

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 45-7741

Exam Date: 07/24/2007

1. Current Owner: CASSIA COUNTY JOINT SCHOOL DISTRICT #151  
237 E 19TH ST  
BURLEY ID 83318  
(208) 678-6600
2. Accompanied by: Max Brown  
Phone No: (208) 312-3091  
Address: 202 E. 15<sup>th</sup> St., Burley, ID 83318  
Relationship to Permit Holder: School District maintenance employee

3. **SOURCE**

GROUND WATER

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Multiple SRBA recommended water rights for irrigation from surface water delivered by Burley Irrigation District. Also, multiple SRBA recommended water rights for municipal water delivered by City of Burley. Water right no. 45-7741 is for irrigation supplemental to surface water delivered by Burley Irrigation District.
2. Other water rights with the same point of diversion: None.

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

GROUND WATER L3 (NW¼NW¼SE¼) Sec. 30, Twp 10S, Rge 23E, B.M. CASSIA County

Method of Determination: GPS, GIS, satellite imagery

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 |        |
| 10S 23E 30  |    |    |    | 7.9 |    |    |    |    |    |    |    |    | 0.6 | 3.2 |    |    | 11.7   |
|             |    |    |    |     |    |    |    |    |    |    |    |    |     | L 3 |    |    |        |

Total Acres: 11.7

Method of Determination: GIS, satellite imagery

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. Attachments 2 and 3.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater. Attachment 1.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres). Attachment 1.
- ☒ Photo of Diversion and System Attached. Attachments 2 and 3.

4.

| <u>Well or Diversion</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> |
|--------------------------|-------------------|-----------|-------------------------|------------------|------------------------------------------|
| <u>ID No.*</u>           |                   |           |                         |                  |                                          |
| D0008514                 | unknown           |           |                         |                  |                                          |

\*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> |
|------------------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|
|                              | Ultrasonic  | Polysonic   | Tyme-Flyte       | 150232            |             | April 2007         |

2. Measurements: See attachment 4, measurement record.

## Description and Summary:

Ultrasonic flow meter attached to 4.02" steel pipe immediately downstream of well head. Irrigation delivery system commingles surface water from canal with ground water. Propeller-type totalizing flow meter permanently installed on pipe. After the discharge measurement, the flow meter accurately totalized the flow for the duration of the measurement. Flow meter is inspected and calibrated annually by IDWR staff. Discharge data is collected annually and stored in WMIS database. Total flow = 200.5 gpm = 0.45 cfs, based on 11 minute average.

**E. FLOW CALCULATIONS**

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

Measured Method: None

**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 11.7 \text{ acres} \times 4.0 \text{ afa} = 46.8 \text{ af}$$

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

$$0.45 \text{ cfs} \times 246 \text{ days} \times 1.9835 = 219.6 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 46.8 \text{ af}$$

2. Volume Calculations for Other Uses:

**G. NARRATIVE/REMARKS/COMMENTS**

Water right no. 45-7741 is for supplemental irrigation use from ground water. The place of use is the baseball field and multipurpose athletic field at Burley High School.

Irrigation is accomplished primarily with surface water from Burley Irrigation District. As per condition 12 of permit approval, the school district maintains shares in the Burley Irrigation District for irrigation of 43.59 acres at Burley High School, attachment 5. Supplemental supply from ground water is necessary prior to and after the availability of canal water.

There are two canal pumps at the point of diversion but the east pump is a separate system. The well is adjacent to the canal pumps and combines ground water with surface water in the same delivery system as the west pump. There is a control valve on the ground water supply line for flow control. A totalizing flow meter is immediately upstream of the control valve allowing for an accurate measurement of ground water diversion. The flow meter is inspected and calibrated annually by IDWR staff. Discharge data is collected annually and stored in WMIS database.

Landscaping immediately adjacent to the school is irrigated with municipal water provided by the City of Burley.

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            | 03/15 to 11/15       | 0.450 CFS             | 46.80 AF             |
|                       | <u>Totals:</u>       | 0.450 CFS             | 46.80 AF             |

