

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-32546
Exam Date: 09/12/2024

1. Current Owner:
DAN J ERSKINE 24788 BOISE RIVER RD PARMA ID 83660 AND/OR
CONNIE R ERSKINE 24788 BOISE RIVER RD PARMA ID 83660
2. Accompanied by: Dan Erskine
Phone No: (208) 454-8712
Address: 24788 Boise River Rd Parma ID 83660
Relationship to permit Holder: Same

3. **SOURCE:**
UNNAMED DRAIN

Tributary
BOISE RIVER

Method of Determination: Beneficial use exam and Department records

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
63-4595	Unnamed stream trib to Boise R.	Irrigation	Decreed

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 SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED DRAIN L3 (NE¼ NW¼), Sec. 36, Twp 05N, Rge 05W, B.M. CANYON County
UNNAMED DRAIN L3 (NE¼ NW¼), Sec. 36, Twp 05N, Rge 05W, B.M. CANYON County

Method of Determination: Field examination, permit, and ArcMap tools with aerial imagery.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	05W	36					20.0 L3												20.0

Total Acres: 20.0

Method of Determination: Field examination, permit, and ArcMap tools with aerial imagery.

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
	Honda			Wacker Neuson PT3A	3"

Wacker Neuson PT3A trash pump with Honda GX240 motor and 3" discharge hose

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

Attempts to prime the pump were not working at the time of the field examination, the motor worked but the pump could not gain suction. Therefore no measurement was taken.

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

Method:

Standard Beneficial Use Rate: 20.0 acres x 0.02 cfs/acre = 0.40 cfs

Theoretical Method: Pump Specifications Maximum Discharge Capacity

Name	BU Rate	Permit Rate	3" Trash Pump*	4" Trash Pump**
gpm	179.53	233.39	396.00	475.00
cfs	0.40	0.52	0.88	1.06

* Wacker Neuson PT3A trash pump with Honda GX240 motor and 3" discharge hose

** trash pump & motor on trailer with 4" discharge hose

The specifications for the 3-inch trash pump were listed at 396 gpm or 0.88 cfs with a permit rate of 0.52 cfs. In comparison a 4-inch trash pump would produce almost twice as much at 1.06 cfs. In conclusion, the 3-inch pump produces almost twice as much as the calculated standard beneficial use rate of 0.40 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 20 \text{ acres} \times 4.5 \text{ ac-ft} = 90 \text{ ac-ft}$$

$$V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = (0.40 \text{ cfs}) \times (259 \text{ days}) \times 1.9835 = 205.5 \text{ ac-ft}$$

$$V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} = 90 \text{ ac-ft}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Dan and Connie Erskine are the owners of permit 63-32546 for irrigation in Canyon County. This permit was approved on 7/13/2007 with a proof due date of 7/1/2008. The proof of beneficial use was submitted on 7/20/2007. A field exam was conducted on 9/12/2024. Dan Erskine accompanied the water rights agent on the exam. According to current Canyon County tax lot data Dan Erskine is the current owner of the land appurtenant to the place of use and point of diversion.

The permitted system functions as a backup irrigation system for those times during the year when the diversion of water right 63-4595 does not provide enough water for irrigation. The delivery ditch for POD for 64-4595 is approximately 2 miles long from the POD to the POU. An unnamed drain tributary to the Boise River passes through the center of the property which often has water available and returns to the Boise River approximately 700 feet from the end of the property boundary.

The permit lists two points of diversion from the unnamed drain, approximately 600 feet apart. The permit holder operates the system by placing the portable trash pump in one of the designated locations and pumping water through the open conduit outlet hose onto the field. The fields have been set up with permanent contour furrows to direct the flood irrigation water across the landscape. The pump can be placed at either location to conveniently reach different areas of the pasture. The pump locations on the permit map were slightly off, so the water rights maps were updated to the exact gps locations.

At the time of the field examination there were two portable trash pumps onsite, a 3-inch and a 4-inch. The permit holder had rented both pumps, the reason being that he had loaned out his pump and could not easily get it back. Mr. Erskine initially rented the 4-inch pump, however it had a malfunctioning carburetor, so could not be started. The 3-inch pump was set up on the upstream POD, however, attempts to prime it did not work, the motor worked but the pump could not gain suction. Therefore, no direct measurements were taken.

