

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. 63-313931. Owner Harold & Elizabeth Rohrbacher, Northwest Farm Credit Services Phone No. 208-722-6038Current address 28253 Shelton Rd., Parma, ID 836602. Examiner's name Cody Parker EXAM DATE May 10, 20183. Accompanied by Harold Rohrbacher Email _____Address sameRelationship to permit holder same Phone No. 208-880-78744. Source Waste Water tributary to Boise River**B. OVERLAP REVIEW**1. Other water rights with the same place of use Farmers Co-op Ditch Co.2. Other water rights with the same source and point of diversion None**C. DIVERSION AND DELIVERY SYSTEM**

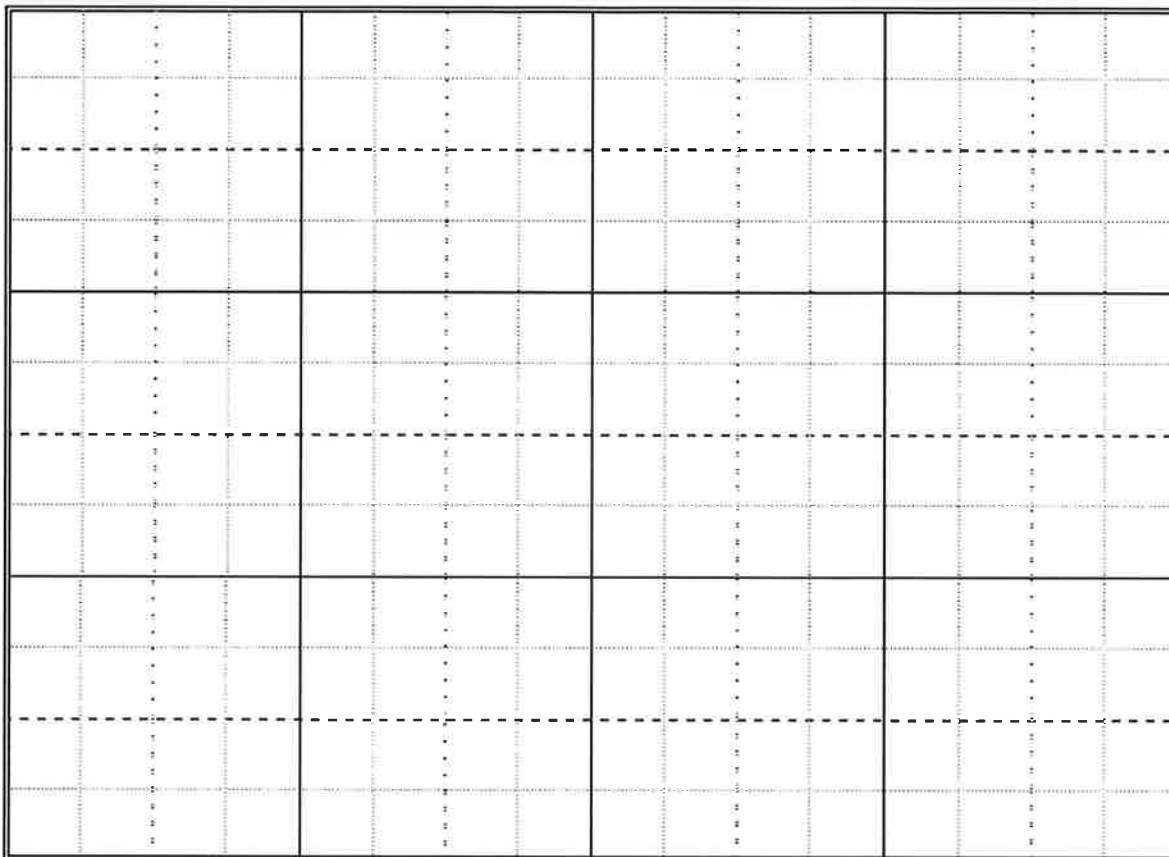
1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
			NE	NE	15	05N	05W	Canyon	GPS, digital PLS

2. Place(s) of Use: Method of determination Aerial imagery, digital PLS map

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	05W	15	14		2	26									6				48

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" = _____

- ☒ 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
	Marathon Elec.	10		Parma	10" discharge, Model 15

*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:** _____

Water level => 10 - 15 ft BGS

Total lift = 40 ft

Mainline elevation diff => 25 ft

Pump rpm = 868

E. NARRATIVE/REMARKS/COMMENTS

This permit authorizes 0.96 cfs wastewater to irrigate up to 48 acres of land. Proof was submitted on March 14, 2007. I completed this field exam on May 10, 2018 accompanied by Harold Rohrbacher, the owner. The property is located between US Highway 26 and Market Rd. adjacent to (west) Shelton Rd.

