

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 45-7675

Exam Date: 7/21/2014

1. Current Owner: CHURCH OF JESUS CHRIST OF THE LATTER DAY SAINTS
ALBION WARD
50 E NORTH TEMPLE ST
SALT LAKE CITY UT 84150
(801)240-2929
2. Accompanied by: Jason Phillips, Bishop and Reed Pickup, maintenance person, by telephone
Phone No: Jason Phillips – 208-673-5011; Reed Pickup – 208-260-1421
Address: 875 South, 1115 East, Albion, ID 83318
Relationship to Permit Holder: Bishop and Maintenance person for church

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 45-13887 (Irrigation, 0.12 cfs, Marsh Creek); 45-14075, (Irrigation, 0.54 cfs, Ground Water)
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

SW1/4SW1/4SE1/4

Sec. 6, Twp 12S, Rge 25E, B.M.

CASSIA County

Method of Determination: Aerial imagery and ArcMap PLSS overlay

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
12S	25E	6	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
																	X		

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
12S	25E	6	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
																	1.0		1.0

Total Acres: 1

Method of Determination: Aerial imagery and ArcMap PLSS overlay

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</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>					
A0004422					

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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No measurement required as per Beneficial Use Examination Rules.

2. Measurements: NA

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method: No measurement required.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.0 \text{ AF/acre} \times 1.0 \text{ acres} = 4.0 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 245 \times 1.9835 = 14.58 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 4.0 \text{ AF}$$

2. Volume Calculations for Other Uses: Volume calculation for domestic use –

$$19 \text{ fixtures} \times 1.0 \text{ gpm/fixture} = 19 \text{ gpm} (0.04 \text{ cfs})$$

$$19 \text{ gpm} \times 60 \text{ min/hr} = 1140 \text{ gal/hr} \times 9 \text{ hrs/week} = 10260 \text{ gal/week} \times 52 \text{ weeks} = 533520 \text{ gallons/year}$$

$$533520 \text{ gallons}/325850 = 1.6 \text{ AF/year}$$

$$\text{Combined volume, Domestic and Irrigation} = 5.6 \text{ AF/year}$$

G. NARRATIVE/REMARKS/COMMENTS

The field exam for permit 45-7675 was conducted on July 21, 2014. The original field exam was begun by Jim Stanton, of the Southern Region Office of IDWR on August 30, 1994, but was never completed. I called Jason Phillips, the Bishop of the Albion Ward, for information pertaining to the church and church grounds. The well was drilled in 1985, and the application for permit was filed on May 5, 1989.

Water is pumped from the well into the well house and is then diverted into an underground sprinkler system for irrigation, or into the church for in-house domestic use. Repeated attempts to obtain the pump horsepower were made, but were unsuccessful.

In speaking with Mr. Phillips, it was revealed that there were 19 water using fixtures inside the church. This number was used in the calculation of the annual volume for the domestic portion (Exhibits 11 and 14, Beneficial Use Exam Handbook). The number of hours of use for the church, per week, was derived from previous field exams on LDS churches and conversations with church members. The irrigation portion was assigned a volume based on the field headgate requirement for the area, while the irrigation flow rate was retained at 0.03 cfs because Beneficial Use Exam rules allow the higher rate on licenses with less than 5 acres of irrigation. Following Beneficial Use Exam rules, no measurement was made because the flow rate of the permit was less than 0.24 cfs.

While conducting the field exam, it was discovered that the church has planted lawn on a previously vacant lot behind (west of) the church. I included as much of this area as possible within the license POU, and it also appears to be covered by Irrigation right 45-13887 out of Marsh Creek, and Irrigation right 45-14075, Ground Water.

Recommend licensing Domestic portion at 0.04 cfs, with a volume of 1.6 AF/year and the Irrigation portion at 0.03 cfs with the volume at 4.0 AF/year, for a combined 0.04 cfs and 5.6 AF volume.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

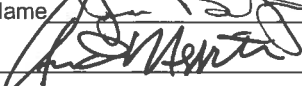
<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.040 CFS	1.60 AF
IRRIGATION	03/15 to 11/15	0.030 CFS	4.00 AF
<u>Totals:</u>		0.040 CFS	5.60 AF

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  Date 07-21-2014
 Reviewer  Date 9/11/14

Idaho Department of Water Resources

System Diagram



Legend

- Township/Range
- Sections
- QQ
- Water lines

45-7675
LDS Church, Albion Ward

Note: Water line locations are inferred
from locations of sprinklers, pump house, well, etc.
They may not be exact.



0 0.005 0.01 0.02 Miles



Pump house

Sprinkler in lawn





Views of lawn and landscaping

