

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 25-13982
Exam Date: April 6, 2021

1. Current Owner: Burns Concrete, Inc.
2. Accompanied by: Rick Karlson
Phone No: (208) 524-4000
Address: 2385 Gallatin Ave.
Email: rick@burnsconcrete.com
Relationship to permit Holder: Facilities Manager

3. **SOURCE:**
GROUND WATER

Method of Determination: Site visit

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
01N 37E Sec. 10 NESE

Method of Determination: Site visit and GPS

PLACE OF USE: Commercial

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	37E	10													C			C	
01N	37E	11										C	C						

Method of Determination: Site visit and GPS

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
 x 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
 x 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
A0012086	Franklin Submersible	150		Crown	8 inch

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Portable Flow Meter	Ultrasonic	Fuji	Portaflow	A0L5539T		

2. Measurements:

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

Portable flow meter with a recorded measurement of 1585.92 GPM or 3.53 CFS.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses:

The Groundwater pump is operated for 10hrs per day, 5 days per week during times when surface water is unavailable. When surface water is available, the pump is operated 1 day out of the week for 10 hours. Surface water is available at the end of April and is then turned off at the end of October. Ground water is diverted approximately 40 days at the start of the season and approximately 25 days at the end of the season. Overall, there are an average of 100 days where the groundwater is diverted and used at the wash plant.

$$1 \text{ CFS} = 26,930 \text{ gallons per hour} \times 3.53 = 95,063 \text{ gallons per hour}$$

$$10 \text{ hours per day} = 950,630 \text{ GPD}$$

$$950,630 \text{ GPD} = 2.92 \text{ AF}$$

$$2.93 \text{ AF} \times 100 \text{ days} = 292.0 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

A field investigation was performed on April 6, 2021 by Jared Adamson and Mackenzie Fahlgren. Rick Karlson of Burns Concrete, Inc. was present during the exam. A flow measurement of 1,585.9 GPM or 3.53 CFS was recorded. Groundwater is diverted into a holding pond and then two pumps convey groundwater from the pond to the wash plant. The groundwater is used to wash gravel products. The effluent from the washing processes is conveyed to a settling pond where water either flows back into the holding pond or leaches into the ground.

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>
COMMERCIAL	03/01 to 12/31	3.53 CFS	292.0 AF

Totals: 3.53 CFS 292.0 AF

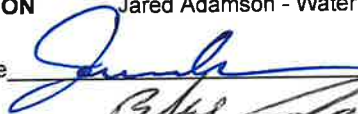
2. Recommended Amendments

☐ 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 Jared Adamson - Water Resource Agent