**2. Recommended Amendments**

☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

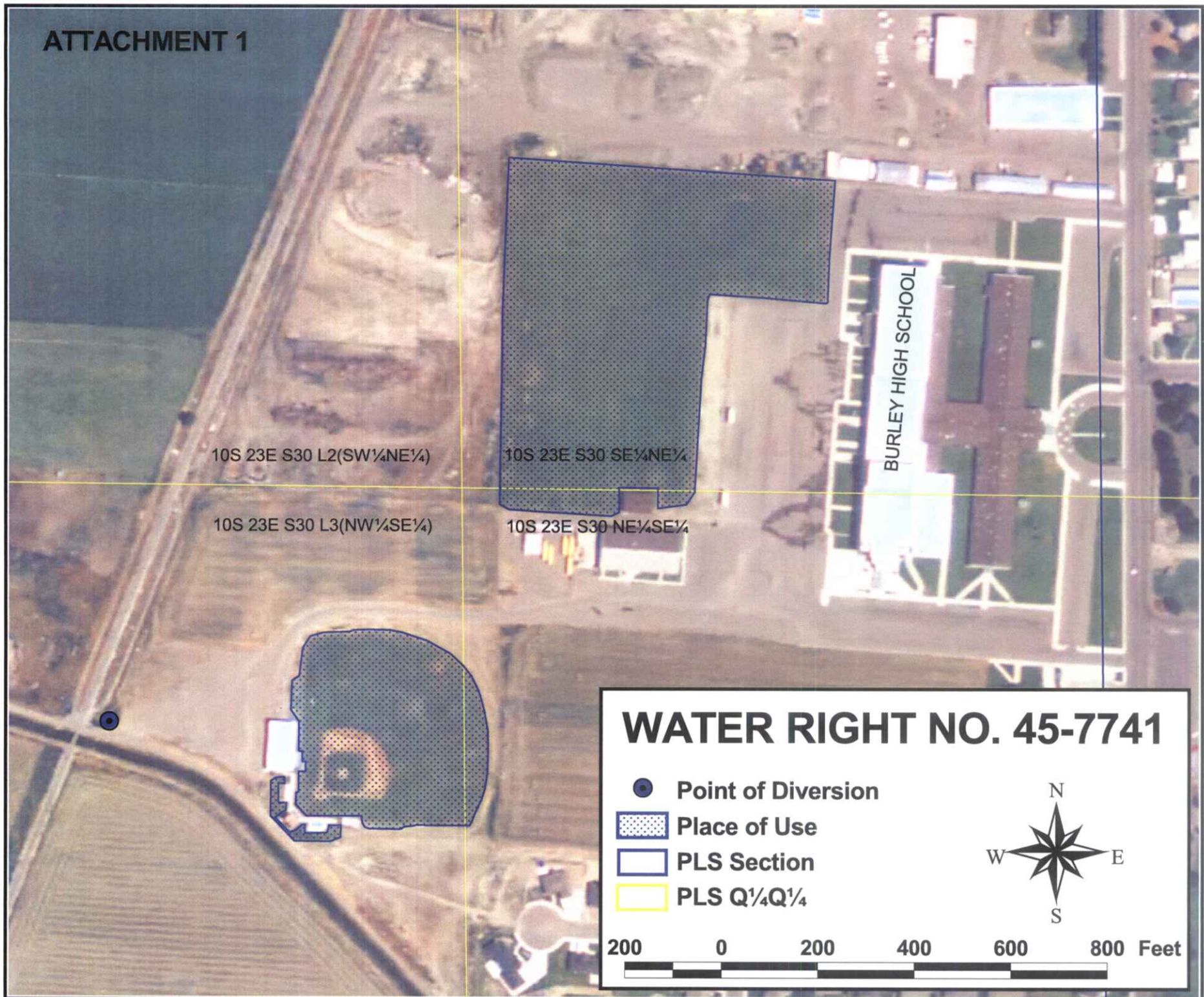
☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

**I. AUTHENTICATION**

Field Examiner's Name Aaron Marshall Date November 5, 2007

Reviewer \_\_\_\_\_ Date \_\_\_\_\_

# ATTACHMENT 1





Point of diversion: Ground water well at right in foreground. Surface water pump system at right in background commingles water with water from well. Totalizing flow meter is positioned upstream of control valve that opens ground water flow into distribution line. Surface water pump system at left is a separate system.



Point of diversion: Ground water well.



Diversion works: Flow meter on line from well, ground water flow control valve, and Y-pipe joining ground water with surface water from canal in background.

# ATTACHMENT 4

## DISCHARGE MEASUREMENT RECORD

OUTER DIAMETER  
4.0201 IN

PIPE MATERIAL  
? CS, SS

WALL THICKNESS  
0.2020 IN

INNER LINING  
? NO LING.

