

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
BENEFICIAL USE FIELD REPORT

## A. GENERAL INFORMATION

Permit No: 22-7683

Exam Date: 5/16/2001

1. Current Owner: MERLE K JEPPESEN  
1282 S SECOND E  
REXBURG ID 83440  
(208)356-9079
- NORTHWEST FARM CREDIT SERVICES ACA  
PO BOX 157  
REXBURG ID 83440-0157  
(208)356-4442
- 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: **(22-13671 GW) Woodmansee Johnson Canal**  
**22-265E, 22-4195, 22-13479 (Adj Rec)**
2. Other water rights with the same point of diversion: **22-13671**

## 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.

**ONLY ON THE THREE  
NORTHERN MOST QQ's  
THIS SURFACE WATER  
OVERLAPS.**

**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

LIMITED TO 805AC

Method of Determination:

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- X Aerial Photo Attached (required for irrigation of 10+ acres).
- X Photo of Diversion and System Attached

4.

| <u>Well or Diversion</u><br><u>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</u><br><u>Size</u> |
|--------------------------------------------|-------------------|------------|-------------------------|------------------|----------------------------------------------------|
| <u>GE WELL</u>                             | <u>GE</u>         | <u>100</u> |                         | <u>Johnston</u>  |                                                    |
| <u>BOOSTER</u>                             | <u>Marathon</u>   | <u>200</u> |                         | <u>Aurora</u>    |                                                    |
|                                            |                   |            |                         |                  |                                                    |

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

**D. FLOW MEASUREMENTS**

1.