The point of diversion is a collection basin which captures water from the waste ditch. A Parma Water Lifter pump lifts water up 10 to 15 ft from the basin to irrigate the place of use. I determined the pump model through conversations with the manufacturer and we determined it is a Model 15 pump. The motor speed is 1735 rpm; the motor is attached to a 6 inch pulley. A serpentine belt attached to the motor pulley drives the 12" pump pulley rotating at half the speed of the motor (868 rpm).

Water from the pump travels through 8" mainline to the first open discharge into a v-shaped ditch approximately 25 ft above the pump head. Here the pump discharge is separate from the Farmers Coop discharge (primary source). Total lift provided by the pump is around 40 ft. Water is siphoned from the concrete ditch using 1-in and 3/4-in siphon tubes.

Water is also conveyed further south to a second discharge point. Here there is only one outlet pipe suggesting that the pump line is tied into the Farmers Coop line. The owner says that they definitely do use waste water at this location.

Based on the pump information and the corresponding pump curve, the diversion rate is 2.79 cfs which is much higher than the permitted rate. Excess water is diverted back to the waste ditch. I have recommended the permit rate for the license. The recommended volume is determined from the headgate requirement.

The permit requires a measuring device and lockable controlling works to be installed. The condition was satisfied as explained in the section below.

The description of the POU is different than the permit. The right will need to be amended at licensing.

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?

Lockable device = power to pump

Measuring device = changed to require on specific request by the Department per water master correspondence in file

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

Flow rate = 2.79 cfs (per pump curve and discussions with Parma employees)

BU Standard = 48 acres x 0.02 cfs/acre = 0.96 cfs

Permit = 0.96 cfs

Recommend 0.96 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____ $V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____ $V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} =$ _____

2. Volume Calculations for Other Uses:

No irrigation volume per IDAPA BU Exam Rule 35.01.j.viii

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion	Annual Volume
	From	To	Q (cfs)	V (afa)
Irrigation	03/01	11/15	0.96 cfs	
Totals:			0.96 cfs	

