

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 22-13671

Exam Date: 5/2001

1. Current Owner: BEVAN JEPPESEN
1282 S SECOND E
REXBURG ID 83440
(208)356-9079

2. Accompanied by: **BEVAN JEPPESEN**
Phone No:
Address:
Relationship to Permit Holder:

3. **SOURCE**
GROUND WATER

TRIBUTARY**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:

2. Other water rights with the same point of diversion:

22-7683 GW
22-7683

Woodmansee Johnson Canal
22-765E, 22-4195, 22-13479

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

GROUND WATER

SW1/4NW1/4

Sec. 29, Twp 05N, Rge 41E, B.M.

MADISON County

Method of Determination:

FE/GIS

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	
05N 41E 20									39.0	40.0			38.0	27.0	40.0	40.0	224.0
05N 41E 21									8.4	20.0							28.4
05N 41E 28					9.5				11.0	17.0							37.5
05N 41E 29	40.0	40.0	40.0	40.0	40.0	39.0	38.0	40.0	40.0	38.0	33.0	39.0	40.0	40.0	39.0	39.0	625.0

Total Acres: 914.9

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.

<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>
WELL	GE	600 hp		Johnston	
Booster	Marathon	200 hp		Aurora	

*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>Size</u>	<u>Calib. Date</u>

2. Measurements:

SONIC METER 6.16 cfs

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

SONIC METER 6.16 cfs

Hand-drawn schematic diagram of a hydraulic system on grid paper. The system includes a pump labeled "NEW" with a flow rate of "3 1/2 GPM (1000)". The pump is connected to a "Booster" pump, which is also connected to a "Booster Motor". The diagram shows various pipes, valves, and flow directions, with dimensions such as 27 1/2", 27", 40 1/2", 70 1/4", 5 1/4", 16", 23 3/4", and 75".

Photo of Diversion and System Attached

4.

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

1.

2. Measurements: $35\frac{7}{8}$ circ = 12.374" od 0.103" thickness

Pressure between Booster & Pump = 0 psi 10.03" o.d. (31.5" circ) 0.101" thickness
Pressure down stream of Booster = 116 psi 7.804" space

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

109.9 ac

384. AF

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .82 \text{ cfs} \times 214 \text{ days} = 348.14 \text{ AF}$$

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

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

this was a portion of permit 22-7528 which was originally issue for another system. at the time of the field exam for 22-7683 and 22-7528, more acres were developed under 22-7683 than what was permitted and less acres were developed under 22-7528 than what was permitted. a split of 22-7528 was created with part of this permit transfered into the system under 22-7683. a licensing amendment will be required to complete this change. only 0.82 CFS is available from permit 22-7528 to be moved into this system with 22-7683. 22-7683 was permitted for 5.0 CFS.

this system is a well/pump to pivots and handlines GE 600 HP motor/johnston pump - 200HP marathon/aurora booster. sonic meter measurement 5/2001- 6.16 cfs with pivots running.

$$0.82 \text{ cfs} \times 1.9835 \times 214 \text{ days} = 348 \text{ AF/a}$$

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	0.820 CFS	348.00 AF
<u>Totals:</u>		0.820 CFS	348.00 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 Keith Wilson Date 5/2001
 Reviewer DAVE CARLSON Date 2/2007

LOG NAME: JEPPESEN **22-07683**
START: 05-16-2001 09:35
END: 05-16-2001 09:40
INTERVAL:00:01:00

05-16-2001 09:35:00
+3.819E+0 ft/s
+6.153E+2 gal/m
+1.371E+0 ft3/s
+TOTAL 0000000 gal
-TOTAL 0000000 gal
ABNORMAL

05-16-2001 09:36:00
+5.455E+0 ft/s
+8.545E+2 gal/m
+1.958E+0 ft3/s
+TOTAL 0000266 gal
-TOTAL 0000000 gal
ABNORMAL

05-16-2001 09:37:00
+4.411E+0 ft/s
+6.910E+2 gal/m
+1.539E+0 ft3/s
+TOTAL 0000953 gal
-TOTAL 0000000 gal
NORMAL

05-16-2001 09:38:00
+4.466E+0 ft/s
+6.997E+2 gal/m
+1.559E+0 ft3/s
+TOTAL 0001671 gal
-TOTAL 0000000 gal
NORMAL

05-16-2001 09:39:00
+4.383E+0 ft/s
+6.867E+2 gal/m
+1.531E+0 ft3/s
+TOTAL 0002375 gal
-TOTAL 0000000 gal
NORMAL

05-16-2001 09:40:00
+6.029E+0 ft/s
+6.912E+2 gal/m
+1.540E+0 ft3/s
+TOTAL 0003026 gal
-TOTAL 0000000 gal
NORMAL

AVERAGE DIVERSION (For 3 min)
(09:37:00 to 09:40:00)
Q = 691.0 gpm

MAXIMUM RECORDED FLOW RATE =
 $Q_{\text{gpm}} = 699.7 \text{ gpm}$
 $Q_{\text{cfs}} = 1.56 \text{ cfs}$

