

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 25-13979
Exam Date: 6/14/2016

1. Current Owner:
SUNNYSIDE PARK UTILITIES INC C/O DOYLE BECK PO BOX 1768 IDAHO FALLS ID 83403-1768
2. Accompanied by: Craig Beck
Phone No: (208)529-9891
Address: 3655 Professional Way, Idaho Falls
Relationship to Permit Holder: Representative

3. SOURCE: GROUND WATER**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: 25-14344 and 25-14351 cover the gravel pit/concrete mixing plant/aggregate cooling/pavement plant adjacent to the industrial park and is used in addition to the (up to) 2,500 gallons per day delivered by this right. The two systems are not interconnected.

Lot 5 of Block 1 has a municipal service hookup to the City of Idaho Falls, but the two systems are not interconnected. That property owner can choose to use either water provider.

25-14289 is a commercial right for a mobile home park decreed in the NENW of Sec 36, however, aerial photography doesn't show a mobile home park in the NENW, but rather in the NWNE of Section 36.

The place of use is also in the boundary of Idaho Irrigation District, who doesn't deliver commercial or industrial water to the parcels covered by this right.

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 SE¼NW¼ Sec. 36, Twp 02N, Rge 37E, B.M. BONNEVILLE County

Method of Determination: GPS and ArcMap

2.

PLACE OF USE: COMMERCIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	37E	25												X L 4					
02N	37E	36					X	X L 1	X	X									

PLACE OF USE: INDUSTRIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	37E	25												X L 4					
02N	37E	36					X	X L 1	X	X									

Method of Determination: Site visit and ArcMap

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

 X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

 X Aerial Photo Attached (required for irrigation of 10+ acres).

 X Photo of Diversion and System Attached

4. Well Information

10 HP submersed pump

D. FLOW MEASUREMENTS

A working flow meter is part of the diversion works. At the time of the examination, the instantaneous flow was between 20 and 25 gpm. However, this reading was not representative of the system's full capacity. The system is comprised of dispersed commercial and industrial buildings with various owners and temporally different water demands. Therefore, a maximum instantaneous rate could not be reasonably ascertained through a single reading of the flow meter.

A theoretical measurement is more appropriate for determining the system's actual maximum capacity. See attached for theoretical measurement of 0.28 cfs based on a static water level of 127 feet provided by the well driller, and the pump's horse power of 10.

F. VOLUME CALCULATIONS

Volume Calculations for Commercial and Industrial purposes:

28 lots * 2500 gallons/day/lot * 365 days/year = 25,550,000 gallons/year / 325,850 gallons/AF= 78.41 AF

However, a condition of approval on the permit limits it to a total annual diversion of **29.0 af**.

G. NARRATIVE/REMARKS/COMMENTS

This right is for Sunnyside Industrial and Professional Park. The Park contains 27 lots, as lots 3 – 6 of block 3 were combined into one taxlot during the project development phase. This right provides for the irrigation of small outdoor areas within the Park.

The gravel washing and cement mixing operation adjacent to the Sunnyside Industrial and Professional Park is covered by rights 25-14351 and 25-14344. This right delivers up to 2,500 gallons per day to that lot, but the two systems are not interconnected.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
INDUSTRIAL	01/01 to 12/31	0.28 CFS	29.0 AF
COMMERCIAL	01/01 to 12/31	0.28 CFS	29.0 AF
<u>Totals:</u>		0.280 CFS	29.00 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 ☐ None

I. AUTHENTICATION

Field Examiner's Name Cooper Fritz Date 7/5/2016

Reviewer _____ Date _____

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 25-13979

Examiner: Cooper

Date of Field Exam: 6/14/2016

Option 1

P/D No.:

PUMP HORSEPOWER 10
BOOSTER HORSEPOWER 0

PUMPING LEVEL 127

DISCHARGE PRESSURE 40

FRICTION 0

RATE OF FLOW (cfs) 0.28
(gpm) 126.0

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.

Examiners Notes:

Lift was taken from well log. Hp was found during site visit. A standard psi for domestic use of 40 to 60 psi was used to estimate the pressure against the pump.

