

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-8787

Exam Date: 9/17/2008

1. Current Owner: KENNETH A BRANDSMA And
DEBRA K BRANDSMA
2169 E 3200 S
WENDELL ID 83355
(208) 536-5200

2. Accompanied by: PERMIT HOLDER

Phone No:

Address:

Relationship to Permit Holder:

3. SOURCE

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 36-7513
2. Other water rights with the same point of diversion: 36-7513

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NW1/4SW1/4 Sec. 1, Twp 08S, Rge 15E, B.M. GOODING County

Method of Determination: SITE VISIT

2. 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	
08S 15E 1									40.0	35.0	37.0	40.0					152.0

Total Acres: 152

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.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
A0001554	US MOTORS	125	84-16198-10-25-74	SINGER EL INE	45475 12 STAGE PUMP

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Calib. Date</u>
TYME-FLYTE	ULTRASONIC	POLYSONICS	TF-P		
PANAMETRICS	ULTRASONIC		878	2283	03/24/2008

2. Measurements:

CAPACITY MEASUREMENT OF 2.88 CFS. WELL SHARED WITH WATER RIGHT 36-7513 FOR 1.73 CFS. RATE AVAILABLE FOR 36-8787: $2.88 - 1.73 = 1.15$ CFS. LIMITED TO PERMITTED AMOUNT OF 1.05 CFS.

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

COMBINATION OF POLYSONIC TYME-FLYTE AND PANAMETRIC FLOW METER. SEE FIELD NARRATIVE FOR MORE DETAIL.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

N/A. SEE BOTTOM OF LAST PARAGRAPH IN FIELD REPORT NARRATIVE FOR EXPLANATION.

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

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

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

License is for the appropriation of 1.05 cfs on 152 acres outside of Wendell. Place of use is the SW 1/4 of T08S R15E Section 1. The point of diversion is in the NWSW of T08S R15W Section 1. The permit was filed to cover what the system could pump when the field exam for 36-7513 was done. 36-7513 is an existing partial decree on the same place of use for 1.73 cfs. Both rights share the same well. The field examiner found the system was capable of producing 2.78 cfs.

System consists of well/pump to mainline that runs to pivot center. Before mainline runs underground at the pump site, a smaller mainline tees off and wraps back around the pump station to provide water for a smaller field between the home and 2200 East road which borders the place of use on the west. This is irrigated by handlines only. A small field in the very northwest corner of the place of use is also irrigated by handlines however this water is supplied by the mainline that goes to the pivot. See system diagram and aerial map for illustration.

During system measurement the valve on the secondary mainline to the small pasture was somewhat partially open. To ensure proper measurement a Polysonic flowmeter was placed on this pipe to check for flow while a Panametric flowmeter was placed on the mainline to the pivot. A negligible flow was measured on the secondary line with the Polysonic. A flow of 1298 gpm or 2.88 cfs was measured with the Panametric. This flow closely coincides with the capacity measurement of 2.78 cfs made during the examination of 36-7513. Subtracting 36-7513 from the capacity rate of 2.88 cfs gives a measurement of 1.15 cfs for this license. Recommended rate is permitted amount of 1.05 cfs. No volume will be listed on this license. This license is recommended to be limited to 608 af combined with 36-7513.

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	04/01 to 10/31	1.050 CFS	
<u>Totals:</u>		1.050 CFS	

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 Nick Van Syke Date 9/17/08
 Reviewer Nick Van Syke Date 1/8/09

