51	47	44	40	35	31	26	21	15									
	50	50	47	43	39	35	30	25	20											
	60	46	42	38	34	30	25	19												
	70	42	38	33	29	24	18													
	80	37	33	28	23	17														
	90	32	27	22	16															
100	27	21	16																	
Shut-off PSI		137	129	120	111	103	94	85	77	68	60	38								
5	0																			
	10							55	54	52	48	43	38	32	26	17				
	20						55	53	52	50	48	43	38	33	26	18				
	30					55	53	51	50	48	46	41	36	30	23					
	40				55	53	51	49	47	46	44	39	33	27	19					
	50			54	53	51	49	47	45	43	41	39	36	31	23					
	60		54	52	51	49	47	45	43	41	39	34	27	19						
	70	54	52	50	48	47	45	43	41	39	37	31	24	15						
	80	52	50	48	46	44	43	41	39	36	34	28	20							
	90	50	48	46	44	42	40	38	36	34	31	25	16							
100	48	46	44	42	40	38	36	34	31	28	21									
110	45	44	42	40	38	35	33	31	28	25	17									
120	43	41	39	37	35	33	30	28	25	21										
130	41	39	37	35	32	30	27	24	21	17										
140	39	37	34	32	29	27	24	20	17											
150	36	34	32	29	26	23	20	16												
160	28	25	22	18																
Shut-off PSI		240	232	223	214	206	197	188	180	171	162	141	119	97	76	54	32			
7.5	0																			
	10											55	52	49	45	41	37	33	28	23
	20											55	54	51	47	44	39	35	30	26
	30											55	54	53	49	46	42	37	33	28
	40											55	54	52	51	48	44	40	35	31
	50											55	53	52	51	49	46	42	38	33
	60											55	53	52	51	49	46	42	38	33
	70				55	54	53	52	50	49	48	46	42	38	34	29	24	18		
	80			55	54	53	52	50	49	47	46	44	40	36	32	27	21	16		
	90	55	54	53	51	50	49	47	46	44	43	38	34	29	24	19				
100	54	52	51	50	48	47	45	44	42	41	36	32	27	22	16					
110	52	51	50	48	47	45	44	42	40	39	34	30	25	19						
120	51	49	48	47	45	43	42	40	39	37	32	27	22	17						
130	49	48	46	45	43	42	40	38	37	35	30	25	20							
140	48	46	45	43	41	40	38	36	34	33	28	23	17							
150	46	44	43	41	39	38	34	32	30	26	20									
160	40	39	37	35	33	31	30	28	26	24	18									
Shut-off PSI		331	323	314	305	297	288	279	271	262	254	232	210	189	167	145	124	102	80	59

