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Permit No: 2-10252

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DEPARTMENT OF WATER RESOURCES

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 2-10252

Exam Date: 10/20/2006

1. Current Owner: JOHN D EDWARDS
4393 HILLTOP LN
HOMEDALE ID 83628
(208)337-4588
2. Accompanied by: John Edwards
Phone No: 337-4588, 250-2055
Address:
Relationship to Permit Holder:

3. **SOURCE**

SNAKE RIVER

TRIBUTARY

COLUMBIA RIVER

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:**

SNAKE RIVER

L7 NE1/4SW1/4

Sec. 13, Twp 03N, Rge 05W, B.M.

OWYHEE County

Method of Determination:

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N	05W	13									3.3			2.2					5.5
											L 7								

Total Acres: 5.5

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</u> <u>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</u> <u>Size</u>
	Baldor	7.5	F0512214405	Berkeley	M13770: Plate, B1.5TPM: Curve

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>

2. Measurements: At the time of the exam, twenty-eight 9/64 inch birds were operating at ~54 psi, which equates to .27 cfs.

The permit holder purchased the pump from Agri-Lines Irrigation in Parma Idaho. They supplied a pump curve indicating capacity between 115 and 120 gpm based on 150 TDH, which equates to .27 cfs and supports the field measurement.

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached
(Pump Curve)

Measured Method:

Pump Curve: 120 gpm = .27 cfs

Sprinkler Heads: 28 9/64 inch birds @ 54 psi = 4.37 gpm/bird = 122.4 gpm = .27 cfs

Theoretical: $\frac{7.5 \text{ hp} \times 8.8 \times .7}{23 \text{ ft} + (54 \text{ psi} \times 2.31)} = .31 \text{ cfs}$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 5.5 \times 4.5 = 24.8 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .27 \times 260 \times 1.9835 = 139.2$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 24.8$$

2. Volume Calculations for Other Uses:

- G. **NARRATIVE/REMARKS/COMMENTS:** Water is sucked (lifted) from the Snake River through an 8 inch intake pipe ~8 feet to the pump and then another ~15 feet to the acres (23 feet total lift). The pump platform is located in the C-Canal drain under the control of Gem Irrigation District. Applicant stated that he has permission from the district for the platform. The property is irrigated with wheel line sprinklers. Hand line sprinklers and drip irrigation are also used for trees and birm area between the fields and the river. No other rights are used.

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	0.110 CFS	24.80 AF
<u>Totals:</u>		0.110 CFS	24.80 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 Lon Beaver Date 11/10/07