The permit map was cleaned up to reflect actual irrigatable acres, these changes found a total of 20 irrigated acres. The POU shapefile was modified to reflect those acres. I am recommending the licensed acres be reduced from 26 acres to 20 acres.

The permit holder provided specifications for both pumps obtained from the rental business, Tates Rents of Caldwell. These specifications were used to obtain the maximum diversion capacity of each pump. The pump on the stream bank was a Wacker Neuson PT3A trash pump with Honda GX240 motor and a 3-inch intake and discharge hose. This pump was rated at a maximum capacity of 396 gpm (0.88 cfs). The other pump was an unnamed 4-inch trash pump on a trailer. This pump was rated at a maximum capacity of 475 gpm (1.05 cfs). Both pump were well over the permit rate of 233.4 gpm (0.52 cfs) and the calculated beneficial use rate of 179.5 (0.40 cfs). I am recommending a rate of 0.40 cfs based on the calculated beneficial use rate for 20 acres.

The original permit, approved on July 13, 2007, was conditioned with 01J, requiring the installation and maintenance of a measuring device and lockable controlling works. In a letter dated June 23, 2008, the watermaster of Water District 63 advised the Department that the lockable controlling works were unnecessary. The Department sent out an Order Waiving the Permit Condition on July 11, 2008, therefore 01J was removed and replaced with 01M. Conditions R05 and R65 were retained. Condition X35 was added to reflect combined limits. Condition 121 was replaced with condition 103 as per Department standards.

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>Volume</u>
IRRIGATION	03/01 to 11/15	0.40 CFS	90 AF
<u>Totals:</u>		0.40 CFS	90 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 Allen Bradbury - Water Resource Agent, Senior

Field Examiner's Name Allen Bradbury Date 2/21/25
Reviewer [Signature] Date 2/26/2025

Delivery System Map

Field Exam: 09.12.2024

Water Right #63-32546 Erskine License for 0.40 cfs from Unnamed Drain trib to Boise River for Irrigation of 20.0 acres.