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

6/4/18

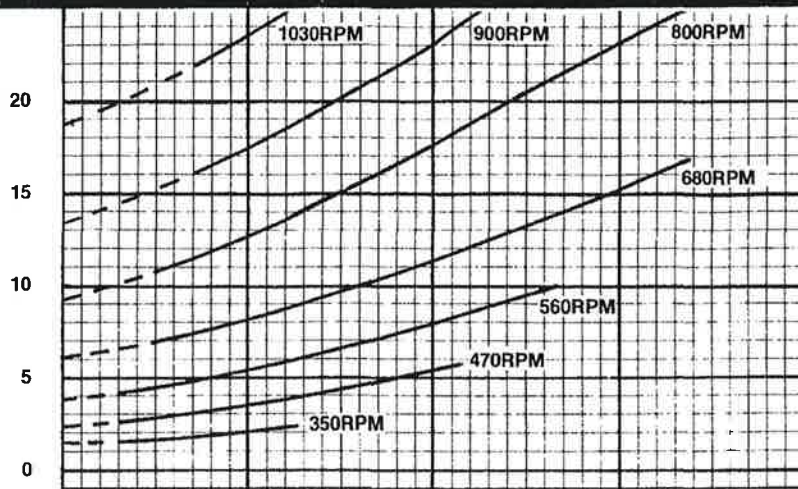
Reviewer

Date

6/4/18

SEAL

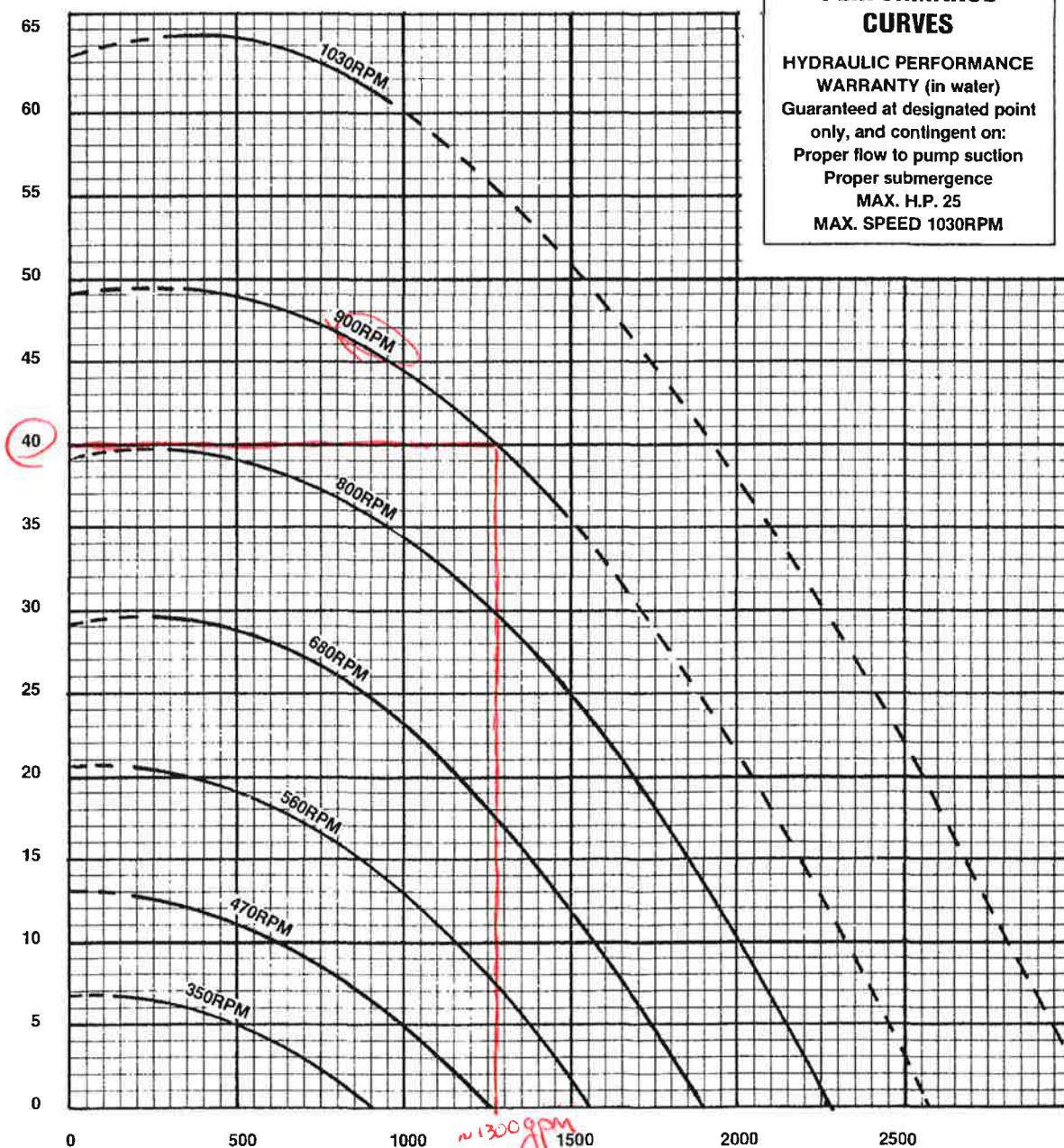
HORSEPOWER



**MODEL 15 PARMA
MULTI-SERVICE PUMP
PERFORMANCE
CURVES**

HYDRAULIC PERFORMANCE
WARRANTY (in water)
Guaranteed at designated point
only, and contingent on:
Proper flow to pump suction
Proper submergence
MAX. H.P. 25
MAX. SPEED 1030RPM

