

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-31258

Exam Date: 10/17/2012

1. Current Owner: SUNDANCE INVESTMENT LTD PARTNERSHIP
C/O GERRY HELLING
9100 W BLACKEAGLE DR
BOISE ID 83709
(208)322-7300
2. Accompanied by: Jake (maintenance employee) c/o Gerry Helling
Phone No: 208-332-7300
Address: 9100 W BLACKEAGLE DR, BOISE, ID 83709
Relationship to Permit Holder: Building maintenance employee

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use:
2. Other water rights with the same point of diversion: 63-31194B

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

GROUND WATER SW1/4NW1/4 Sec. 21, Twp 03N, Rge 01E, B.M. ADA County

Method of Determination: GPS

2.

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
03N 01E 21	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
						6.1	8.9										15.0

Total Acres: 15

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>
D0018856	Franklin Electric				

*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>
	Tyme Flight Polysonic					

2. Measurements:

Average discharge rate over 8 measurements: 249 gpm (0.55 cfs)
The diversion rate to be licensed under this right will be limited to 0.30 cfs

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

Measurements of flow from the well was taken using a Tyme Flight Polysonic near the points of diversion.

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 15 \text{ acres} \times 4.5 \text{ AF/acre} = 67.5 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.55 \text{ cfs} \times 259 \text{ days} \times 1.9835 = 282.6 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 67.5 \text{ AF}$$

2. Volume Calculations for Other Uses:**G. NARRATIVE/REMARKS/COMMENTS**

This permit was field examined on 10/17/12 by myself, Craig Tesch, and Jennifer Cuhacian of IDWR. The Sundance Company point of contact, Gerry Helling, set up a meeting with their maintenance guy Jake, who accompanied us on the exam. This permit authorizes the diversion of ground water to be used for supplemental irrigation purposes. Primary irrigation water is from surface water supplied by the Nampa and Meridian Irrigation District. Ground water is supplied by a 270-foot, 8-inch well with a screened interval of 229-feet to 270-feet below ground surface; static water level is 25-feet below ground surface.

Water is pumped from the well to a shed 50-feet to the northeast that contains a pressure tank and plumbing. Water is then sent to sprinklers and drip lines to irrigate 15 acres of landscape in the Silverstone business park. The well is located on the east side of the Sunstone Building in the middle of the eastern boundary of the POU.

We could not find any information on the pump in the 8-inch well other than it has a Franklin Electric motor. With a screen size of 8-inches, the pump is probably 4-inches or 6-inches in diameter. Regardless, Jake turned on the system and we took a measurement of flow in the pipe exiting the well using the Tyme Flight meter. Average discharge rate at steady flow was approximately 250 gpm (0.56 cfs). There were breaks in the flow due to pressure tank filling and movement of sprinklers by Jake. Pump discharge is greater than the requested diversion rate of 0.30 cfs. The requested annual diversion volume (18.0 AFA) is based on the retirement of 4 acres of Boise River water rights (4 acres x 4.5 AF/acre = 18 AF). The applicants have purchased the 4 acres of water rights needed for mitigation (water right 63-31499), and it has been verified that land is no longer irrigated under 63-31499.

On average, the owner irrigates when needed during the irrigation season from March 1st through November 15th. Water that is released onto the property is consumptively used by vegetation or seeps into the subsurface. In summary, the beneficial use of this water right includes irrigation of 15 acres. The diversion rate to be licensed under this right will be limited to 0.30 cfs. Water right 63-31194B irrigates from the same POD as this right, and the combined useage of both rights from this well is limited to a total discharge of 0.62 cfs.