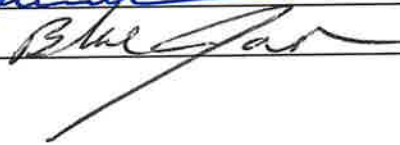
Field Examiner's Name



Date

4-1-2022

Reviewer



Date

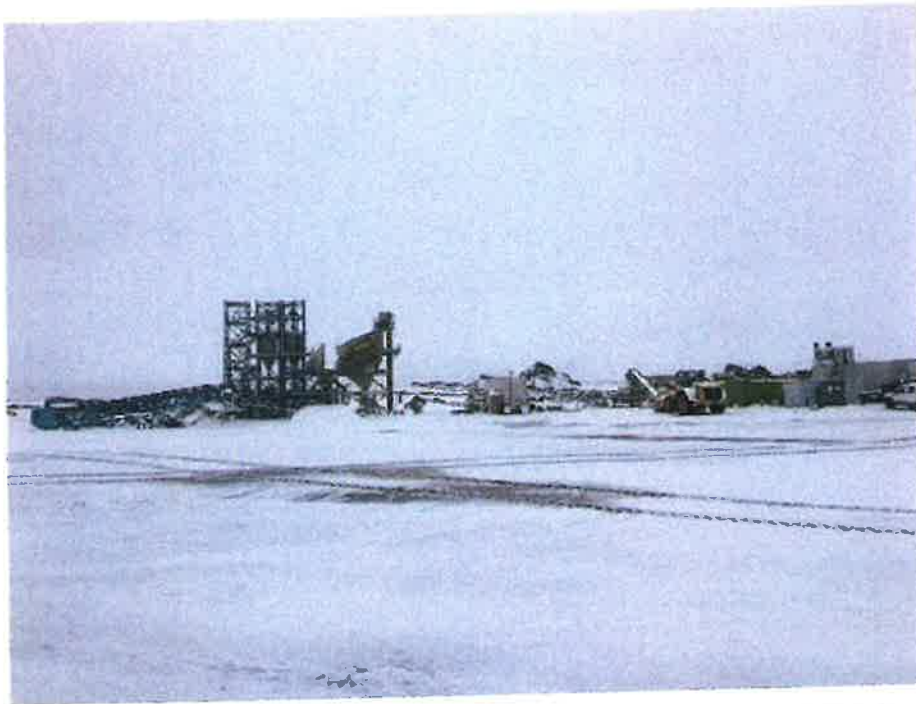
4/1/2022



Point of Diversion:

Pump is a submersible with motor
make of Franklin and the pump make
being Crown.





Wash Plant:

Water is conveyed to the wash plant from the holding pond. Pond is right of photo.



Overall Point of Diversion:

Point of diversion is on the west side of the facility.



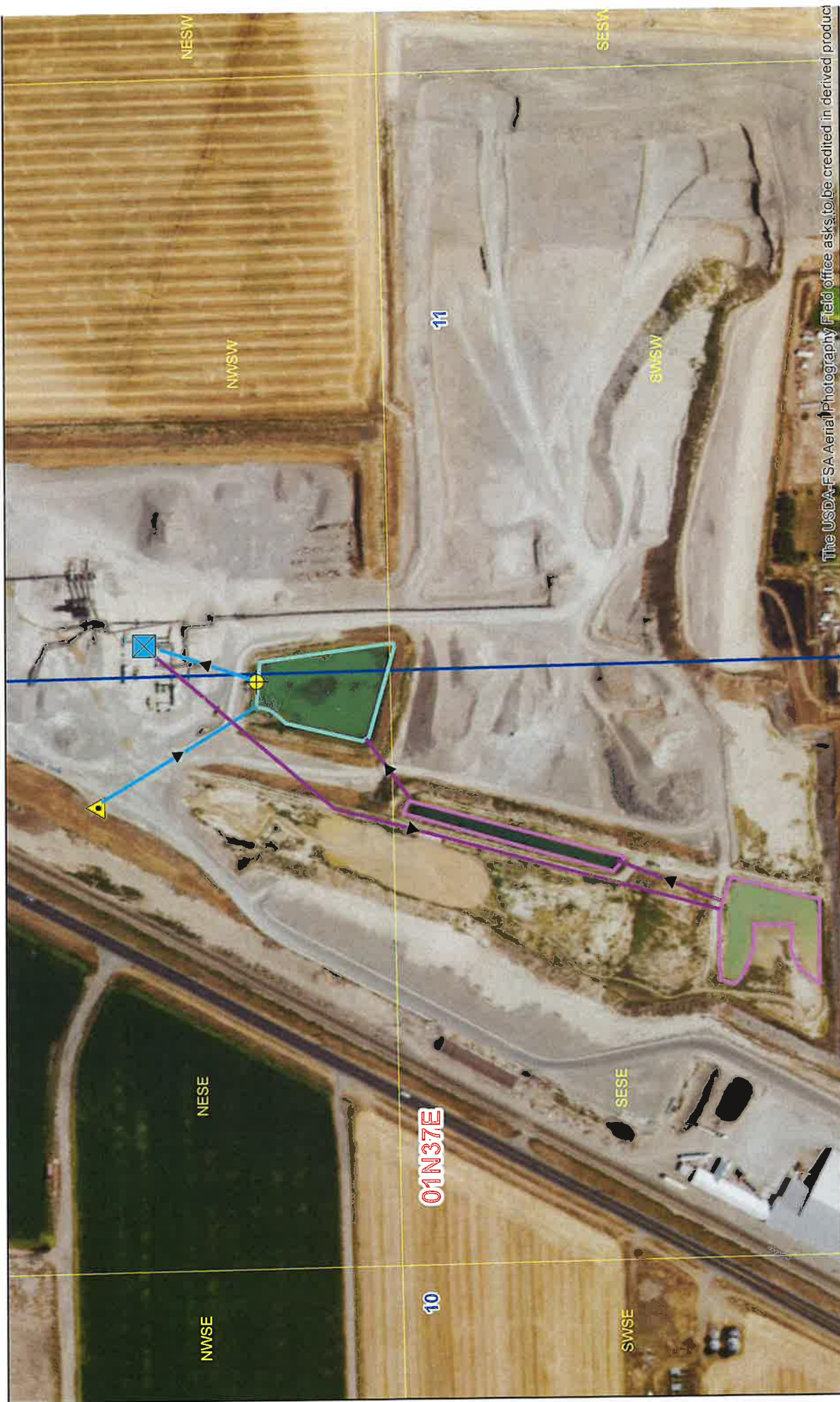
Holding Pond:

Canal water inlet is on the far side of the pond.



Settling Pond:

Water from the wash plant drains to the settling pond. Water that does not leach into the gravel will overflow back into the holding pond and be used again.



The USDA-FSA Aerial Photography Field office asks to be credited in derived product

	Point of Diversion		Holding Pond
	Pond Diversion		Settling Ponds
	Wash Plant		Township/Range
	Water Line		Sections
	Recycled Water Line		QQ

1,000 Feet

500

250

0

N

Adamson, Jared

From: Rick <rick@burnsconcrete.com>
Sent: Friday, August 6, 2021 8:06 AM
To: Adamson, Jared
Subject: Requested Information
Attachments: J. Adamson IDWR 8 6 21.pdf

Good morning Jared,

I hope all is well with you.

I have collected what information I could find regarding the well at our Cotton Pit, and have attached that information in letter form.

Sorry it has taken so long. I had to go through a bunch of old records that were in storage.

I found information on most of what you were asking for, but unfortunately I did not find everything.

Thanks for your patience.

Have a great weekend.

Best regards,

Rick K.

Rick Karlson
Burns Concrete, Inc.

2385 Gallatin Avenue
P.O. Box 1864
Idaho Falls, ID 83403-1864
(208) 524-4000 Phone
(208) 524-4462 Fax
rick@burnsconcrete.com



MODEL 10L-2000

RECEIVED

06 06 2021

Department of Water Resources
Eastern Region

GENERAL DATA

RPM: 3500 NOMINAL, 60HZ.
MAX. O.D. W/CABLE GUARD 10 11/16"
MINIMUM WELL SIZE 12"
DISCHARGE SIZE: 6" STANDARD

BOWLS : CAST IRON
IMPELLERS : BRONZE
SHAFT : STAINLESS STEEL

IMPELLER DATA

IMPELLER NO.: 1012
TYPE : ENCLOSED
EFFECTIVE EYE AREA : 23.3 SQ.IN
TRIM DIAMETER
A - 8.325"
B - 7.600"
C -
D -
E -

THRUST CONSTANT K: 11.8
NO. OF VANES : 5
IMPELLER SKIRT CLEARANCE : .015"
EFFICIENCY CORRECTION
1 STAGE - 3%
2 STAGE - 2%
3 STAGE - 0%

