

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 57-11588

Exam Date: 4/13/2015

1. Current Owner: EDMUND V BRAND
15507 BATES CREEK RD
OREANA ID 83650-5060
(208) 834-2086

CAROL A BRAND
15507 BATES CR RD
OREANA ID 83650
(208) 834-2086

2. Accompanied by: Edmund V Brand

Phone No:

Address:

Relationship to Permit Holder:

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW1. Other water rights with the same place of use: Overlap? ☒ Yes ☐ No

Water Right No.	Source	Purpose of Use	Basis
57-11704, 57-11706	Pickett Creek	Irrigation	Decreed
57-11729, 57-11731	Bates Creek	Irrigation, Stockwater	Decreed

Comments: Surface water rights for surrounding creeks. See attached.2. Other water rights with the same point of diversion: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments: No POD overlap.**C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NW1/4SW1/4 Sec. 28, Twp 04S, Rge 01W, B.M. OWYHEE County

Method of Determination: Aerial imagery over PLSS map using ArcMap.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
04S	01W	28	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	4.1
									1.7				2.4						

Total Acres: 4.1

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
04S	01W	28	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
												X							

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
04S	01W	28	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
									X			X							

Method of Determination:

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. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Unk.	Unk	3	Unk	Unk	Unk

*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
Pipe / Conduit	Ultrasonic	Polysonics	TF-P	N8J4626	---	4/2/2015

2. Measurements: Average flow rate of 33.021 gallons per minute. See attached Tyne Flyte readings.**E. FLOW CALCULATIONS**☒ Additional Computation Sheets Attached

Measured Method:

6" aluminum pipe, wall thickness of 0.044 in., transducers spaced 3.946 in apart recorded 3900 gallons of water in 12 minutes at an average of 33.021 gallons per minute OR 0.07 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.1 \text{ acres} \times 4.5 \text{ af/acre} = 18.45 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \text{ cfs} \times 260 \text{ d} \times 1.9835 \text{ af/cfs} \cdot \text{d} = 36.0997 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 18.45 \text{ af}$$

2. Volume Calculations for Other Uses:

20 horses are most kept at one time during beneficial use period.

At 12 g/h/d per admin memo #3: 20 head * 12g/h/d * 365 d/y = 87,600 g/y = 0.269 af

G. NARRATIVE/REMARKS/COMMENTS

Permit 57-11588 authorized the diversion of 0.34 cfs from ground water for irrigation, stockwater and domestic purposes. The exam was completed on April 13, 2015 by WRA Patrick Kelly.

Legal descriptions of POU & POD on the permit were found to be accurate for the property in the name of Edmund & Carol Brand. Aerial photography of the land showed irrigated fields and domestic structures. PLSS maps were overlaid with imagery and the use was found to be within the permitted legal descriptions.

Overlap review showed surface water rights from the Pickett and Bates Creek owned by Mr. Brand. Uses included irrigation and stockwater. Combined use limits will be placed on the license for these rights. The combined use limit for 0.29 cfs is exceptionally high for 4.4 acres of land, however comments found in 57-11704 state that 0.14 cfs is for conveyance losses from Pickett Creek.

Mr. Brand escorted me to the well where a 3 hp pump delivers ground water to the property. 6" aluminum pipe with 0.044" walls are used to deliver the water for irrigation. An ultrasonic device was used to measure flow rate through the pipe. After 12 minutes of measurement, a diversion rate of 33.021 gal/min OR 0.07 cfs was found. This is the maximum flow rate for the system. See measuring tape attached to this report.

Flow rates and volume for stockwater and domestic uses were suggested under Administrative Memo's No. 3 & 22. The owner has never had more than 20 horses on the property at one time during the beneficial use period. And a domestic structure where water is used for in home is present.

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>
IRRIGATION	03/01 to 11/15	0.07 CFS	18.5 AF
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.3 AF
<u>Totals:</u>		0.07 CFS	19.4 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 Patrick Kelly Date 4-13-2015

Reviewer _____ Date _____

Measurement Date: April 13, 2015
Technician: Patrick Kelly
Water Permit: 57-11588