SYSTEM Diagram

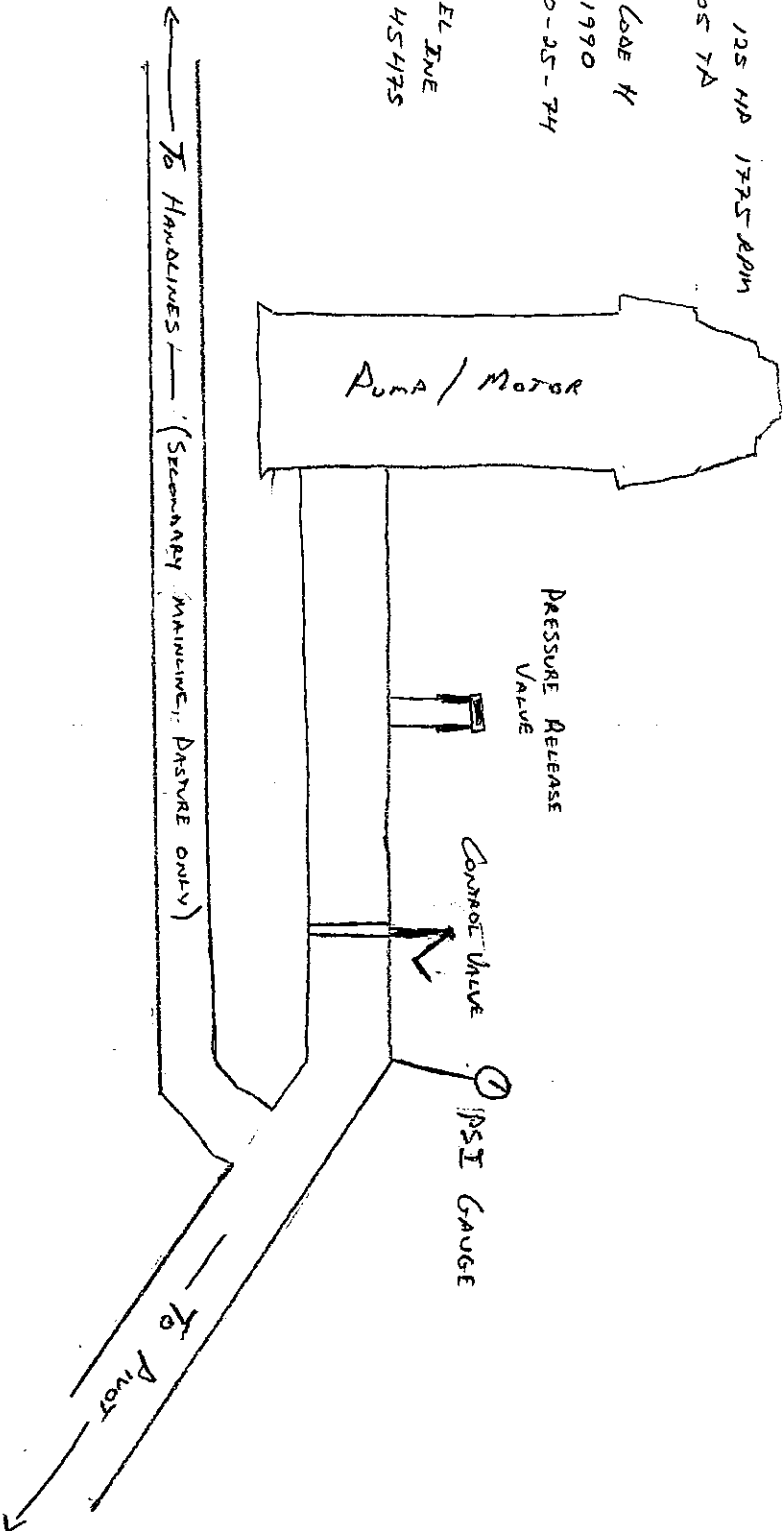
MOTOR:

U.S. MOTORS 125 HP 1775 RPM
 FRAME 4057A
 TYPE RU
 DESIGN B CODE H
 # C521990
 DT-16198-10-25-74

PUMP:

SINGER ELINE
 PUMP NO. 454735
 STAGE 12

SITE TAG ID: A0001554



1
2

PUMP:

U.S. MOTORS 125 HP 1775 RPM
FRAME 405TA

TYPE RV

DESIGN B CODE H

IA # CS21990

B4-16198-10-25-74

SINGER EL INE

PUMP NO. 45475

4

STAGE 12

SITE TAG ID:

A0001554

PARAMETRICS
MEASUREMENTS

PIPE MEASUREMENTS

4.139" THICKNESS

6.02" DIAMETER

- SPACING → 4.143

1087628
- 1074648

1012980

1298 3PM

"Rite in the Rain"

TYPE - FLUTE DATA

12:35+ 8.717E 0GPM 00R
 +00000 *10 G 00R
 -00000 *10 G 00R

12:36+ 8.189E 0GPM 00R
 +00000 *10 G 00R
 -00000 *10 G 00R

12:37+ 7.925E 0GPM 00R
 +00001 *10 G 00R
 -00000 *10 G 00R

12:38+ 7.660E 0GPM 00R
 +00001 *10 G 00R
 -00000 *10 G 00R

12:39+ 6.340E 0GPM 00R
 +00002 *10 G 00R
 -00000 *10 G 00R

12:40+ 7.925E 0GPM 00R
 +00003 *10 G 00R
 -00000 *10 G 00R

12:41+ 7.925E 0GPM 00R
 +00003 *10 G 00R
 -00000 *10 G 00R

12:42+ 7.660E 0GPM 00R
 +00004 *10 G 00R
 -00000 *10 G 00R

12:43+ 6.340E 0GPM 00R
 +00005 *10 G 00R
 -00000 *10 G 00R

12:44+ 6.604E 0GPM 00R
 +00006 *10 G 00R
 -00000 *10 G 00R

12:45+ 6.075E 0GPM 00R
 +00006 *10 G 00R
 -00000 *10 G 00R

MODE SELECT
 INPUT

OUTER DIAMETER
 6.0201 IN

PIPE MATERIAL
 ? CS,SS

WALL THICKNESS
 0.1390 IN

INNER LINING
 ? NO LING.

KIND OF FLUID
 ? WATER

SENSOR MOUNTING
 ? U

TYPE OF SENSOR
 ? SMALL

DATA CHANGE
 ? NO

SPACING
 4.143 IN U

ZERO MODE
 CLEAR

ZERO MODE
 AUT ZERO

00-00 00:2600 *R
 +003.10 % AI2

MODE SELECT
 T0 CHECK

0217.2 MMSEC
 101.25 % T0

09-17 12:2000 *R
 + 6.340E 0GPM

MODE SELECT
 INPUT

OUTER DIAMETER
 6.0201 IN

PIPE MATERIAL
 ? CS,SS

WALL THICKNESS
 0.1390 IN

INNER LINING
 ? NO LING.

KIND OF FLUID
 ? WATER

SENSOR MOUNTING
 ? U

TYPE OF SENSOR
 ? SMALL

DATA CHANGE
 ? NO

SPACING
 4.143 IN U

ZERO MODE
 CLEAR

ZERO MODE
 AUT ZERO

00-00 00:2600 *R
 +003.10 % AI2

MODE SELECT
 T0 CHECK

0217.2 MMSEC
 101.25 % T0

09-17 12:2000 *R
 + 6.340E 0GPM

Log Name C:\Documents and Settings\jbrooks\Desktop\36-8787.LOG
Log Title C:\Documents and Settings\jbrooks\Desktop\36-8787.LOG
Start Time 9/17/2008 11:50
End Time 9/17/2008 12:01
Records 3
Interval 60
Error Flags 8208
Cyclic Flags 2

Field Exam Measurement for Water Right 36-8787 by Dan Nelson and Nick Van Dyke

Item #	Label	Symbol	UnitType	Channel	Comport	Computer	Decimal	Width	Input	NodeID
0	Velocity	ft/s	578	0	0	PT878	4	12	2	0
1	Volume	gal/m	846	0	0	PT878	4	12	3	0
2	(+)Total	gal	1160	0	0	PT878	4	12	20	0