63-4595 overlapping right for 20.5 acres

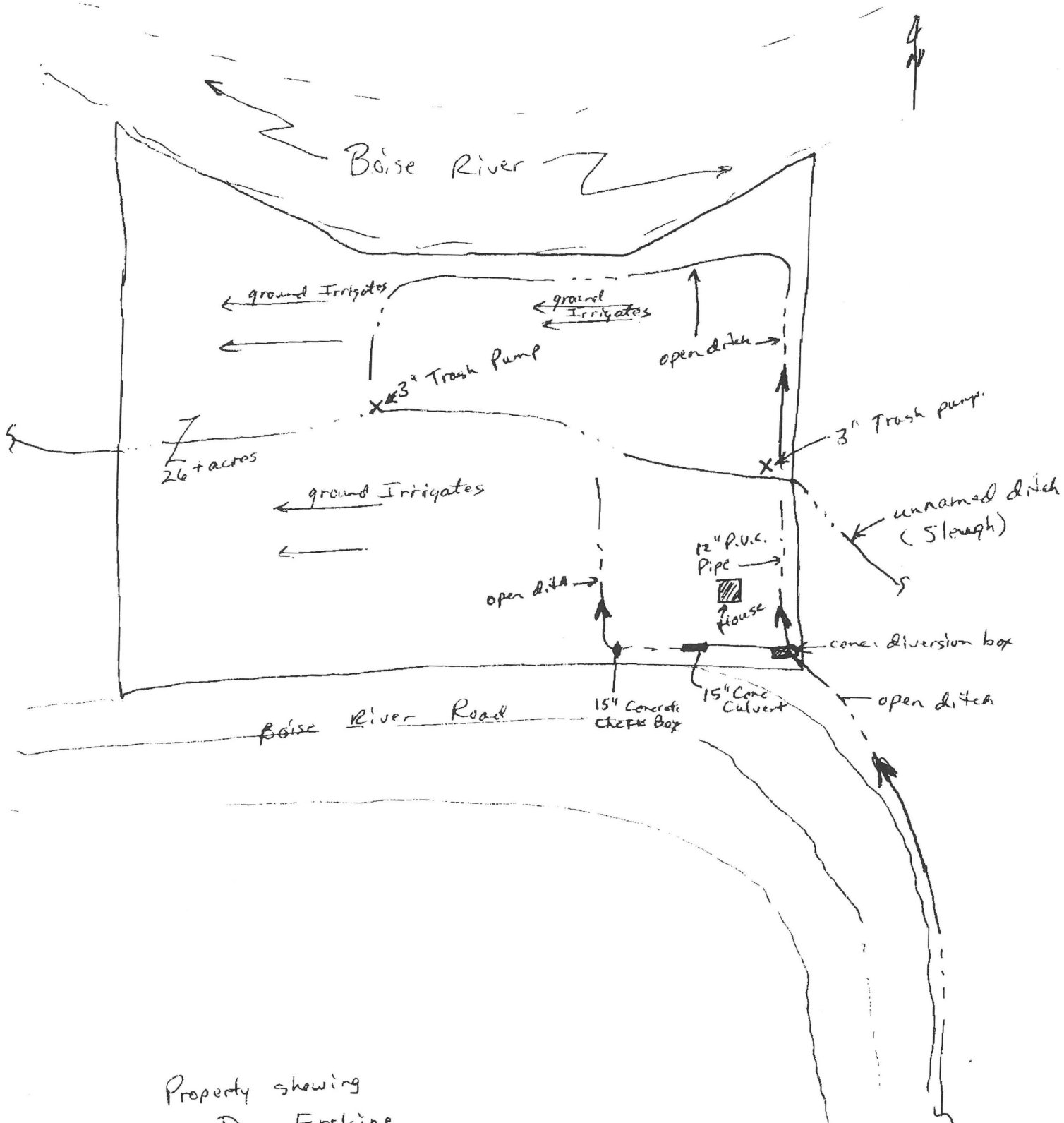
Permit 63-32546 for 0.50 cfs from Unnamed Drain trib to Boise River for irrigation of 26.0 acres.

Condition 01J right holder shall install and maintain a measuring device and lockable controlling works.(waived)



- License Points of Diversion
- Permit Points of Diversion
- License Place of Use
- Permit Place of Use
- Tax Parcel

0 0.05 0.1 Miles



Property showing

Dan Erskine
 24788 Boise River Road
 Parma, Idaho 83660

63-32546

BENEFICIAL USE FIELD REPORT CALCULATIONS

63-32546 Erskine

Yrs

Permit #: 63-32546

Priority Date 9/7/2006

Proof Due: 7/1/2008

0.97

Permit Name: Dan & Connie

Permit Approved: 7/13/2007

Proof Made: 7/20/2007

0.02

Ownership Change: Erskine

Exam Date: 9/12/2024

Permit Rate 0.50 (applied for)
Fee Rate 0.50 (Max. Paid for)
Exam Fee Paid \$50.00
Deficiency Fee Paid \$50.00 yes

0.00 to 0.20	\$50.00	0.00 to 20.0	\$50.00
0.21 to 1.00	\$100.00	20.1 to 100.0	\$100.00
1.01 to 2.00	\$125.00	100.1 to 200.0	\$125.00

Source UNNAMED DRAIN

Tributary BOISE RIVER

Permitted Uses:	Proposed		Permitted		Measured/Recommended		Number of stock:
	Rate of Diversion (cfs)	Annual Volume (af)	Rate of Diversion	Annual Volume	Rate of Diversion	Annual Volume	
IRRIGATION	0.52		0.52		0.4	90	
STOCKWATER							
DOMESTIC							
TOTAL	0.52		0.52		0.40		
	Acres Proposed:	26.0	Acres Permitted:	26.0	Acres Developed:	20.0	