KIND OF FLUID  
? WATER

SENSOR MOUNTING  
? U

TYPE OF SENSOR  
? SMALL

07-24 16:3800 \*R  
+002.70 % A12

0137.2 MMSEC  
101.59 % T0

16:44+ 2.045E 2GPM 00R  
+ 6.391E 0FPS 00R  
+00000 \*G 00R  
-00000 \*G 00R

<sup>1</sup>  
16:45+ 2.016E 2GPM 00R  
+ 6.302E 0FPS 00R  
+00203 \*G 00R  
-00000 \*G 00R

<sup>2</sup>  
16:46+ 2.028E 2GPM 00R  
+ 6.338E 0FPS 00R  
+00405 \*G 00R  
-00000 \*G 00R

<sup>3</sup>  
16:47+ 1.996E 2GPM 00R  
+ 6.236E 0FPS 00R  
+00605 \*G 00R  
-00000 \*G 00R

<sup>4</sup>  
16:48+ 2.012E 2GPM 00R  
+ 6.289E 0FPS 00R  
+00806 \*G 00R  
-00000 \*G 00R

<sup>5</sup>  
16:49+ 1.983E 2GPM 00R  
+ 6.197E 0FPS 00R  
+01005 \*G 00R  
-00000 \*G 00R

<sup>6</sup>  
16:50+ 1.985E 2GPM 00R  
+ 6.204E 0FPS 00R  
+01204 \*G 00R  
-00000 \*G 00R

<sup>7</sup>  
16:51+ 2.045E 2GPM 00R  
+ 6.391E 0FPS 00R  
+01405 \*G 00R  
-00000 \*G 00R

<sup>8</sup>  
16:52+ 2.050E 2GPM 00R  
+ 6.407E 0FPS 00R  
+01606 \*G 00R  
-00000 \*G 00R

<sup>9</sup>  
16:53+ 1.955E 2GPM 00R  
+ 6.108E 0FPS 00R  
+01806 \*G 00R  
-00000 \*G 00R

<sup>10</sup>  
16:54+ 2.000E 2GPM 00R  
+ 6.250E 0FPS 00R  
+02005 \*G 00R  
-00000 \*G 00R

<sup>11</sup>  
16:55+ 1.993E 2GPM 00R  
+ 6.230E 0FPS 00R  
+02205 \*G 00R  
-00000 \*G 00R

200.5  
gpm  
avg

**ATTACHMENT 5**

BURLEY IRRIGATION DISTRICT  
AT THE ROOT; HELPING YOU GROW

246 E. 100 S.

BURLEY, ID 83318

(208) 678-2511 FAX (208) 678-3723

DATE : 11-5-07

TIME : 11:05

TO : Aaron Marshall  
208-287-6700

FROM : BID

Total number of pages sent including cover letter : 2

If there are any problems with this transmittal please call (208) 678-2511  
and ask for : Theresa

Special Instructions :

Cassia School

**Burley Irrigation District**

246 E. 100 S.  
Burley, Idaho 83318  
(208) 678-2511  
2007 Water Billing

CASSIA COUNTY CASSIA COUNTY SCHOOL DIST  
237 E. 19TH ST

BURLEY, ID 83318-2444

601175

3-19-07

**CASSIA COUNTY SCHOOL DIST**

| Serial No.        | Property Id.              | Acres            | A/f Water Used | Past Due          | Other Charges     |
|-------------------|---------------------------|------------------|----------------|-------------------|-------------------|
| 302.6             | -DECLO                    | 4.93             | 0              | \$0.00            | \$0.00            |
| <del>302.5</del>  | <del>-DECLO</del>         | <del>5.23</del>  | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |
| 302.1             | 100 S. 900 E.             | 8.44             | 0              | \$0.00            | \$0.00            |
| <del>270.1</del>  | <del>-New Declo Sc</del>  | <del>20</del>    | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |
| <del>96.117</del> | <del>-Football comp</del> | <del>9.22</del>  | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |
| <del>96.116</del> | <del>-New Burley H</del>  | <del>13.59</del> | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |
| <del>96.111</del> | <del>-New Burley H</del>  | <del>30</del>    | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |
| <del>35.11</del>  | <del>333 W. 27 Th</del>   | <del>10.46</del> | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |
| <del>12.111</del> | <del>1900 Hiland A</del>  | <del>11.54</del> | <del>0</del>   | <del>\$0.00</del> | <del>\$0.00</del> |

2007 Minimum charge for 113.41 total acres @ \$45.00 per acre totaling \$5,103.45  
Administration fee \$5.00

Less 5.00% discount if paid or mailed before: March 1, 2007  
Water must be paid, before any water will be deliver  
A delinquent penalty will be added if paid after: June 1, 2007

\$255.17

Total Due \$5,108.45

Total \$ 4,853.28

CELL PHONES. DITCHRIDER contact #: Toby Walker 260-0616, Kent Tracy 260-0615, Brent Germain 260-0614, Laurie Kowitz 260-0617, Pat Rodgers 260-0618, Steve Darrington 260-0603, Reid Beck 260-0604. BID Annual Meeting is Feb. 13, 2007 at 9:30 A.M.  
BID uses aquatic herbicide in its Irrigation water that may potentially result in illness and damage to plants where crops are submerged.

CP# 054638