BOWL DATA

BOWL NO. : 1011
DIAMETER : 10.187"
CONNECTION : FLANGED

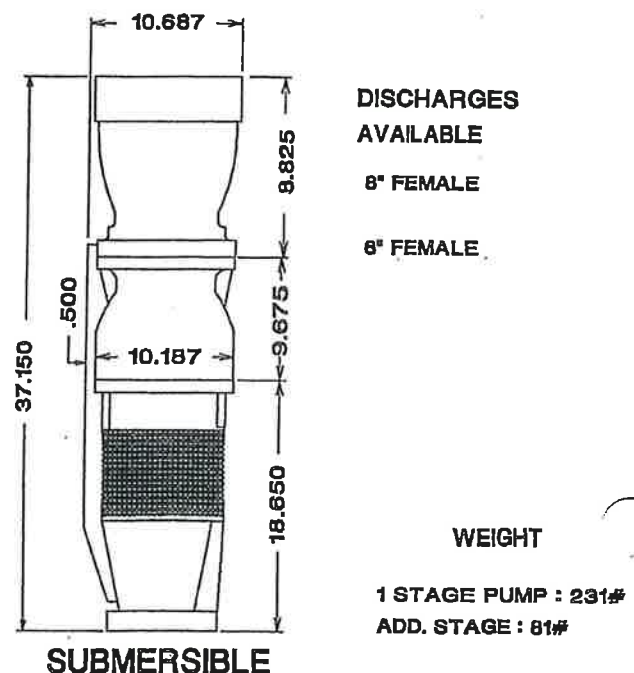
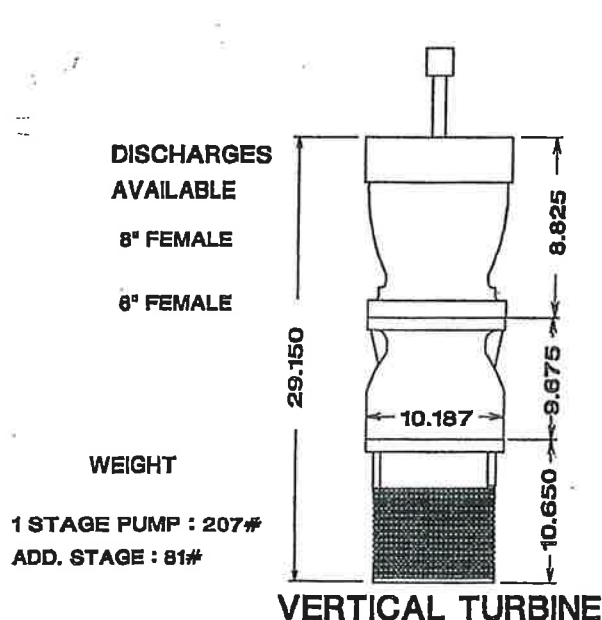
SHAFT BEARING CLEARANCE : .010"
BEARING MATERIAL: CUTLESS RUBBER
PUMP SHAFT DIAMETER : 1.5"

SPECIAL MATERIALS AVAILABLE - CONTACT FACTORY

NOTE: EFFICIENCY PERFORMANCE BASED ON A-TRIM, CAST IRON BOWLS
POLISHED BRONZE IMPELLERS, AND 6 FEET SUBMERGENCE.

THIS CHARACTERISTIC CURVE IS BASED ON FACTORY TESTS WHEN PUMPING
CLEAR, NONAERATED WATER AT A TEMPERATURE NOT EXCEEDING 85 F.
AND UNDER SUCTION CONDITIONS AS INDICATED. SPECIFICATIONS SUBJECT
TO CHANGE WITHOUT NOTICE.

PUMP PERFORMANCE RATING IS FOR THE DESIGNATED POINT ONLY AND IS
SUBJECT TO TEST TOLERANCES AND PROCEDURES AS SPECIFIED IN THE
STANDARD OF THE HYDRAULIC INSTITUTE.