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	03/01 to 11/15	0.300 CFS	
	<u>Totals:</u>	0.300 CFS	

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 Craig Teach Date 11/30/2013

Reviewer _____ Date _____

10-17 10:3100 *R
+007.90 1.412

0130.5
10

PRE UNIT FHS ER
NO

10:40 1.1400E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R

10:41 1.1600E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R

* 10:42 1.1800E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R

10:43 1.2000E 0GPM 00R
+00001 *10 G 00R
-00000 *10 G 00R

10-17 10:4300 *R
-000.400E 0GPM

10:44 1.2200E 0GPM 00R
+00001 *10 G 00R
-00001 *10 G 00R

10-17 10:4400 *R
-001.301E 0GPM

10:45 1.2400E 0GPM 00R
+00001 *10 G 00R
-00007 *10 G 00R

10:46 1.2600E 0GPM 00R
+00002 *10 G 00R
-00002 *10 G 00R

10-17 10:4600 *R
-001.402E 0GPM

10:47 1.2800E 0GPM 00R
+00002 *10 G 00R
-00002 *10 G 00R

10-17 10:4700 *R
-001.503E 0GPM

10-17 10:4700 *R
-045.101E 0GPM

10-17 10:4700 *R
-000.100E 0GPM

10:48 1.3000E 0GPM 00R
+00003 *10 G 00R
-00005 *10 G 00R

10:49 1.3200E 0GPM 00R
+00003 *10 G 00R
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10:50 1.3400E 0GPM 00R
+00005 *10 G 00R