FLOW CALCULATIONS

Meter Reading:

gpm

0.000 cfs

None Taken

Couldn't prime pump

Theoretical Method

Est. Pump Set

minus 10' =

$$Q = (8.8) \times (HP) \times E$$

HP =

E =

H =

PSI =

Q =

Q =

$$TDH = [(LIFT) + (PSI \times 2.31)]$$

	70.0%			#DIV/0!	#DIV/0!
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PSI (if open discharge assume [0])

cfs

gpm

Theoretical Method: Pump Specifications Maximum Discharge Capacity

Name	BU Rate	Permit Rate	3" Trash Pmp	4" Trash Pmp
gpm	179.53	233.39	396.00	475.00
cfs	0.40	0.52	0.88	1.06

Recommended Flow Rate 0.40

Recommended Acres: 20.0

Max Rate Per Acre: 0.02

Max Volume Per Acre: 4.50

Consumptive Use 3.5
Season of Use 3/1 11/15 = 260 days

Volume (VIR)	20.0	X	4.5	=	90.0 af	
Volume (DR)	0.400	x	260	x	1.9835	= 206.28 af
BU Standard Rate	20.0	X	0.02	=	0.40 cfs	
Rate/acre	0.400	/	20.0	=	0.020 cfs/ac	

$$V \text{ I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement})$$

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

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

Recommendation Standards for diversion rate (choose most restrictive)

0.50 Permit Rate – the rate applied for

0.50 Fee Rate – the maximum rated paid for on the fee schedule.

0.40 Beneficial Use (BU) standard = $x.x \text{ ac} \times 0.020 \text{ cfs/acre}$

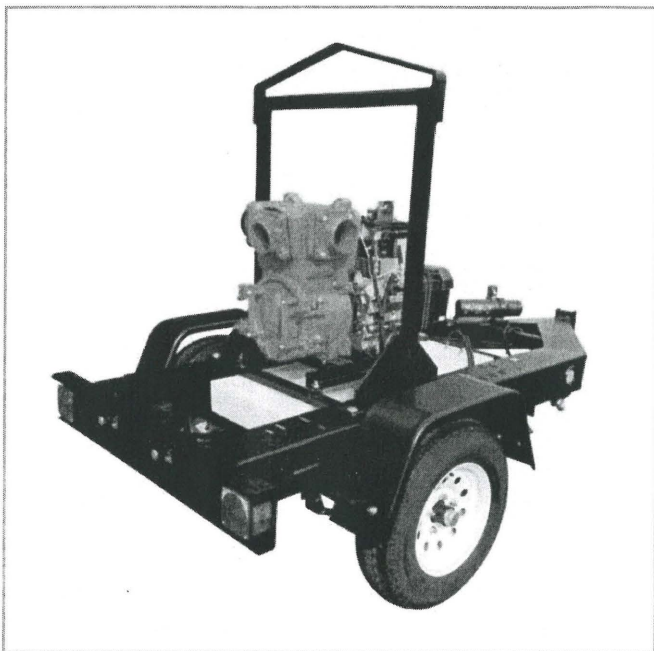
0.00 Measured Value – the value measured in the field

0.88 Theoretical Rate - the rate calculated

Tates Rents - Caldwell

5723 E Cleveland Blvd
Caldwell, ID 83607
208-454-9600

www.tatesrents.com



Actual item may differ from image.

Key 7413

Name PUMP, TRASH 4" TRAILER

Item# 34873

Key	Item#	Name	Daily	Weekly	Monthly
7413	34873	PUMP, TRASH 4" TRAILER	\$288.00	\$863.00	\$2,013.00

Specs: **WATER CAPACITY: 475 GPM**
MAXIMUM LIFT: 25 FT
MAXIMUM HEAD: 85 FT
FUEL TANK CAPACITY: 28 GAL
LENGTH: 102 IN
WIDTH: 57 IN
HEIGHT: 67 IN
WEIGHT: 735 LB