OUTER DIAMETER
2.0000 IN
PIPE MATERIAL
? AL, DI

WALL THICKNESS
0.0440 IN

SPACING
3.946 IN U

0227.5 MMSEC
102.98 % T0

ZERO MODE
CLEAR

ZERO MODE
AUT ZERO

0225.3 MMSEC
102.02 % T0

ZERO MODE
CLEAR

ZERO MODE
AUT ZERO

ZERO MODE
ZERO OPR

10:36+ 31.436E 0GPM 00R
+ 0.367E 0FPS 00R
+00000 *10 G 00R
-00000 *10 G 00R

10:37+ 32.757E 0GPM 00R
+ 0.383E 0FPS 00R
+00002 *10 G 00R
-00000 *10 G 00R

10:38+ 32.493E 0GPM 00R
+ 0.360E 0FPS 00R
+00006 *10 G 00R
-00000 *10 G 00R

10:39+ 31.964E 0GPM 00R
+ 0.374E 0FPS 00R
+00009 *10 G 00R
-00000 *10 G 00R

10:40+ 32.757E 0GPM 00R
+ 0.383E 0FPS 00R
+00012 *10 G 00R
-00000 *10 G 00R

10:41+ 29.851E 0GPM 00R
+ 0.351E 0FPS 00R
+00016 *10 G 00R
-00000 *10 G 00R

10:42+ 33.814E 0GPM 00R
+ 0.396E 0FPS 00R
+00019 *10 G 00R
-00000 *10 G 00R

10:43+ 33.285E 0GPM 00R
+ 0.390E 0FPS 00R
+00022 *10 G 00R
-00000 *10 G 00R

-----+ 0.387E 0FPS 00R
+00029 *10 G 00R
-00000 *10 G 00R

-----+ 0.400E 0FPS 00R
+00033 *10 G 00R
-00000 *10 G 00R

10:47+ 32.757E 0GPM 00R

-----+ 0.383E 0FPS 00R
+00036 *10 G 00R
-00000 *10 G 00R

10:48+ 33.021E 0GPM 00R
+ 0.387E 0FPS 00R
+00039 *10 G 00R
-00000 *10 G 00R



MOVES WATER
AROUND PROPERTY
FOR STOCK [HORSES]

Process	Basin Sequence	Draft	Owner	Source	POD/POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	57-10632	N	FERRIS, LINDA K. THOMAS JR. BEN A. THOMAS KELLY A. THOMAS	BATES CREEK	POU								X									0
Water Permit	57-11588	N	BRAND, CAROL A. BRAND, EDMUND V	GROUND WATER	POU									X								0
Water Permit	57-11588	N	BRAND, CAROL A. BRAND, EDMUND V	GROUND WATER	POU						5.0			10.0								15
Water Permit	57-11588	N	BRAND, CAROL A. BRAND, EDMUND V	GROUND WATER	POU						X			X								0
Water Right	57-11704	N	BRAND, CAROL A. BRAND, EDMUND V	PICKETT CREEK	POU							1.4					NORTH GR					1.4
Water Right	57-11706	N	BRAND, CAROL A. BRAND, EDMUND V	PICKETT CREEK	POU										3.0		SOUTH GR					3
Water Right	57-11728	N	WATKINS, BARBARA, WATKINS, WALTER J	BATES CREEK	POU							0.7										0.7
Water Right	57-11728	N	WATKINS, BARBARA, WATKINS, WALTER J	BATES CREEK	POU							X										0
Water Right	57-11729	N	BRAND, CAROL A. BRAND, EDMUND V	BATES CREEK	POU							1.4										1.4
Water Right	57-11729	N	BRAND, CAROL A. BRAND, EDMUND V	BATES CREEK	POU							X						BATES CREEK				0
Water Right	57-11730	N	TEETER, JOHN, TEETER, STEPHANIE	BATES CREEK	POU										1.5							1.5
Water Right	57-11730	N	TEETER, JOHN, TEETER, STEPHANIE	BATES CREEK	POU									X								0
Water Right	57-11731	N	BRAND, CAROL A. BRAND, EDMUND V	BATES CREEK	POU										3.0		SOUTH GR					3
Water Right	57-11731	N	BRAND, CAROL A. BRAND, EDMUND V	BATES CREEK	POU									X								0
Water Right	57-11734	N	WATKINS, BARBARA, WATKINS, WALTER J	PICKETT CREEK	POU							0.7										0.7
Water Right	57-11738	N	TEETER, JOHN, TEETER, STEPHANIE	PICKETT CREEK	POU										1.5							1.5
Water Right	57-11749	N	TEETER, JOHN, TEETER, STEPHANIE	GROUND WATER	POU										1.6							1.6
Water Right	57-46D	N	GRETZ, W WARREN, MUTCHLER, JANET A	PICKETT CREEK	POU		8.0															8
Water Right	57-46E	N	RAAUM, DIANE, RAAUM, JAMES	PICKETT CREEK	POU					10.7			3.0									13.7
Water Right	57-46G	N	GRETZ, W WARREN, MUTCHLER, JANET A	PICKETT CREEK	POU		8.0															8
Water Right	57-46H	N	RAAUM, DIANE, RAAUM, JAMES	PICKETT CREEK	POU					10.7			3.0									13.7
Water Right	57-7521	N	GABICA, GENE E. GABICA, JOHN, WATKINS, BARBARA, WATKINS	GROUND WATER	POU										X							0

pickfile shows for neighbor prop. to the West.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

April 6, 2015

EDMUND V BRAND
15507 BATES CREEK RD
OREANA ID 83650

RE: Scheduling Field Exam for Water Right Permit No. 57-11588.

Dear Mr. Brand:

We are planning to **conduct water right examinations** in the vicinity of the above-referenced permit **during the week of April 13, 2015**. 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 conditions during the examination. The permit authorizes domestic stock water & irrigation use on the property.

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 10, 2015.** If there is a problem with scheduling or conducting the examination at this time, please call and other arrangements can be made. I appreciate your attention in this matter and I look forward to hearing from you.

Sincerely,

Patrick Kelly.
Water Resource Agent