CROWN

10L-2000

MODEL 10L-2000

RPM 3500 NOMINAL, 60HZ

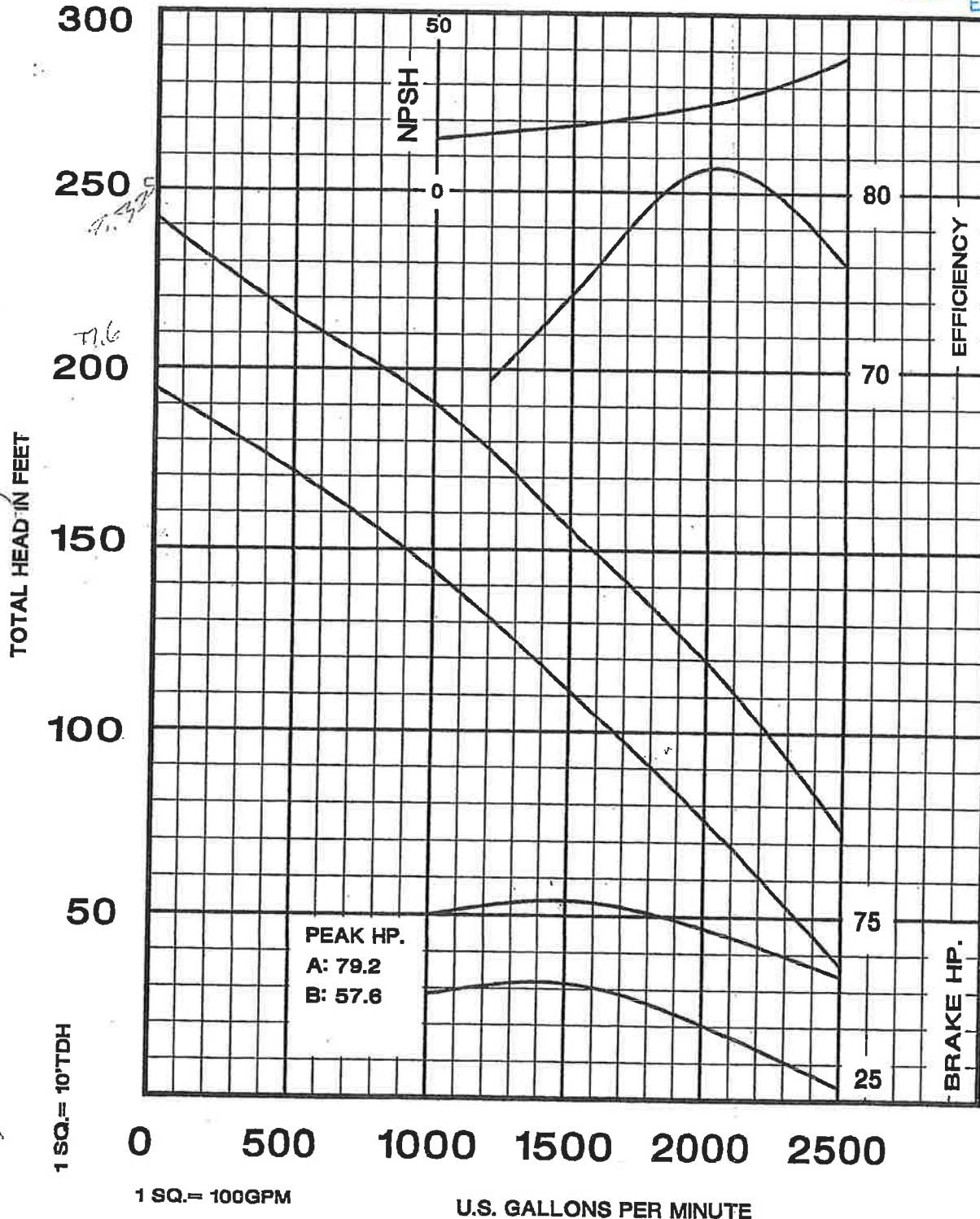
PERFORMANCE CHARACTERISTICS

RECEIVED

AUG 06 2021

MINIMUM WELL SIZE 12"

Department of Water Resources
Eastern Region



CROWN

CROWN PUMP CORPORATION, HIGHWAY 16 & BIVAR, DE LEON, TEXAS

August 06, 2021

RECEIVED

AUG 06 2021

Department of Water Resources
Eastern Region

Mr. Jared Adamson
Water Resources Agent
Idaho Department of Water Resources
900 N Skyline Dr. Ste. A
Idaho Falls, Idaho 83402

Jared,

This note is in response to your request for additional information after your site visit to the Burns Concrete aggregate facility on W 81st S, in Idaho Falls. You and Mr. MacKinzie Fahlgren visited the site on April 6 of this year to inspect the water well that is installed at that location.