Accessories

Optional Accessories

Item Name	Rates
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DISCHARGE HOSE, 4"	Rental: Minimum \$11.00 / Daily \$22.00 / Weekly \$64.50 / Monthly \$129.50 *
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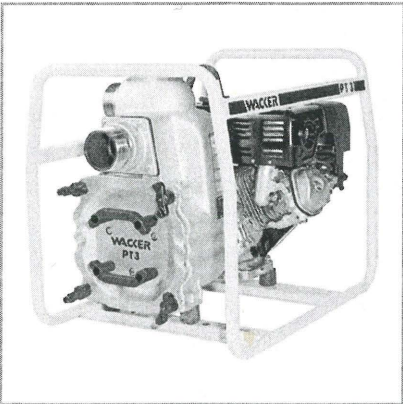
INTAKE HOSE, 4"	Rental: Minimum \$2.50 / Daily \$3.50 / Weekly \$12.50 / Monthly \$24.00 *
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DIESEL	Resale: \$10.00 each
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Tates Rents - Caldwell

5723 E Cleveland Blvd
Caldwell, ID 83607
208-454-9600

www.tatesrents.com



Actual item may differ from image.

Key 7404
Name PUMP, TRASH 3"
Item# 33437

Key	Item#	Name	2 Hours	4 Hours	Daily	Weekly
7404	33437	PUMP, TRASH 3"	\$44.00	\$74.00	\$84.00	\$255.00

Specs: Rental Includes 1 Section Of Discharge And 1 Section Of Suction

** WACKER PT3A **
Length: 26.5 IN
Width: 20 IN
Height: 22.5 IN
Weight: 150 LBS
Discharge Head: 92.9 FT
Discharge Capacity: 356 GPM
Suction Height Lift: 25 FT
**

** MULTIQUIP QP3TH **
Length: 28.7 IN
Width: 21.7 IN
HeightT: 23 IN
Weight: 142 LBS
Discharge Head: 95 FT
Discharge Capacity: 296 GPM
Suction Height Lift: 25 FT
Max Solid Intake: 1.5 IN
**

11.3 Engine—PT3 / PT3A / PT3(I) / PT3H

Machine		PT3 5000009321 5000009322	PT3A 5000009098 5000009101 5000009240 5000620800	PT3H 5000009100 5000009103
Engine type		4-stroke, overhead valve, single cylinder		4-stroke, air cooled, diesel engine
Engine make		Wacker Neuson	Honda	Hatz
Engine model		WM270	GX240 UT2PA2	1B 30
Maximum rated power at rated speed ¹	kW (hp)	6.6 (9) @ 4000 rpm	5.9 (7.9) @ 3600 rpm	5.0 (6.8) @ 3600 rpm
Displacement	cm ³ (in. ³)	265 (16.17)	270 (16.5)	347 (21.2)
Spark plug		(NGK) BR 6HS Champion RL86C	(NGK) BPR 6ES (DENSO) W20EPR-U	—
Electrode gap	mm (in.)	0.6–0.7 (0.024–0.028)	0.7–0.8 (0.028–0.031)	—
Operating speed	rpm	3500		
Maximum engine speed—no load	rpm	3700 ± 100		3700 ± 50
Valve clearance (cold) Intake and exhaust	mm (in.)	—		0.10 (0.004)
Air cleaner	type	Dual element		Dry pleated paper element
Engine lubrication	oil grade	SAE 10W30 Service class SJ		CD, CE, CF, CG rated
Engine oil capacity	L (qt)	1.1 (1.2)		
Fuel	type	Regular unleaded gasoline		No. 2 diesel
Fuel tank capacity	L (qt)	6.0 (6.4)	5.3 (5.6)	5.0 (5.3)

¹Net engine power rating per SAE J1349 and ISO 3046. Actual power output may vary due to conditions of specific use.



11.4 Pump—PT2 / PT2(I) / PT2A / PT2H

Machine		PT2(I) 5000620725	PT2 5000009318	PT2A 5000009092 5000009095 5000009237	PT2H 5000009094 5000009097
Dimensions	mm (in.)	550 x 465 x 500 (21.7 x 18.3 x 19.6)			590 x 495 x 510 (23.2 x 19.4 x 20.0)
Operating weight	kg (lb)	—	43 (96)		59 (131)
Maximum suction lift ¹	m (ft)	7.5 (25)			
Maximum total head	m (ft)	32 (106)			
Maximum pressure	bar (psi)	3.2 (46)			
Maximum flow rate ²	L/min (gpm)	652 (172)			
Suction / discharge diameter	mm (in.)	50 (2)			
Maximum solid size	mm (in.)	25 (1)			

¹Based on pump operating at sea level. Maximum suction lift will be less at higher altitudes.