Reviewer _____ Date _____



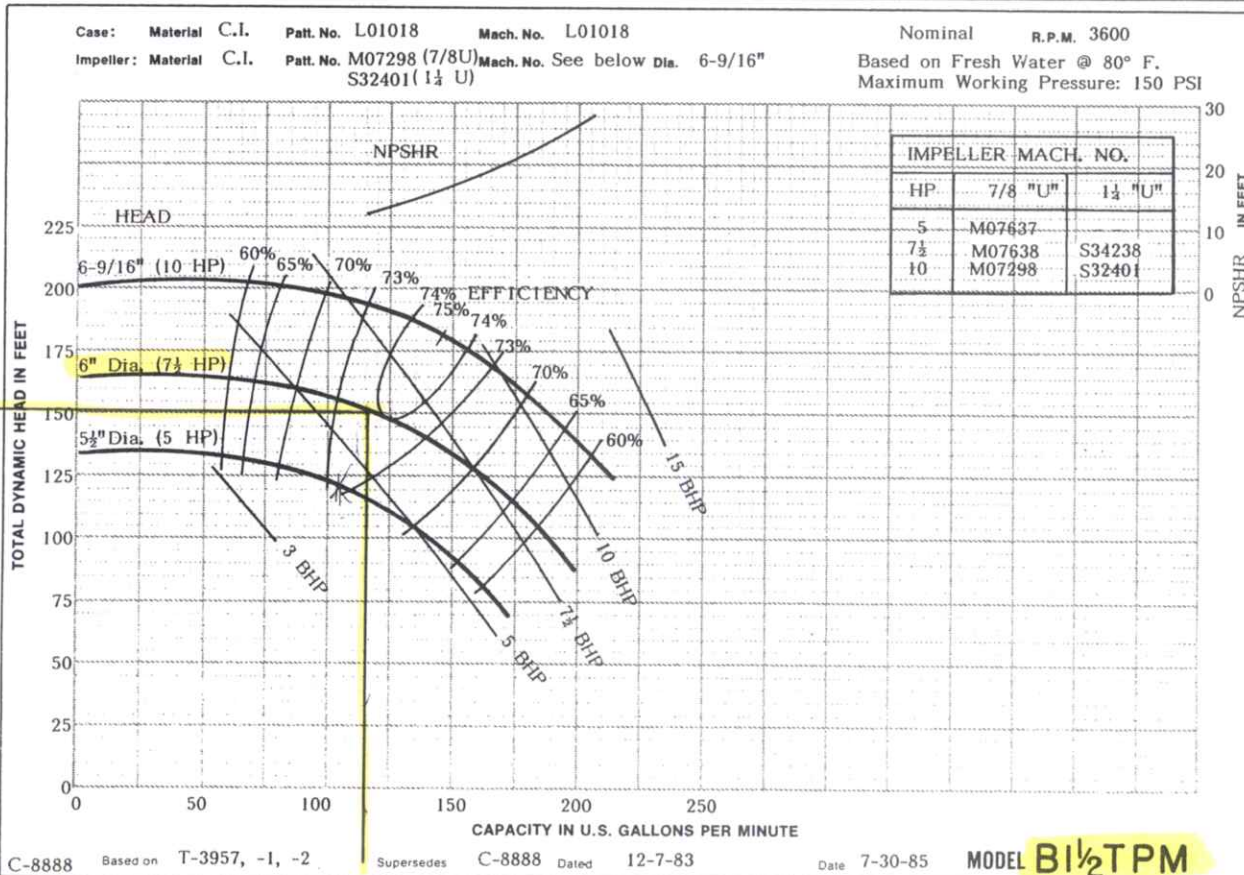
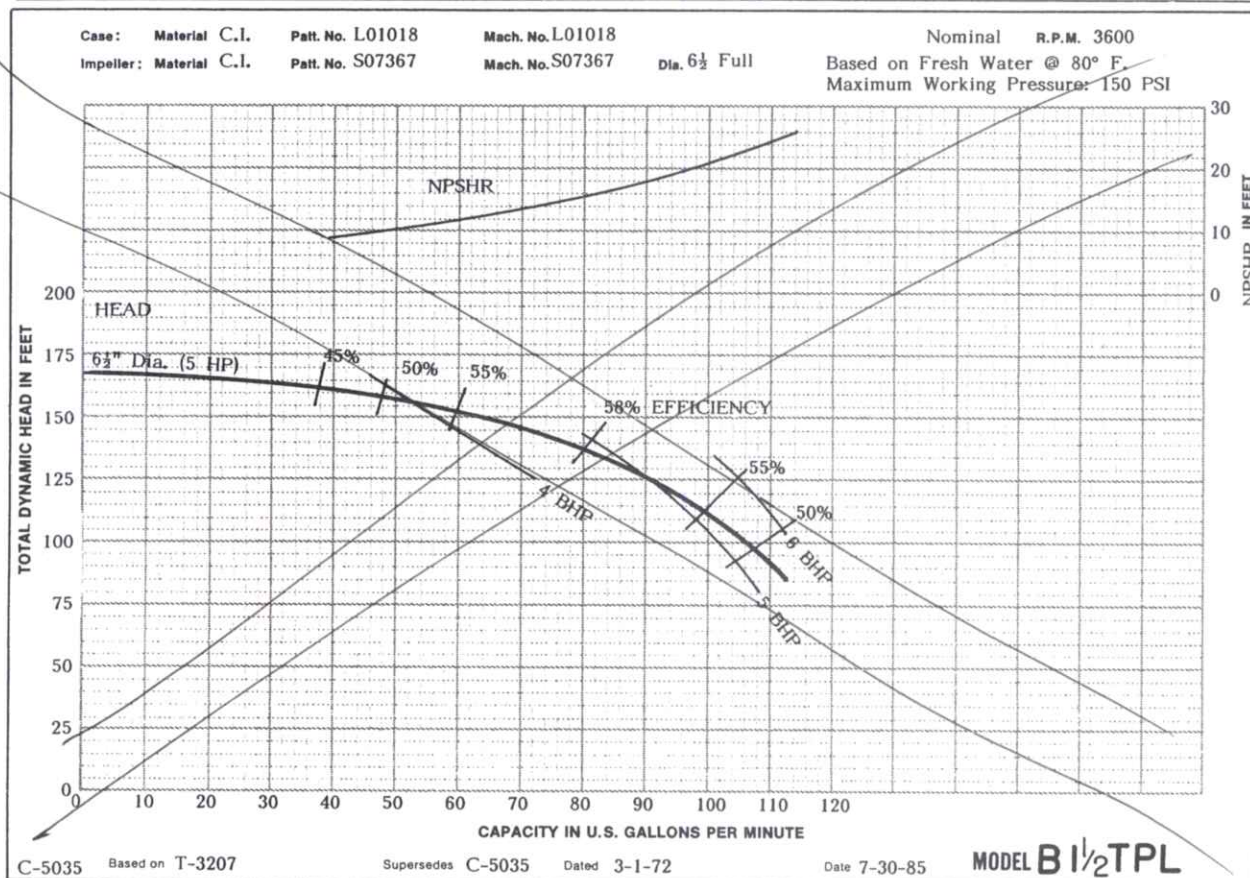
Mainline in red.