TOTAL HEAD FEET

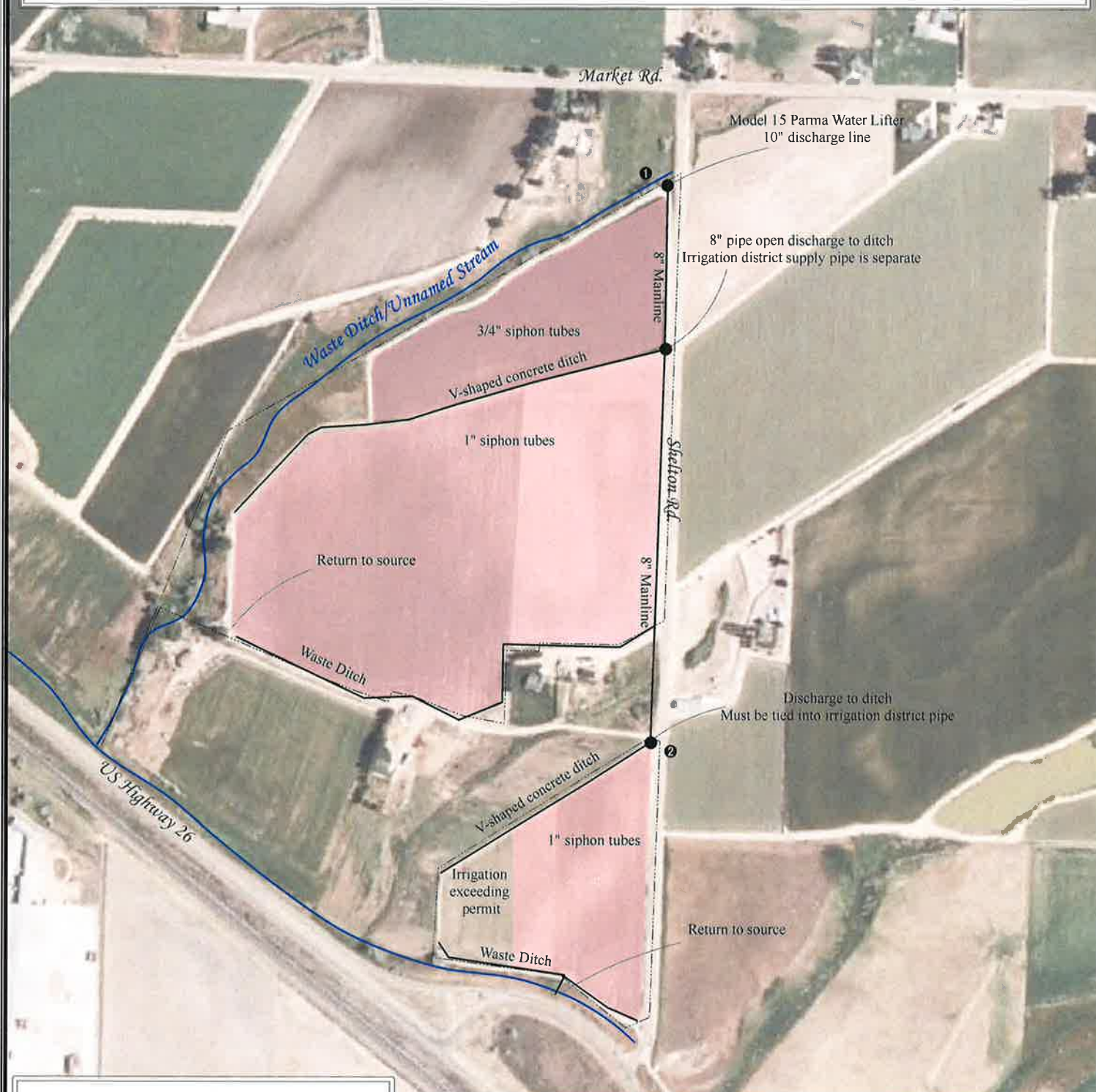


FLOW-GPM

--- Pump is not to operate continuously in this area.

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System Diagram



LEGEND

Irrigation included on license

Property boundary

N



0 0.075 0.15 Miles



Notes

1 - Parma Water Lifter Model 15, 10 in. discharge line. ~25 ft lift from pump head to first open discharge to ditch. Water level 10-15 ft BGS. Total lift approximately 40 feet. 10 hp Marathon Electric motor, 1735 rpm. Motor pulley is 6 inches, pump pulley is 12 inches. Pump rpm = 868. Diversion rate is 2.79 cfs per pump curve.

2 - A separate discharge pipe from the pump could not be located at this point. The owner says the system provides water to this location. So, the discharge line from the well must be tied into the irrigation district supply line.

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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 0.1 0.2 0.4 Miles



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Picture Attachment



Figure 1 The POD is a Parma pump driven by a 10 hp Marathon Motor. Pump rpm is 868. Lift to first open discharge is approximately 40 ft.



Figure 2 The specs for the electric motor. Motor speed is 1735 rpm w/ a 6" pulley. The motor pulley drives the 12" pump pulley using a serpentine belt. Pump rpm is half that of the motor.

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Picture Attachment



Figure 3 Open discharge to the concrete ditch. The POU is watered using a mix of $\frac{3}{4}$ " and 1" siphon tubes from the ditch.



Figure 4 Open ditch to water northern fields.

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Picture Attachment



Figure 5 The second discharge pt. The water shown here is Farmers Coop water. There is no separate pipe from the pump at this location. The owner says that the pump is tied into the Farmers Coop system.