Date/Time	Velocity (ft/s)	Volume (gal/m)	(+)Total (gal)	Error #
9/17/2008 11:50:12	5.495973444	1304.291499	1074648.222	0
9/17/2008 11:51:12	5.486145604	1301.959179	1075893.073	0
9/17/2008 11:52:13	5.476639115	1299.703122	1077280.423	0
9/17/2008 11:53:12	5.481735636	1300.912616	1078539.776	0
9/17/2008 11:54:13	5.465834466	1297.138988	1079842.172	0
9/17/2008 11:55:12	5.475619453	1299.461138	1081158.131	0
9/17/2008 11:56:13	5.487858236	1302.365617	1082483.684	0
9/17/2008 11:57:13	5.462131195	1296.260136	1083782.068	0
9/17/2008 11:58:12	5.440676835	1291.168638	1085033.981	0
9/17/2008 11:59:12	5.455232913	1294.623052	1086329.908	0
9/17/2008 12:00:12	5.477087645	1299.809566	1087628.131	0

Last Total	First Total	Number of Readings	Average Flow Rate In GPM
1087628.131	1074648.222	10	1298.0

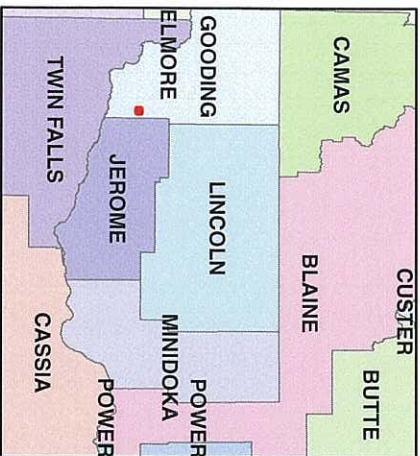
Idaho Department of Water Resources



Water Right
36-8787
(IRRIGATION)

