

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

**A. GENERAL INFORMATION**

Permit No: 22-13529

Exam Date: 2/5/2015

1. Current Owner: COLUMBINE TELEPHONE  
DBA SILVERSTAR COMMUNICATIONS  
PO BOX 900  
DRIGGS ID 83422  
(208)354-6700
2. Accompanied by: Joe Matigue  
Phone No:  
Address:  
Relationship to Permit Holder: SilverStar Communications Employee

3. SOURCE TRIBUTARY  
GROUND WATER

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: None
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 NE1/4SE1/4NW1/4 Sec. 23, Twp 05N, Rge 45E, B.M.  
TETON County

Method of Determination: GPS

2.

**PLACE OF USE:** HEATING

| Twp | Rge | Sec | NE        |           |           |           | NW        |           |           |           | SW        |           |           |           | SE        |           |           |           |               |
|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|
|     |     |     | <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> | <u>Totals</u> |
| 05N | 45E | 23  |           |           |           |           |           |           |           | X         |           |           |           |           |           |           |           |           |               |

**PLACE OF USE:** COOLING

| Twp | Rge | Sec | NE        |           |           |           | NW        |           |           |           | SW        |           |           |           | SE        |           |           |           |               |
|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|
|     |     |     | <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> | <u>Totals</u> |
| 05N | 45E | 23  |           |           |           |           |           |           |           | X         |           |           |           |           |           |           |           |           |               |

Method of Determination: Aerial photography and site visit.

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.

**Well or Diversion****ID No.\*****Motor Make****Hp****Motor Serial No.****Pump Make****Pump Serial No. or Discharge Size**

D0044083 (Injection)

D0037924

**D. FLOW MEASUREMENTS**

2. Measurements: No measurement required

**E. FLOW CALCULATIONS**☐ Additional Computation Sheets Attached

Measured Method:

Permitted rate of diversion is &lt;0.24 cfs. No measurement required.

Q=0.18 cfs.

**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: N/A

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \text{N/A}$$

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

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

2. Volume Calculations for Other Uses:

Assume heat exchangers operate for approximately 8 hrs a day, 5 days per week.

$$0.18 \text{ cfs} \times 1.9835 \times 86.7 \text{ days} = 31.0 \text{ acre-feet.}$$

$$\text{Heating} = 31.0 \text{ acre-feet}$$

$$\text{Cooling} = 31.0 \text{ acre-feet}$$

$$\text{Total volume} = 31.0 \text{ acre-feet}$$

**G. NARRATIVE/REMARKS/COMMENTS**

Heating and cooling is for the Silver Star Communications office building. Water delivery system consists of one production well and one injection well. Water is pumped through several heat exchange units and then is diverted into the injection well.

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> |
|-----------------------|----------------------|-----------------------|----------------------|
| HEATING               | 01/01 to 12/31       | 0.180 CFS             | 31.00 AF             |
| COOLING               | 01/01 to 12/31       | 0.180 CFS             | 31.00 AF             |
|                       | <u>Totals:</u>       | 0.180 CFS             | 31.00 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 Blake Jordan Date 4/27/2015

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

22-13529



## Legend

- Township/Range
- Sections
- QQ

0 387.5 775 1,550 Feet  
1 inch = 666 feet



Point of Diversion



Injection Well.