| <u>Measurement</u><br><u>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

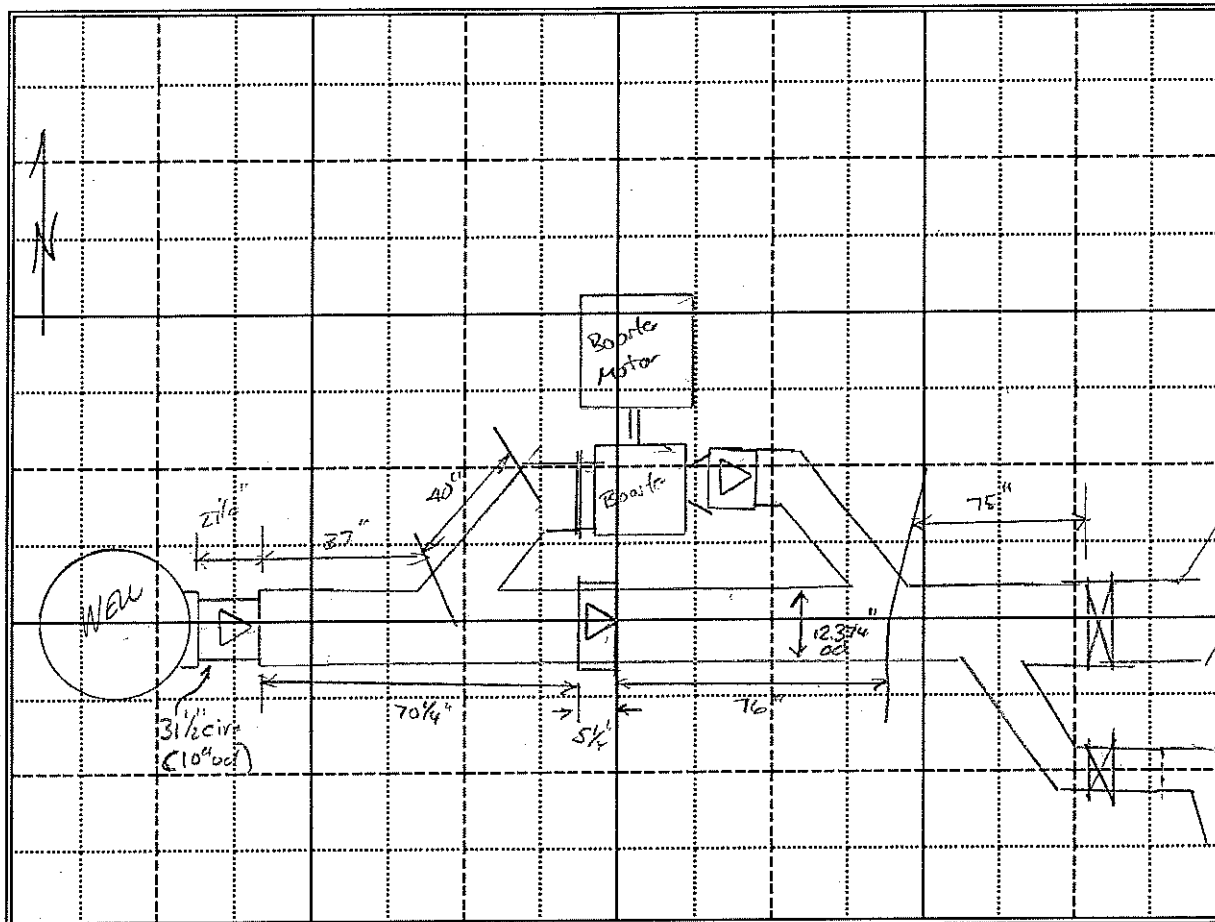
**E. FLOW CALCULATIONS**

\_\_\_\_ Additional Computation Sheets Attached

Measured Method:

SONIC METER 6.16 CFS

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate well size/ditch size/pipe i.d. as applicable.



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 |
|---------------------------------------|------------|-----|-------------------|-----------|-----------------------------------|
| Well                                  | GE         | 600 | BCJ222018         | Johnston  | CLASS 50<br>12"                   |
| Booster                               | Marathon   | 200 | 09164590-10/25-09 | Aurora    | 93-14647                          |
|                                       |            |     |                   |           |                                   |

\*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 |
|-----------------------|-------|--------|-----------|-------------------------|------|-------------|
| Ultrasonic 7/14/1995  | Sonic | Plymco | ISTT-P    |                         |      |             |
| Ultrasonic 5/16/2001  | Sonic | Fuji   | PLC-S1011 | 71K00891TB<br>S# 240383 | —    |             |

2. Measurements:  $39\frac{7}{8}$  circ = 12.374" od      0.103" thickness

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

**F. VOLUME CALCULATIONS**

## 1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 805 \times 3.5 = 2817.5$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 5 \text{ cfs}$$

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

## 2. Volume Calculations for Other Uses:

**G. NARRATIVE/REMARKS/COMMENTS**

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.  
 5.0 cfs X 1.9835 X 214 days = 2212.3 AF/a  
 larger place of use than what was permitted. *permit for 805 ac*  
 a portion of permit 22-7528/22-13671 will be moved into this system  
 via the licensing amendment process.  
 the northern most 3 QQs have a overlap with moody creek water rights including Woodmansee Johnson Canal shares.  
 the rest of the place of use has no overlapping water rights.

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       | 5.000 CFS             | 2,122.30 AF          |
| <u>Totals:</u>        |                      | 5.000 CFS             | 2,122.30 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 2/16/2007

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 =  
 $Q_{\text{gpm}} = \underline{699.7 \text{ gpm}}$   
 $Q_{\text{cfs}} = \underline{1.56 \text{ cfs}}$

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**



# Idaho Department of Water Resources

Water Right:

**22-7683**

(Irrigation)

