

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-32175
Exam Date: 08/25/2020

1. Current Owner:
IDAHO CONCRETE CO PO BOX 1310 NAMPA ID 83653-1310
2. Accompanied by: Ryan Russell & Willie Travis
Phone No: (208) 466-5001 (Ryan)
Relationship to permit Holder: Ryan is Idaho Concrete Company's Area Manager and Willie works on site

3. **SOURCE:**
GROUND WATER

Method of Determination: Field visit

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Comments: There are overlaps with irrigation rights for Siebenberg Cooperative Ditch Co. and many municipal rights for the City of Caldwell.

2. Other water rights with the same point-of-diversion: NO Overlap

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NE¼ NW¼, Sec. 17, Twp 04N, Rge 03W, B.M. CANYON County
GROUND WATER NE¼ NW¼, Sec. 17, Twp 04N, Rge 03W, B.M. CANYON County
GROUND WATER SW¼ SW¼, Sec. 17, Twp 04N, Rge 03W, B.M. CANYON County

Method of Determination: Field visit, GPS

PLACE OF USE: INDUSTRIAL

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	03W	8											X	X					
04N	03W	17					X	X L4											

Method of Determination: Field visit, GPS

3.
 - x Delivery System Diagram Attached (required). Indicate all major components and distances between components.
 - x 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 or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Landmark	50	16100009	Fisher	8" (FP7-FP12-50-15-3975)
	n/a	50		Fisher	8"
	n/a	50		Fisher	8"
	n/a	50		Fisher	12"
	n/a	40		Berkeley	4"

D. FLOW MEASUREMENTS

- Measurements were not obtained on the discharge pipes as the only one running is an open discharge pipe.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

- Volume Calculations for irrigation: n/a
- Volume Calculations for Other Uses (Industrial):

Location	Item	Amount
TRUCK FILL STATION	Loads/day	15
	Gallons per load	3500
	Days/week	5
	Weeks/year	52
	Gallons/year (GPY)	13650000
	cfs	0.06
SAND SCREW	Gallons per minute	950
	Minutes/hour	60
	Hours/day	4.5
	Days/week	5
	Weeks/year	35
	Gallons/year (GPY)	44887500
	cfs	0.19
WASH PLANT	Gallons per minute	2600
	Minutes/hour	60
	Hours/day	8.5
	Days/week	5
	Weeks/year	35
	Gallons/year (GPY)	232050000
	cfs	0.98
TOTALS	Gallons/year (GPY)	290587500
	Acre-feet/year (afa)	891.8
	cfs	1.23

Volume estimate sand screw: $0.28 \text{ cfs (allowable rate)} \times 3600 \text{ sec/hr} \times 8.5 \text{ hrs/day} \times 5 \text{ days/week} \times 35 \text{ weeks/yr} = 34.4 \text{ AF}$

Volume estimate truck wash (during sand screw non-working weeks): $17 \text{ weeks} \times 75 \text{ loads/week} \times 3500 \text{ gallons/load} = 13.7 \text{ AF}$

Cumulative volume: $34.4 \text{ AF} + 13.7 \text{ AF} = 48.1 \text{ AF}$

G. NARRATIVE/REMARKS/COMMENTS

Permit 63-32175 was applied for on August 23, 2005, by Consolidated Concrete Co, Inc. The permit sought 0.28 cfs of groundwater for industrial uses, which included concrete batching, dust suppression, and truck washout. A hold was placed on processing new groundwater appropriations in the Boise River Basin from May 15, 1992, and in early 2008 IDWR again resumed processing of groundwater appropriations. On September 19, 2008, IDWR mailed the applicant a letter requesting their intent for processing the application for permit, and no response was received within 30 days, and a preliminary order was issued on November 3, 2008, to void the permit. On November 17, 2008, the manager of Idaho Concrete Company contacted IDWR. This company had purchased Consolidated Concrete Co. Inc in October 2008. The preliminary order voiding the permit was withdrawn and the permit was approved on January 15, 2009. The permittee had 5 years to file beneficial use, and due to poor economic conditions, they asked for an additional 5-year extension which was approved. Proof of beneficial use was filed on December 31, 2018, by the Idaho Concrete Company.

On August 25, 2020, myself and Dan Nelson performed a field examination of the permit in question. Due to the shallow water table in the area, the permittee diverts groundwater that seeps into gravel pits to both dewater the pits for gravel operations and for industrial uses. The water that is diverted is pumped into a ditch, in which the majority flows downstream off the property except for a portion which is utilized for industrial uses.

The permittee has 5 pumps that they can use in different configurations to divert water for their uses. There are three 8" 50 HP pumps, one 12" 50 HP pump, and one 4" 40 HP pump. At the time of the examination, three pumps were deployed and were inaccessible. Serial numbers were only obtained from one pump as displayed in the previous table in this report. Water is diverted from a gravel pit on the east side of the property and pumped into a ditch at the outfall location with open discharge. As such, a measurement could not be obtained due to the open discharge. Water then flows in a northwestern fashion in a ditch throughout the property to dewater the pit.

