

LICENSE REVIEW CHECKLIST

Permit No. 37-8296 Date: 10/19/2011 Reviewer: Craig L. Saxton

Name/Address: ok

Source: ok

Point of Diversion: no Change?
no Add?
no F06 (overlap POD)
no X59 (subdivision description)

Place of Use: no Change
no X60? (subdivision description)
no E55? (PPU acre Limit)

yes Overlaps: Right(s): 37-872 Big Wood Canal Co
01-00006 American Falls Reservoir Dist #2

Diversion Rate:

Permitted Rate: <u>5</u> AF Fee Limit: <u>\$5</u> cfs <u>\$200</u> Measured: <u>3.6</u> cfs Theoretical: <u>4.01</u> cfs Recommended Total Diversion Rate: <u>4.01</u> cfs	Diversion rate from rights with same POD: <u>n/a</u> Total = <u>4.01</u>
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Water Uses: no Change?

Irrigation <u>4.01</u> cfs Domestic <u> </u> cfs Municipal <u> </u> cfs Storage <u> </u> cfs other <u> </u> cfs Total = <u>4.01</u> cfs	af	af	af	af	af	af

SOU: 3/15 - 11/15

Evap Loss: Seep Loss 0

Volume Determination

<u>4.01</u> cfs x 1.9835 x <u>246</u> days = <u>1957</u> af <u>vs.</u> <u>357.2</u> acres x <u>4</u> (FHR) = <u>1429</u> af	
<u> </u> Dom uses @ 0.6 AF per use = <u>0</u>	Total Max Div Vol = <u>1429</u>

Remarks: Supplemental - No max vol on license. Limit vol in conditions.
No water master control conditions but this does fall in WD130 and is regulated.

Additional Conditions	<u> </u> Watermaster Control <u> </u> GW Measurement/Measuring devices <u> </u> Other	GW Dist? <u> </u> Water Msmt. Dist? <u> </u> Crit. GWMA? <u> </u> GWMA? <u> </u> Govt Lots? <u> </u>
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Advance Priority? yes/no
No If yes, explain why below:
 Adjust Memo

Comment Report

37-8296

1. csaxton 7/12/2010 10:36:38 AM POD

Comment: Updated Shape

2. csaxton 10/5/2011 12:29:36 PM POU

Comment: Updated Shape

3. csaxton 10/5/2011 12:30:01 PM POU

Comment: Updated PLS

4. csaxton 10/19/2011 Supplemental vs. Primary

Comment: Part of this right was developed as supplemental while part of it developed as primary.

5. csaxton 10/19/2011 Diversion Rate

Comment: After reviewing Cindy Yenters July 27, 2011 memo discussing a supplemental field examination for this right, I am recommending licensing of 4.01 cfs. Cindy did measure 3.6 cfs on July 28, 2011 but an argument was made that the well produced more historically. The authorized development period for this right ended in May 1, 1992. The field exam conducted by Jim Stanton in 1993 listed the pump number as LP91295 which is the same pump number on the documentation provided to Cindy Yenter in 2011 to calculate a theoretical diversion rate. Therefore the measurement taken by Cindy in 2010 is on a system that has 17 years of wear and tear from the time proof was submitted. Cindy explains that the pump curve indicates that the design capacity ranges from 3.20 to 4.67 cfs depending on factors related to bowl size. Both of the extremes do not match the system in place. Cindy determined that HP theoretical calculation capacity returned a diversion rate of 4.01 cfs which is roughly half way between the pump curve range. Because of the age of the pump at the time of measurement and the range of design diversion rate calculated from the pump curve, it seems reasonable to recommend 4.01 cfs.

6. csaxton 10/19/2011 POU acreage - rounding

Comment: Due to standard procedure of rounding acres in a QQ up to the nearest full acre when it is over 10 acres, the primary, supplemental, and total acreages licensed and referenced in the conditions is slightly different than what Cindy Yenter described in her July 27, 2011, because her calculations included 10ths of acres in each QQ despite weather it was over or under 10 acres. I am recommending the same POU that Cindy found, the numbers just come out a little different due to rounding.

7. shemenway 8/23/2011 Field Report Narrative

Comment: On 7/28/2010, Cindy Yenter conducted a field exam on this system. She determined there was an error in the original field exam, having to do with the number of acres developed under the right, and the CFS. It was determined that not all acres had been included, and no discharge measurement had been taken. A total of 357.5

had been included, and no discharge measurement had been taken. A total of 357.5 irrigated acres was found under this system as of 1992. Surface shares were confirmed via BWCC/AFRD2 office. Most of the ground water use is supplemental, but some may be considered primary (see Cindys memo for complete description). It was determined that there is a total of 76.8 primary ground water acres under the system. An open flow discharge from the well was taken on 7/28/2010 at 1617 gpm or 3.6 cfs. Mr. Astle felt this was less than the well originally produced, and provided a pump curve and supporting documents (150 Hp, TDH 230 ft, to calculate 4.01 cfs or 1800 gpm). 2005 withdrawal data from NSGWD hydrographer resulted in completely invalid PCC estimates. An hour meter was installed on the well in 2010 at Cindys direction, and will be used to determine annual withdrawals. This is a valid measurement method for an open discharge well which is acceptable to WD130 (serves to satisfy the measurement condition on the permit).

8. shemenway 8/23/2011 5:05:33 PM POU
Comment: Updated Shape

9. shemenway 8/23/2011 5:05:51 PM POU
Comment: Updated PLS



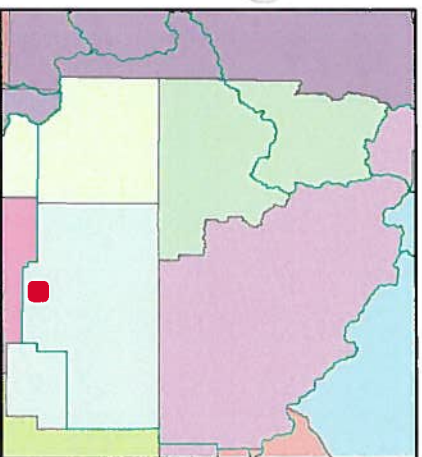
Idaho Department of Water Resources

**Water Right
37-8296
(IRRIGATION)**

Reference Map

Legend

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



**Lincoln County
IDWR Basin 37**

Prepared by Saxton, Craig
On October 19, 2011
2009 Aerial Photography