22-13671

## Legend

Point of Diversion



Place of Use



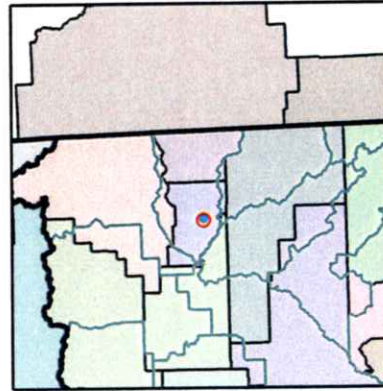
Townships



PLS Sections



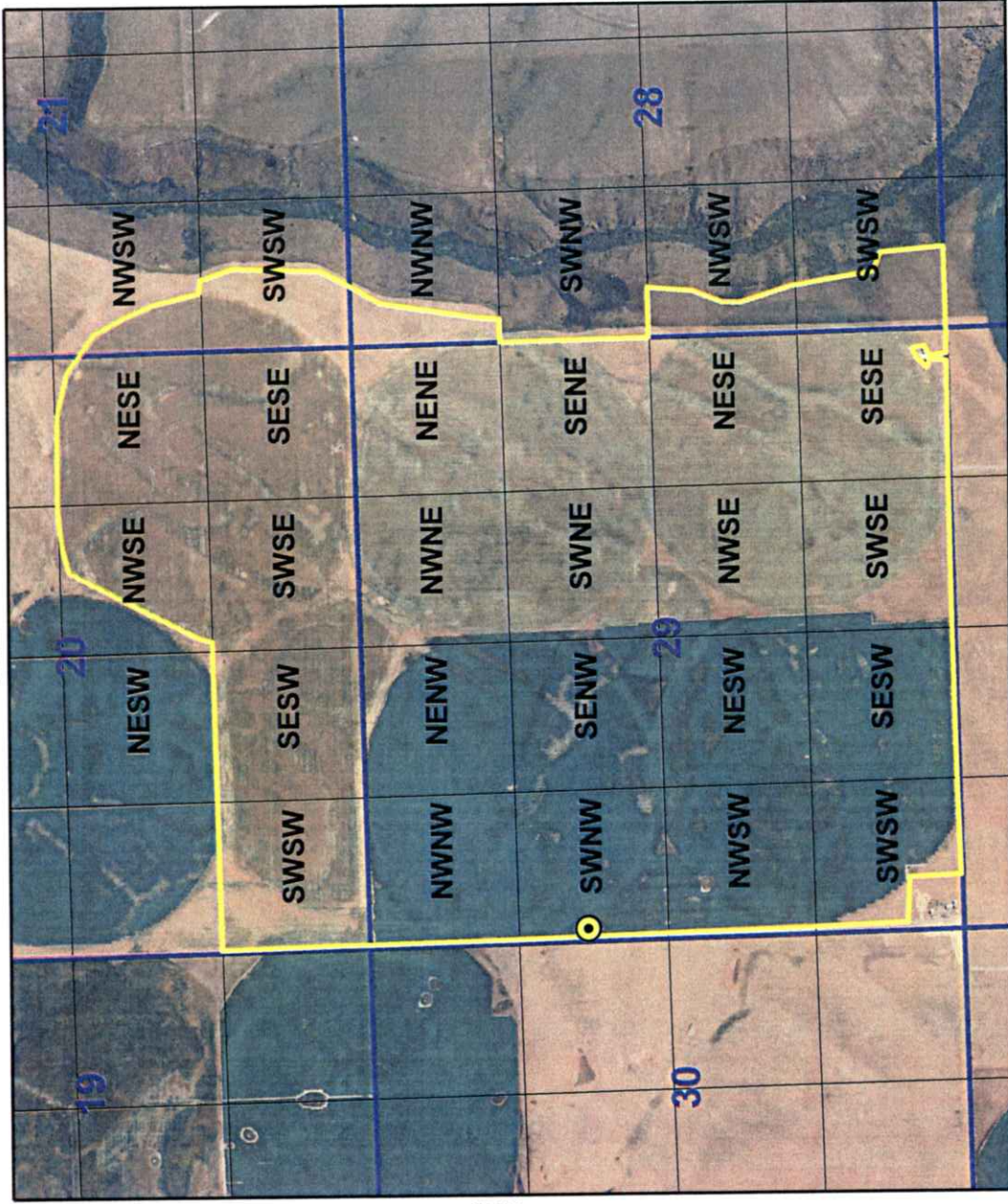
Quarter Quarters



Madison County  
IDWR Basin 22

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

R41E



T05N



1.2 Miles

0.6

0

# Point of Diversion



22-7683