The permittee operated a wash plant connected to a crusher from April 1, 2005, to April 26, 2019. The permittee also operated a sand screw to wash out #200 size materials; the sand screw was operating from approximately June 1, 2014, to October 1, 2019. The wash plant and sand screw were currently not in production at the time of examination, but the equipment to operate it was observed during the exam, and as such, should be included in licensing as they were used during the permit development period. The wash plant utilized water diverted from the ditch that is supplied with water from the original outfall location. An estimate described in this report is that the wash plant utilized ~2600 GPM when running, and with considering non-working hours, had a capacity of approximately 0.98 cfs over the course of a year. The sand screw used ~950 GPM when running, and with considering non-working hours, is estimated to have used approximately 0.19 cfs over the course of a year. The permittee also diverts water to fill trucks for dust abatement. The truck fill is presently in use, but the pump was not working during the day of examination. It is estimated that the fill station uses a total of 0.06 cfs over the course of a year.

Between the truck fill station, sand screw, and wash plant, it is estimated that the capacity of the system is up to 1.23 cfs (891.8 afa). Because the permit allowed for a diversion rate of 0.28 cfs, and estimations are that the facility is not running 24 hours / 365 days a year, I recommend licensing the permit at 0.28 cfs. For annual volume, I assumed the 0.28 cfs rate for 8.5 hours/day for 35 working weeks annually (estimates for the wash plant) and accounted for the truck fill station's volume during the non-working weeks of the wash plant (17 weeks per year). This amounted to 34.4 and 13.7 acre-feet, respectively. Therefore, I am recommending an annual volume of 48.1 acre-feet annually for this permit.

The facility should secure additional water rights for industrial usage past the 0.28 cfs that I am recommending for licensing if the facility gets to full production again.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
INDUSTRIAL	01/01 to 12/31	0.28 CFS	48.1 AF