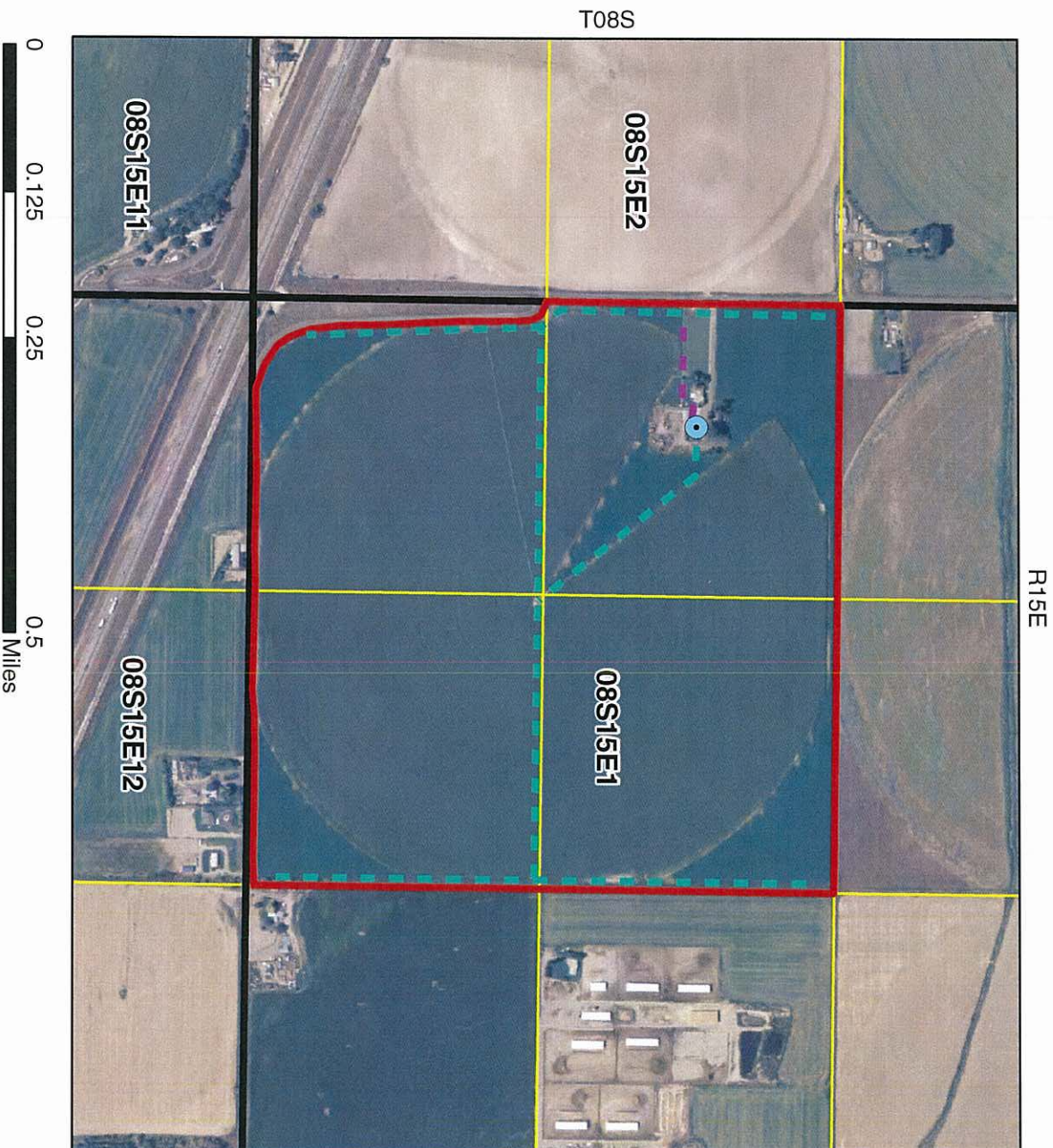
Legend

- point_of_diversion
- pivot_mainline
- secondary_mainline
- license_pou
- PLS Sections
- Quarter Quarters



Gooding County
IDWR Basin 36

Prepared by Nick Van Dyke
On January 08, 2009
2004 Aerial Photography

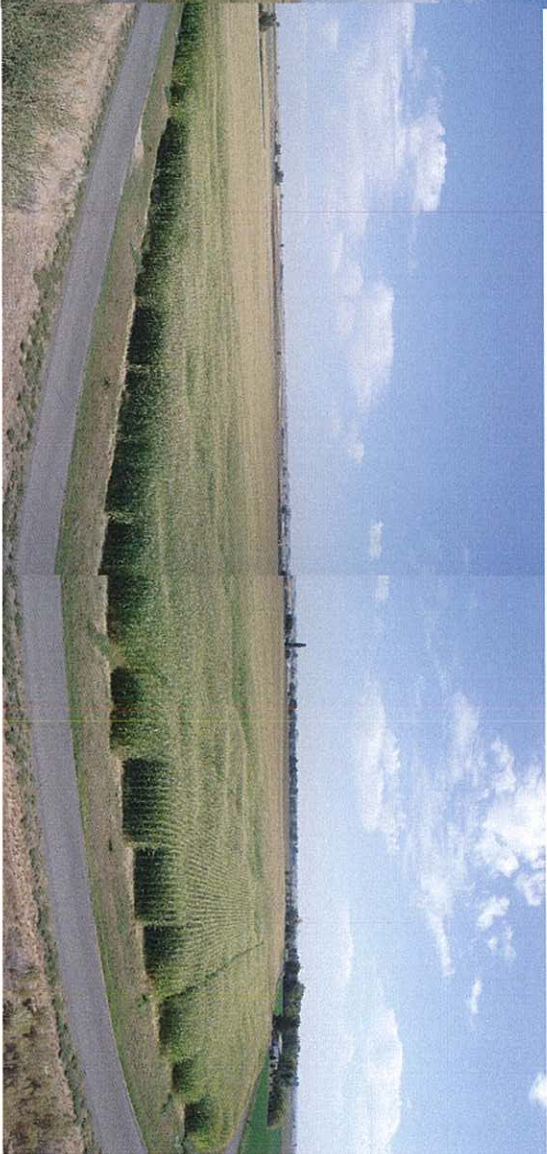




- Point of diversion.



- Place of use irrigated by handlines. Area inside fence is irrigated by secondary mainline



- Pivot place of use.