North Pivot #1

Use average flow for all Pivots
 $Q = (4)(691 \text{ gpm}) = 2764 \text{ gpm} =$
 $Q = 6.158 \text{ cfs} = 6.16 \text{ cfs}$

22-07683
22-13671



Idaho Department of Water Resources

Water Right:

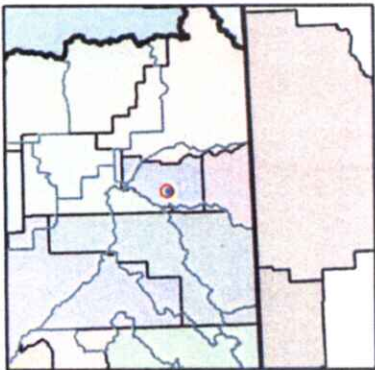
22-7683

(Irrigation)

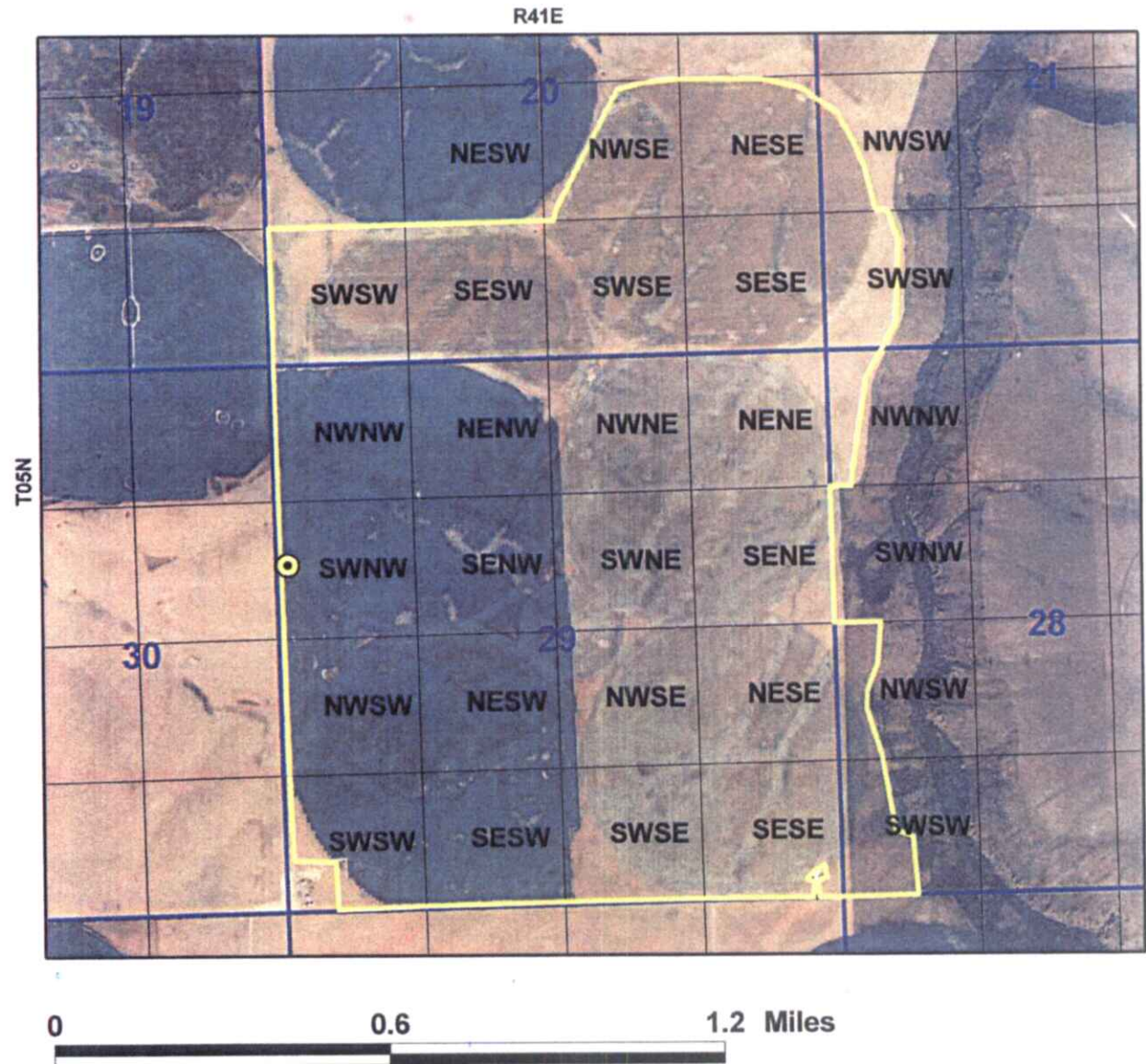
22-13671

Legend

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



Madison County
IDWR Basin 22



Prepared by D. Carlson
On Thursday, February 1, 2007
2004 Aerial Photography

Point of Diversion



22-7683
22-13671