Totals: 0.28 CFS 48.1 AF

2. Recommended Amendments

____ Change P.D. as reflected above x Add P.D. as reflected above ____ None

____ Change P.U. as reflected above x Add P.U. as reflected above ____ None

I. AUTHENTICATION

Amy Steinke - Hydrogeologist, Staff

Field Examiner's Name Amy Steinke Date 10-18-2021

Reviewer _____ Date _____

Pictures/Other

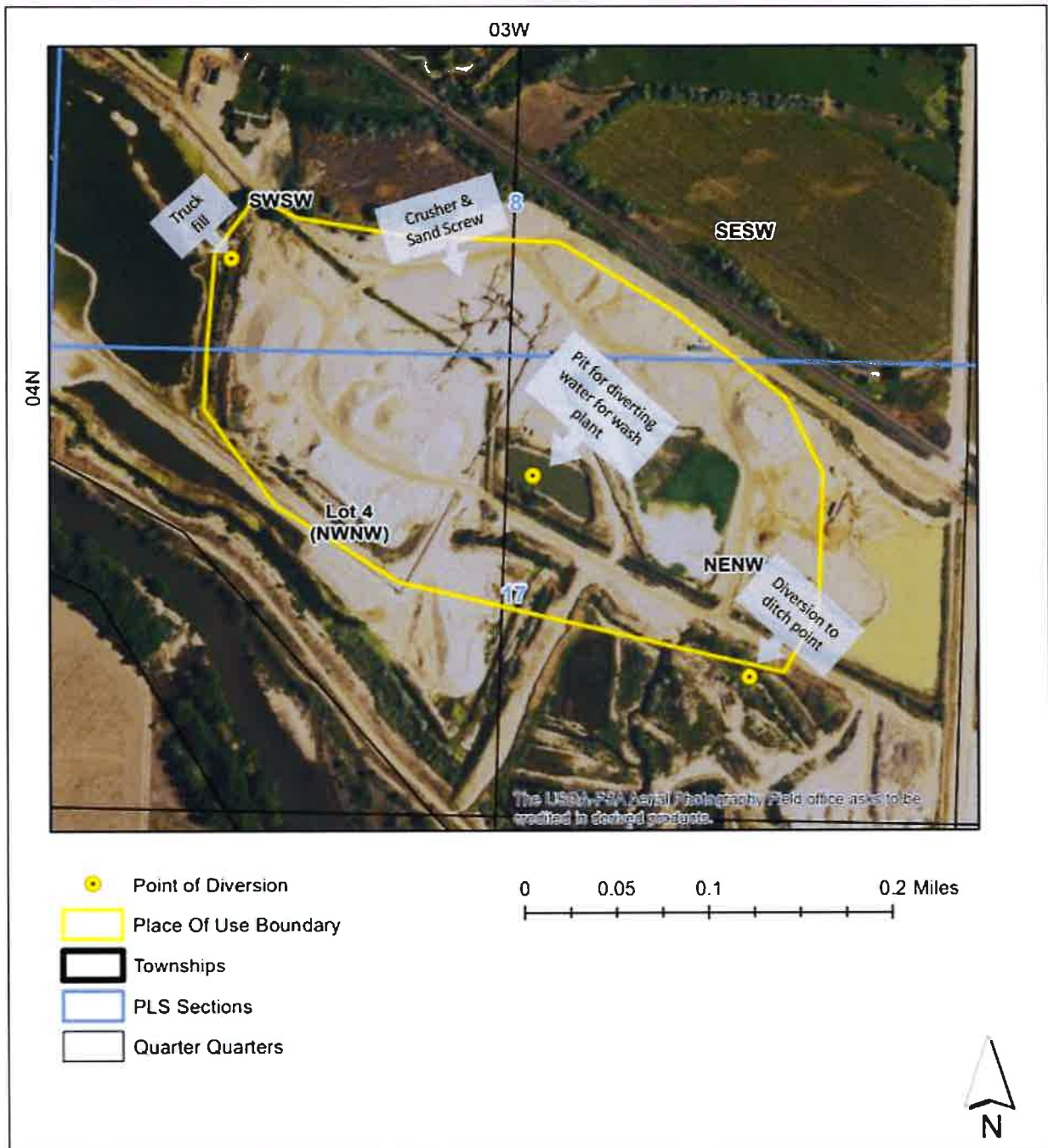


Figure 1: Overview of facility with diversion components highlighted

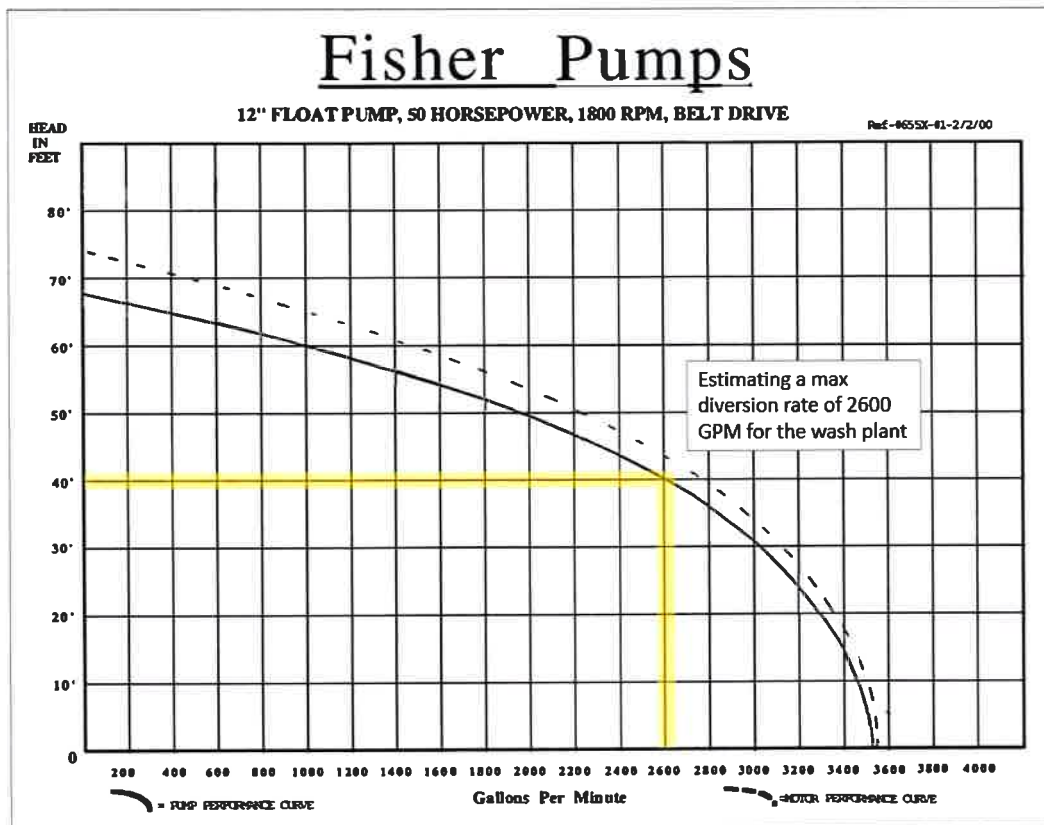


Figure 2: Pump curve applicable to the majority of pumps used on site. The standard discharge on the 12" float pump is 8".



Figure 3: Pump dewatering pit near the discharge pipe (POD)



Figure 4: Photo of the discharge pipe



Figure 5: Part of the crusher/wash plant that currently is not being used.



Figure 6: Truck fill station



Figure 7: One of the floating Fisher pumps that can be used on the property.



Figure 8: Pump used for the truck fill station. During the field exam, the pump was deployed but not functioning.