Curve from Agri-Liner Irrigation
Parma IL



BERKELEY PUMPS TYPE "B" RATING CURVES MOTOR DRIVE

CURVE	4075
DATE	1-2-86
PAGE	1.02
SUPERSEDES	
All previously issued	
4075 Curves	



John Edwards
Berkeley B 1 1/2 TPM
7 1/2 HP, 10, 230 ✓

EXAM INFO

Permit: 2-10252

Exam Date/Time: 10/20

Name: John Edwards

Phone: Home- 337-4588
Work-
Cell- 250-2055

C Canal
Gem Irrig Dist

Driller: —

Date Drilled: —

8" intake
pipe,

Depth:
Static:
Dynamic:

X

Berkeley
Model B105TPM
Ser # M13770

Ser # F0512214405
Bulldozer Motor
Cat # JPL1509T
Spec 37E285X77
230 Volt
37 amps, 3450 RPM
50-53 PSI

Pump Capacity (gpm):

Hp: 7.5

Psi: 24 birds/3 lines 60 PSI
54 PSI

28 birds

Exposed Pipe/Type/Size/Length:

Lift: 8' suction + 15' elevation to acres

8" intake
Sprinkler Type: Rainbirds

Nozzle Size/#: 9/64" - 12 rivers 50' apart

Psi:

Acres Irrigated: ~6

- 5 sets - 40' - 4 sets of 8
- 7 sets - 40' - 1 set of 15
- 5 sets of 8
- 2 sets of 9

Stock: —

Domestics: — 1 home on well

Other Uses: — yard

Other Rights:

Directions:

Cross river stay on 95 left → 2 mi
south → Left on Market Rd → 3 mi
to Hogg Rd — part 1/4 mi to Rio Ranchette
Rd (Blue sign on left) — Left down gravel
rd to river

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7.5 hp Berkeley Pump and
Baldor Motor



P/D: 8" intake
pipe



~8' lift to pump

~15' lift to acres



P/U looking east



P/U looking west