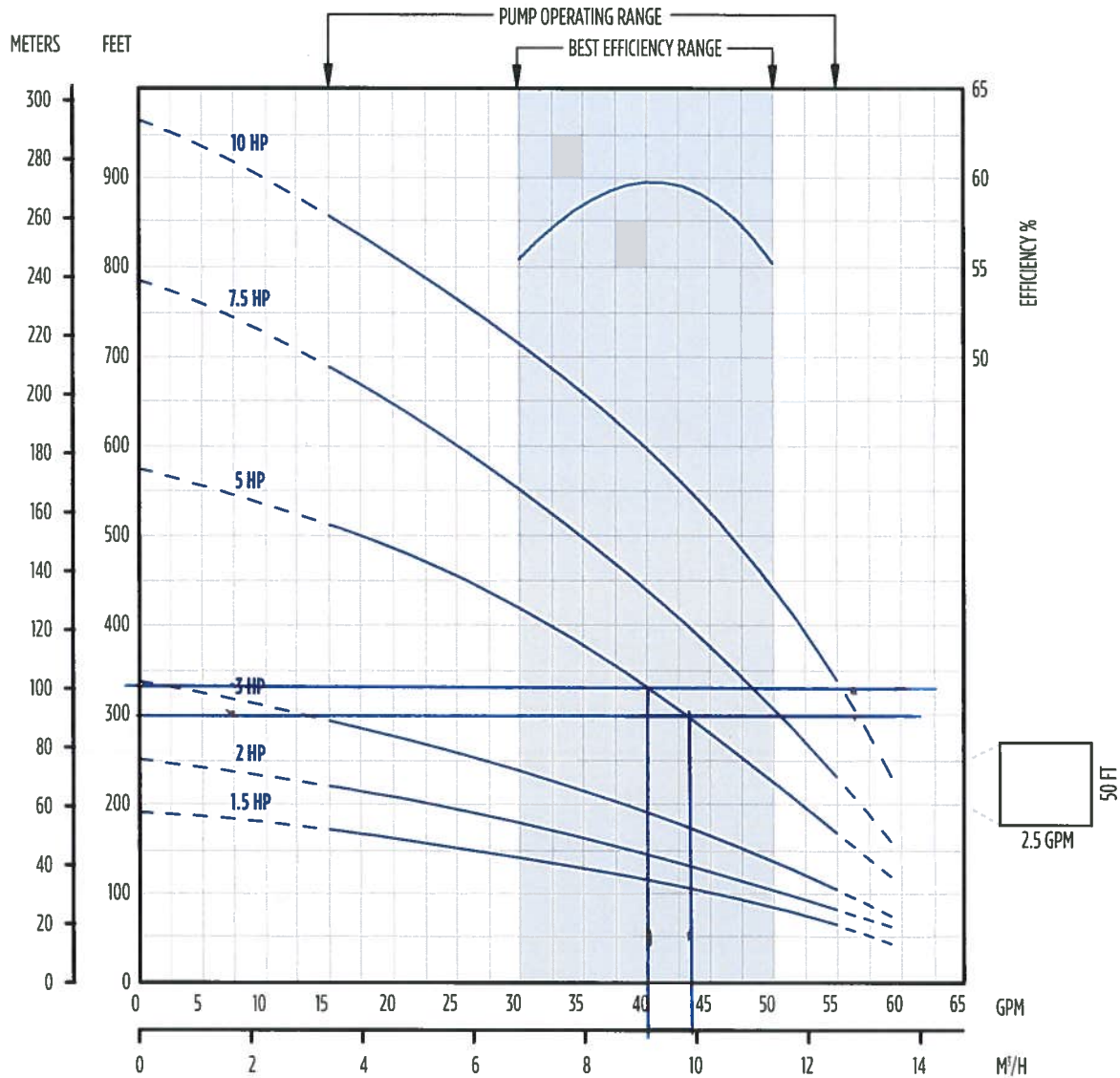
HP	PSI	20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	800	850	Shut-Off (ft)
10	0																								
	10												55	53	50	48	45	42	39	35	31	27	22	16	
	20												54	52	49	47	44	41	37	33	29	24	19		
	30												53	51	48	45	42	39	36	32	27	22	16		
	40												54	52	49	47	44	41	37	34	30	25	19		
	50												53	51	48	45	43	39	36	32	27	22	17		
	60												55	52	50	47	44	41	38	34	30	25	20		
	70												55	54	53	52	51	49	46	43	40	36	32		
	80												55	54	53	52	51	50	47	45	42	38	35		
	90												55	54	53	52	51	50	49	46	43	40	37		
100												55	54	53	52	51	50	49	48	45	42	39			
110												55	54	53	52	51	50	49	48	45	42	39			
120												55	54	53	52	51	50	49	47	46	43	40			
130												55	54	53	52	51	50	49	48	45	42	39			
140												55	54	53	52	51	50	49	48	45	42	39			
150												55	54	53	52	51	50	49	48	45	42	39			
160												55	54	53	52	51	50	49	48	45	42	39			
Shut-off PSI		410	402	393	385	376	367	359	350	341	333	311	289	268	246	224	201	179	158	136	115	93	71	50	

NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage. Performances for former XP models are the same as 45 gpm models. Performance shown is based on a pump without check valve.



4" HIGH CAPACITY PUMPS - 45 GPM

PERFORMANCE



HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																		Shut-Off (ft)
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	
1.5	0				52	46	38	30	21											190
	10		55	51	45	37	26	20												
	20	54	50	43	35	27	18													
	30	49	42	34	26	16														
	40	41	33	24	15															
	50	32	23																	
	60	22																		
Shut-off PSI		74	65	56	48	39	30	22	13											250
2	0				55	51	46	41	36	30	23									
	10			55	50	45	40	35	29	22										
	20		54	49	44	39	34	28	21											
	30	53	49	44	38	33	27	19												
	40	48	43	38	32	26	18													
	50	42	37	31	24	17														
	60	36	30	23	16															
Shut-off PSI		99	91	82	74	65	56	48	39	30	22									

MEMORANDUM

TO: Water Right Permit File 41-7084

FROM: Daniel A. Nelson

DATE: February 27, 2018

SUBJECT: Telephone Conversation

Judy Miller sent in a change of ownership form for permit 41-7084, which confirmed she was the new owner of the property associated with the permit. Unfortunately, she did not address any of the other questions posed in the letter. Therefore, I contacted her to see if I could find out some additional information to ensure that the license for this permit is issued correctly.