I was able to find most of the information that you were asking for, however I was unable to find the serial numbers for the motor and pump.

The motor is a Franklin Submersible Motor model 2391066004 – 150HP, 8", 480V;
The pump is a Crown 10L-2000-2 Pump End.
I have attached the pump data sheet and the pump curve for your information.

You also asked a question regarding how often we typically run the well pump through the season. I would like to answer that question by using the beginning of this year, and the end of last year as an example.

The pit typically operates 10 hrs. per day, five days per week. We started operating this year on April 16. In order to have enough water for start-up we need to run the well pump roughly 10 hours per day for a 5-day period before we have enough water for actual process start-up. The irrigation water (canal water) was not available until April 26. Until the canal water was available, we had to pump roughly 8 hours per operating day from the day of start up until the canal water was available. Once the canal water is available, we need to pump an average on one day per week for roughly 10 hours. We won't run the well pump unless we actually need the water for processing.

Last year the pit operated until November 18 and the canal water was no longer available after October 28. Therefore, we had to pump roughly 8 hours a day during operating days from October 28 through November 18.

The canal water is not available on a regular schedule which would meet with our production schedule. The availability of canal water is wholly dependent on the water year and the agricultural needs. The overall availability of water dictates when water is turned into the canal and turned out of the canal. This year the water district sent out a notice that they may be curtailing irrigation water earlier this year than they did last year.

I hope this answers all your questions. Should you have any other questions or need any further information please don't hesitate to contact me.

Best regards,

Rick Karlson
Burns Concrete, Inc.
2385 Gallatin Ave.
Idaho Falls, ID 83402
208-524-4000

Jared,

The water in the settling pond to the south (new revision area) transfers its water back into the process water ponds to the north and north east of it. We thought since the process discharge water flowed thru the south pond also it would be advisable to have it included in the point of diversion map.

Let me know if you have any additional question.

Thanks,

Kirk Burns
Burns Concrete, Inc.
President

2385 Gallatin Avenue
P.O. Box 1864
Idaho Falls, ID 83403-1864
(208) 524-4000 Phone
(208) 524-4462 Fax
kirk@burnsconcrete.com



From: Adamson, Jared <Jared.Adamson@idwr.idaho.gov>

Sent: Monday, April 11, 2022 4:02 PM

To: Kirk Burns <kirk@burnsconcrete.com>

Subject: RE: Amendment to Permit

Thanks Kirk,

I'm wondering if I misunderstood Rick when I visited the site last year. Is the most southern pond the settling pond or part of the settling pond? How is that southern pond connected to the water system for the wash plant? The updated information you give me will also help me update my exam notes.

Thanks again,

Jared

From: Kirk Burns <kirk@burnsconcrete.com>
Sent: Monday, April 11, 2022 3:26 PM
To: Adamson, Jared <Jared.Adamson@idwr.idaho.gov>
Cc: 'Linda' <linda@burnsconcrete.com>
Subject: RE: Amendment to Permit

Hi Jared,

Attached is the revision to the Point of Diversion Map. Let me know if you have any questions.

Thanks,

Kirk Burns
Burns Concrete, Inc.
President

2385 Gallatin Avenue
P.O. Box 1864
Idaho Falls, ID 83403-1864
(208) 524-4000 Phone
(208) 524-4462 Fax
kirk@burnsconcrete.com



From: Adamson, Jared <Jared.Adamson@idwr.idaho.gov>
Sent: Monday, April 11, 2022 3:02 PM
To: kirk@burnsconcrete.com
Subject: Amendment to Permit

Hey Kirk,

Send that PDF over to me anytime, and I'll get the changes made and back to you ASAP.

Thanks,



Jared Adamson | Water Resource Agent, Sr.

Idaho Department of Water Resources

900 N Skyline Drive Suite A, Idaho Falls, ID 83402 | (208) 525-7161

State of Idaho
Department of Water Resources
Water Right License
25-13982



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters
- Burns Corrected Place Of Use Boundary

0 0.05 0.1 0.2 Miles