²Zero net head

11.5 Pump—PT3 / PT3(I) / PT3A / PT3H

Machine		PT3(I) 5000620726	PT3 5000009321 5000009322 5000009323	PT3A 5000009098 5000009101 5000009240 5000620800	PT3H 5000009100 5000009103 5000009242
Dimensions	mm (in.)	675 x 505 x 570 (26 x 20 x 23)			
Operating weight	kg (lb)	—	64 (140)	68 (149)	77 (169)
Maximum suction lift ¹	m (ft)	7.5 (25)			
Maximum total head	m (ft)	29 (93)			
Maximum pressure	bar (psi)	2.8 (40)			
Maximum flow rate ²	L/min (gpm)	1350 (356)			
Suction / discharge diameter	mm (in.)	75 (3)			
Maximum solid size	mm (in.)	38 (1.5)			

¹Based on pump operating at sea level. Maximum suction lift will be less at higher altitudes.

²Zero net head



Figure 1. Diversion point 1 with 3-inch trash pump from unnamed drain to pasture.



Figure 2. Flood irrigation of northwest pasture.



Figure 3.
Diversion point 2.



Figure 4.
Northeast pasture.



Figure 5. Front pasture south of unnamed drain.



Figure 6. Close up of contour furrows in front pasture south of unnamed drain.



Western Region • 2735 W Airport Way • Boise, ID 83705-5082

Phone: 208-334-2190 • Fax: 208-334-2348 • Email: westerninfo@idwr.idaho.gov • Web: idwr.idaho.gov

Governor Brad Little

Director Mathew Weaver

January 30, 2025

DAN J ERSKINE
24788 BOISE RIVER RD
PARMA, ID 83660

PROOF DEFICIENCY LETTER

RE: Permit No 63- 32546

Dear Permit Holder

The Department received the proof of beneficial use (proof) form for the above referenced permit on July 20, 2007, with a payment of \$50. However, a license cannot be issued without the correct fee.

This permit authorizes a diversion rate of 0.50 cfs (cubic feet per second) of surface water requiring a license examination fee of \$100.00. The original \$50 payment has been applied to the payment of the license examination fee, however an additional \$50 is needed for the correct fee.

Please submit the remaining \$50 portion of the fee within the next **thirty (30) days** to avoid the possibility of your permit lapsing. If you have any questions concerning this matter, please contact me at (208) 334-2190 or allen.bradbury@idwr.idaho.gov.

Sincerely,

A handwritten signature in blue ink that reads "Allen Bradbury". The signature is fluid and cursive, with the first name "Allen" and last name "Bradbury" clearly distinguishable.

Allen Bradbury
Water Resource Agent, Sr.

Enclosure: Permit
BU Fee Receipt
Fee Schedule



Western Region • 2735 W Airport Way • Boise, ID 83705-5082

Phone: 208-334-2190 • Fax: 208-334-2348 • Email: westerninfo@idwr.idaho.gov • Web: idwr.idaho.gov

Governor Brad Little

Director Mathew Weaver

August 9, 2024

DAN & CONNIE ERSKINE
24788 BOISE RIVER RD
PARMA, ID 83660

RE: Scheduling Field Exam for Water Right Permit No. 63-32546

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use to issue a water right license.

The above-referenced permit authorizes **0.50 cfs from an unnamed drain for irrigation of 26.0 acres. If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued, and the permit should be relinquished. If that use was developed but you have ceased using the water and currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

If you developed a beneficial use of water under the permit, but no longer own the place of use property identified in the permit, please submit the enclosed Ownership Change form with the applicable \$25 processing fee.

Please contact me within the next **thirty (30) days** at (208) 605-4623 to either schedule an examination or submit a relinquishment or ownership form. If you no longer own the place of use property and/or do not respond to this letter, the department will work with the current property owner to issue a license or void the permit.

Sincerely,

Allen Bradbury
Water Resource Agent, Sr.
IDWR Western Region

Enclosure: Relinquishment of Permit Form
Notice of Ownership Change Form
Proof Report and Map