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05N05W15

Basin/Seq.	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
63-11390	SSI FOOD	UNNAME	IRRIGATION							15	7.5	24	36							82.5
63-138C	FARMER'S	BOISE R/I	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-188	FARMER'S	BOISE R/I	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-189	FARMER'S	BOISE R/I	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-190	FARMER'S	BOISE R/I	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-191	FARMER'S	BOISE R/I	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-296	FARMER'S	BOISE R/I	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-31393	NORTHWASTE V	IRRIGATION		14		2	26									6				48
63-434B	CAMPBEL	SAND HO	IRRIGATION											22	35					57
63-4335	JOHNSON	UNNAME	IRRIGATION					0.1	17	37	26	13	3.2							96.3
63-4336	JOHNSON	SAND HO	IRRIGATION					0.1	17	37	26	32	36							148.1
63-4337	JOHNSON	UNNAME	IRRIGATION					0.1	17	37	26	13	3.2							96.3
63-4641A	CAMPBEL	SAND HO	IRRIGATION															20.5	32.5	53
63-4641B	CAMPBEL	SAND HO	IRRIGATION															20.5	32.5	53
63-4641C	CAMPBEL	UNNAME	IRRIGATION															2.3		2.3
63-4851	FARMER'S	SAND HO	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	2.3
63-4852	FARMER'S	CONWAY	IRRIGATION	X	X	X	X	X	X	X	X	X	X			X	X	X	X	
63-5197	JOHNSON	SAND HO	IRRIGATION					0.1	17	37	26	32	36							148.1
63-7921	HAMIL TC	SAND HO	IRRIGATION															16		16

Farmers Coop rights, overlap for POU

63-7921 HAMILTIC SAND HOLLOW CREEK

Parker, Cody

From: Rex Barrie <Waterdistrict63@qwestoffice.net>
Sent: Tuesday, May 15, 2018 7:38 AM
To: Parker, Cody
Subject: RE: Measuring Device Waiver for Permit 63-31393

Cody,

That looks good to me.

Rex R. Barrie
Boise River Watermaster

From: Parker, Cody [mailto:Cody.Parker@idwr.idaho.gov]
Sent: Tuesday, May 15, 2018 7:36 AM
To: Rex Barrie
Subject: RE: Measuring Device Waiver for Permit 63-31393

Something like this?

“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.”

Cody Parker

From: Rex Barrie [mailto:Waterdistrict63@qwestoffice.net]
Sent: Tuesday, May 15, 2018 6:35 AM
To: Parker, Cody <Cody.Parker@idwr.idaho.gov>
Subject: RE: Measuring Device Waiver for Permit 63-31393

Cody,

I would not waive the requirement. However, I could be written that “when” required the owner shall install a measuring device as required by the director.

There have been several that have it written that way.

Rex R. Barrie
Boise River Watermaster

From: Parker, Cody [mailto:Cody.Parker@idwr.idaho.gov]
Sent: Monday, May 14, 2018 2:49 PM

To: waterdistrict63@qwestoffice.net

Subject: Measuring Device Waiver for Permit 63-31393

Mr. Barrie,

I am working on writing a license for water right permit 63-31393. The permit authorizes diversion of wastewater to irrigate 48 acres. The waste water is used to supplement water from the Farmer Cooperative Ditch Co. The place of use is located approximately 1 mile east of Parma in Basin 63. A condition of the permit requires the owner to install a measuring device prior to diversion of water. The owner explained in a letter submitted with the proof of beneficial use, that he did not install a permanent measuring device but a portable weir may be provided upon Department request. After talking with others in the Department we decided that the Department would not consider the portable device satisfactory. However it was suggested that since the source is wastewater, and the location is in an area that is not actively regulated, you may be willing to waive the measuring device requirement. Please let me know if you are willing to waive the condition. Thank you in advance for your help. Please let me know if you need any more information.

Respectfully,

Cody Parker
Water Resource Agent
IDWR Western Region
208.334.2190
cody.parker@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

March 30, 2018

HAROLD And ELIZABETH ROHRBACHER
28253 SHELTON RD
PARMA ID 83660

RE: Water right permit no. 63-31393

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the permit referenced above **this season**. An examination is needed to verify the water use in order to issue a water right license.

The details of the permit referenced above can be found in the enclosed water permit report. **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but you have ceased using the water and have no further interest in pursuing a water right, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

Please contact me within the next thirty (30) days at 208-334-2190 to either schedule an examination or submit a relinquishment form. If you do not make a timely response in this regard, action will be taken to void the permit.

Respectfully,

Cody Parker
Water Resource Agent
IDWR Western Region
208.334.2190
cody.parker@idwr.idaho.gov

Enclosed: Water right report and map
Relinquishment form