Ms. Miller informed me that she uses 9 steel rain bird sprinklers for the pasture. This confirms that the measurement made by the field examiner probably was not accurate. The flow rate would probably be closer to 45 gpm instead of 18 gpm measured by the field examiner. Ms. Miller confirmed that the spigot used could only operate one or two sprinklers. Ms. Miller told me that the well pump was actually a 5 Hp pump, and was installed by Pumpco in American Falls approximately 7 to 8 years ago. Ms. Miller was not sure of the pressure or the well depth, so she gave me permission to contact Pumpco to determine a reasonable flow rate.

Ms. Miller also stated that the most livestock they have had in the pasture was 3 horses and 2 cows. There has never been more than that many animals on the property. This sounds reasonable for the 4 acre property.

I asked Ms. Miller to review the map concerning the irrigation place of use I created, and she said that was an accurate rendition of what they actually irrigate. The 4.5 acres recommended by the field examiner was not really realistic.

I spoke with a Pumpco representative, and they told me that the pump installed was a 45 gpm -- 5 Hp -- J Class -- Jacuzzi pump. He also told me the pump was set at 210 feet with a well static water level of 167 feet, and the total well depth was 256 feet deep. He stated that the pressure system was set up at the standard 40 to 60 psi rating.



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

February 6, 2018

KENNETH L ZIMMER
3706 REGISTER ROAD
AMERICAN FALL, ID 83211

RE: Water Right Permit 41-7084

Dear Mr. Zimmer:

On October 14, 1999, Department Staff met with Richard Miller to perform a field examination on permit 41-7084 for an irrigation, stockwater, and domestic use. A copy of this letter is also being sent to Richard Miller to ensure that the current property owner is notified of what is happening with this permit. There are couple of reasons why the licensing of this permit has been delayed.

The first concern involves the diversion rate that was calculated by the field examiner. The diversion rate for this permit was measured from a spigot near the pasture. The field examiner then stated that the permit holder irrigated the pasture with 20 sprinklers. The flow rate measured was 0.04 cfs or 18 gpm, and could have been limited by the spigot opening. Standard irrigation sprinklers usually operate at approximately 2 to 5 gpm per sprinkler or between 80 to 100 gpm. The rate of flow measured would not provide the amount of water needed to run 20 standard irrigation sprinklers.

In order to confirm what the actual diversion rate is, could you or Mr. Miller please provide the horsepower of the pump used for this domestic and irrigation system? With the pump information, I can double check the system to ensure that the flow rate is correct for this right prior to licensing. We could also use the pressure on the system and the sprinkler nozzles to estimate a diversion rate for this system when the irrigation system is operating.

The second and final concern is that Mr. Miller was listed on the field examination as the owner of the property, which has been confirmed by county records. However, the Department has not received an assignment of permit or change of ownership to change the ownership of this water right into Mr. Miller's name. I have included an assignment of permit, which would need to be signed by Mr. Zimmer. If Mr. Zimmer is no longer available, we can use the change of ownership form to change the ownership of this water right at the time of licensing. I have enclosed a copy of both forms. If Mr. Zimmer is no longer the owner of the water right, please the form that works best for you to change the ownership to the current owner of the water right.

I have also enclosed a computer generated report of permit 41-7084 and a map showing the tax parcel associated with permit 41-7084. Please review these documents to ensure they are associated with the property you may have an interest.

Thank you so much for helping complete the processing of this file, and hopefully, we can license this permit reasonably soon. If I don't receive any correspondence within the next 30 days or by March 7, 2018, I will be forced to license this permit in the name of Mr. Zimmer with the lower diversion rate of 0.04 cfs recommended by the field examiner. This diversion rate may not allow Mr. Zimmer or Mr. Miller to adequately irrigate the pastures with the current irrigation system.

Please don't hesitate to contact me if you have any further questions.

Respectfully;



Daniel Nelson
Water Right Analyst 3
Idaho Department of Water Resources
Email: dan.nelson@idwr.idaho.gov
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)

cc Richard Miller

Enclosures: Computer Generated Copy of Permit 41-7084
Map Showing the Property Associated with Permit 41-7048
Assignment of Permit Form
Change of Ownership form.



Additional Information Request Letter Map for Permit 41-7084

The 2015 aerial photo below shows the tax parcel associated with permit 41-7084.