GPM

208

287

240

272

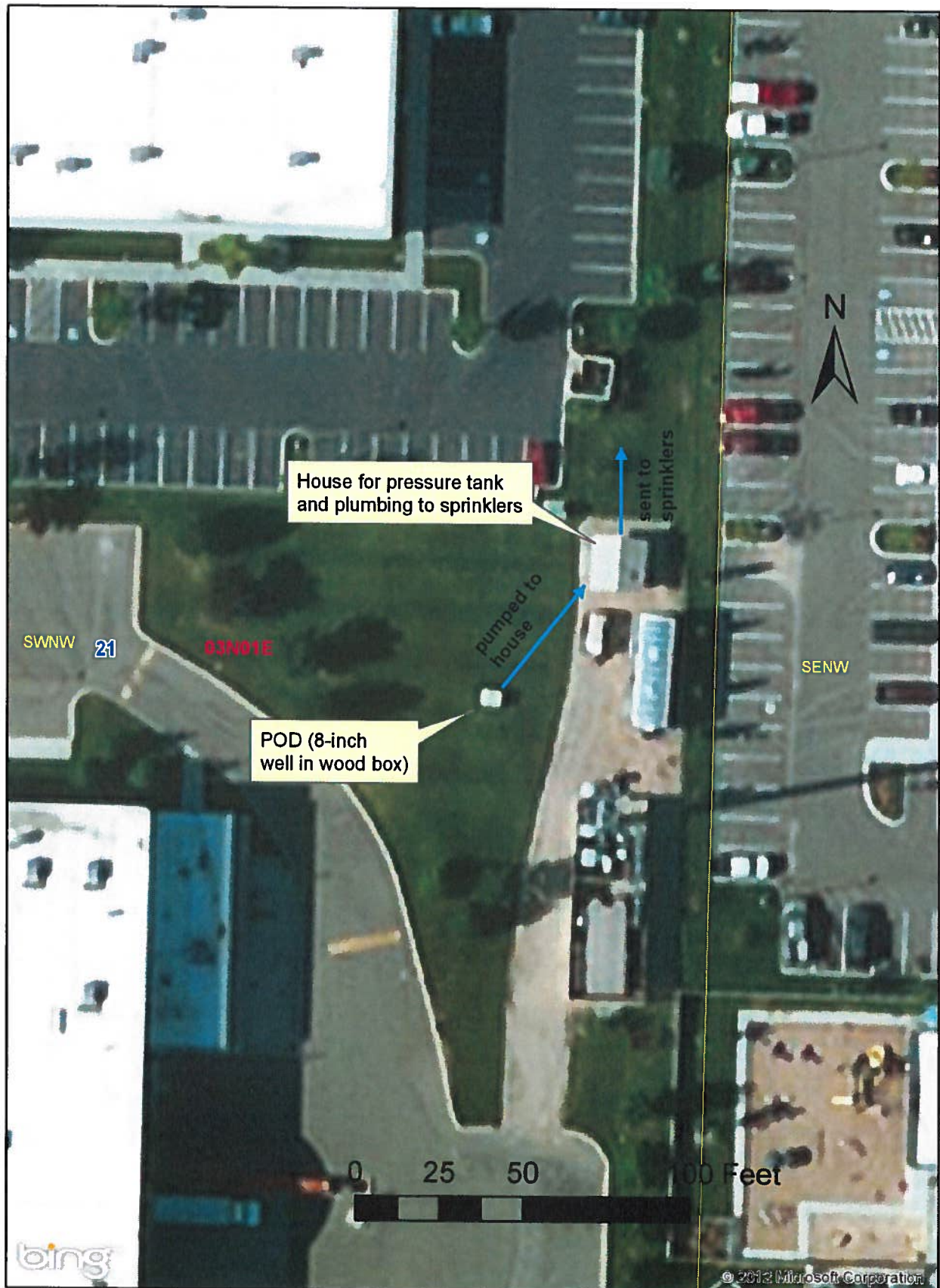
194

284

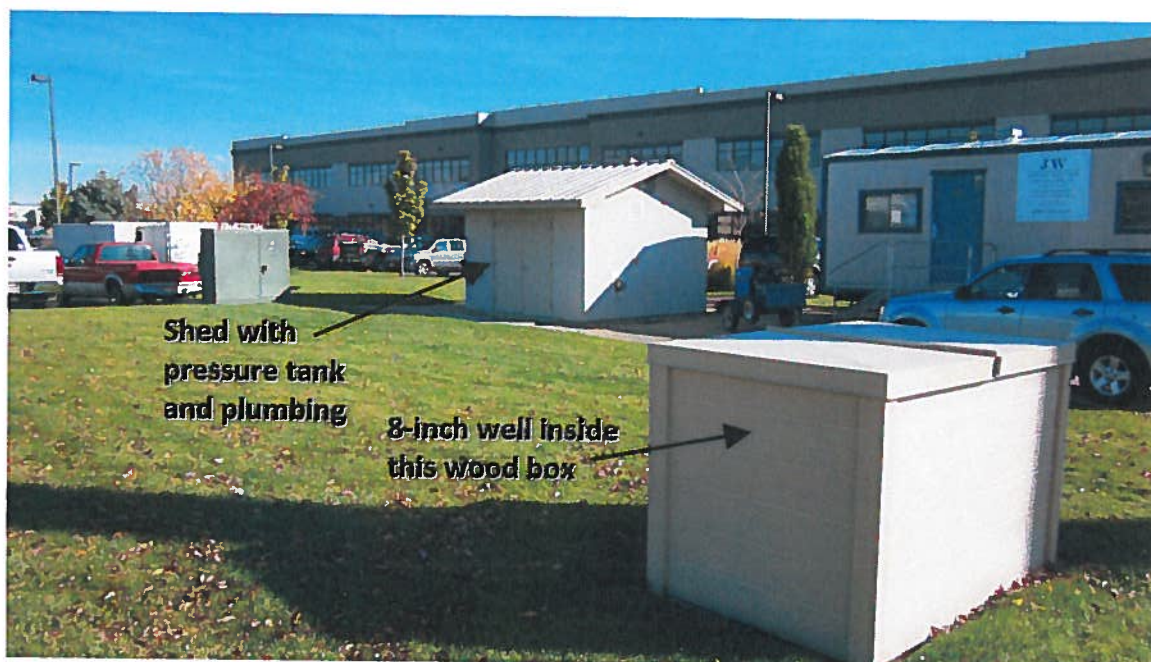
265

245

Avg = 249 gpm



Photos taken by Craig Tesch on 10/17/2012



Licensed POD – Looking northeast at the 8-inch well inside the wood box and shed with the pressure tank and plumbing to the sprinklers and drip lines.



Licensed POD – Looking southwest at the 8-inch well inside the wood box.

Photos taken by Craig Tesch on 10/17/2012



Close-up of the well.



Close-up of the well ID tag, D0018856.

