

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-23971
Exam Date: 05/02/2022

1. Current Owner:
ERIK BRY PO BOX 204 GARDEN VALLEY ID 83622-0204
2. Accompanied by: Erik Bry
Phone No: 208-462-5433
Address: Lot 1, Pine Tree Ranch Sub 3, north side of 2 Lower Ditch Rd Garden Valley Rd, ID 83622
Relationship to permit Holder:

3. SOURCE:
SCRIVER CREEK

Tributary
MIDDLE FORK PAYETTE RIVER

Method of Determination: Site visit, aerial imagery

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:**

SCRIVER CREEK L3 (SE¼ SW¼), Sec. 22, Twp 10N, Rge 04E, B.M. BOISE County

Method of Determination: Pump GPS at 44° 10' 46.56" N, 115° 58' 10.38" W

2.

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	
10N	04E	22												0.5 L3					0.5

Total Acres: 0.5

PLACE OF USE: DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
10N	04E	22												X L3					

Method of Determination: Field photos and aerial photography used to measure irrigation boundaries on Bry property. Acres calculated using ArcMap tools.

3. 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.

N/A 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
N/A	Century	3/4	07215J2ML060000757	Red Lion	½ hp 60 hz

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Measurements: Portable pump system did not provide suitable circumstances to measure diversion rates.

E. FLOW CALCULATIONS

x Additional Computation Sheets Attached

Measured Method: Theoretical calculations were used to calculate flow.

Irrigation & Domestic Use

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}} = \frac{8.8 * .7 * 1/2}{4 + (2.31 * 50) + 0} = 0.03 \text{ cfs}$$

Efficiency = .70

Depth to water = 5

Psi = 40 – 60

Hp = 1/2

Theoretical Irrigation Use = 0.03 cfs

B.U. Irrigation Limit 0.02 cfs

Theoretical Domestic Use = 0.03 cfs

Permitted Total Rate 0.07 cfs

License Recommendation 0.03 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: Irrigation using natural stream flow is exempt from volume requirements per IDAPA Beneficial Use Rule 35.01.j.viii.

2. Volume Calculations for Domestic: Quantity is 0.6 AFA per household when irrigation is separated per Application Processing Memo 22.

G. NARRATIVE/REMARKS/COMMENTS

A field exam was conducted on 05/02/22 by Water Right Agent Laura McSherry and Senior Water Right Agent Justin Shearer and were accompanied by Mr. Erik Bry. Erik Bry is the current owner and original applicant. The application for

permit was submitted on August 3, 2020, and proof of beneficial use was submitted on July 28, 2021.

The point of diversion (POD) location was confirmed on Scriver Creek in the SESW QQ and is accurately described by the permit. A ½ hp Red Lion pump mounted on a Century motor and fixed to a wood board is diverting water from Scriver Creek using a 5/8" water hose. From the pump, one 5/8" mainline hose connects to three handlines or 3 5/8" water hoses diverting water to a RV trailer and 2 Rainbird sprinklers that irrigate the place of use (POU). Water right overlap did not discover any other water rights associated with the POD on Scriver Creek. No amendment required to correct the legal description.

The permit authorizes 1.0 acre for irrigation within the SESW QQ. ArcMap tools and aerial imagery, supported by photos taken during the field exam, were used to verify the area of irrigated lands. The permit holder confirmed that 0.22 acres on the west side of the lot does not get irrigated. Evidence of irrigation was found to be 0.5 acres within the 1-acre place of use. No amendment required to correct the legal description of the POU.

The POD is lockable and located on the perimeter of the POU that borders Scriver Creek. As a result, there is at most 5 ft of head between where the water is diverted and where it is used on land. Pump and motor information was obtained using the model and serial numbers located on the respective equipment. Using the pump specifications for the ½ hp Red Lion pump with likely discharge pressure of 40-60 psi, 5 ft of head, and assuming 70% efficiency, a theoretical flow rate of 0.03 cfs was calculated. However, because the permit holder has only developed 0.5 acres for irrigation use the recommended licensed flow rate for irrigation use is 0.02 cfs based on the standard diversion of 0.03 cfs/acre. For domestic use, the recommended licensed flow rate is 0.03 cfs which is an ample supply for the permit holder's system and needs. The total recommended licensed flow rate is 0.03 cfs since that is the maximum capacity of the system.

Condition 01H was updated to R02 and Condition 121 was updated to 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>Annual Volume</u>
IRRIGATION	03/15 to 10/31	0.02 CFS	
DOMESTIC	01/01 to 12/31	0.03 CFS	

Totals: 0.03 CFS

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

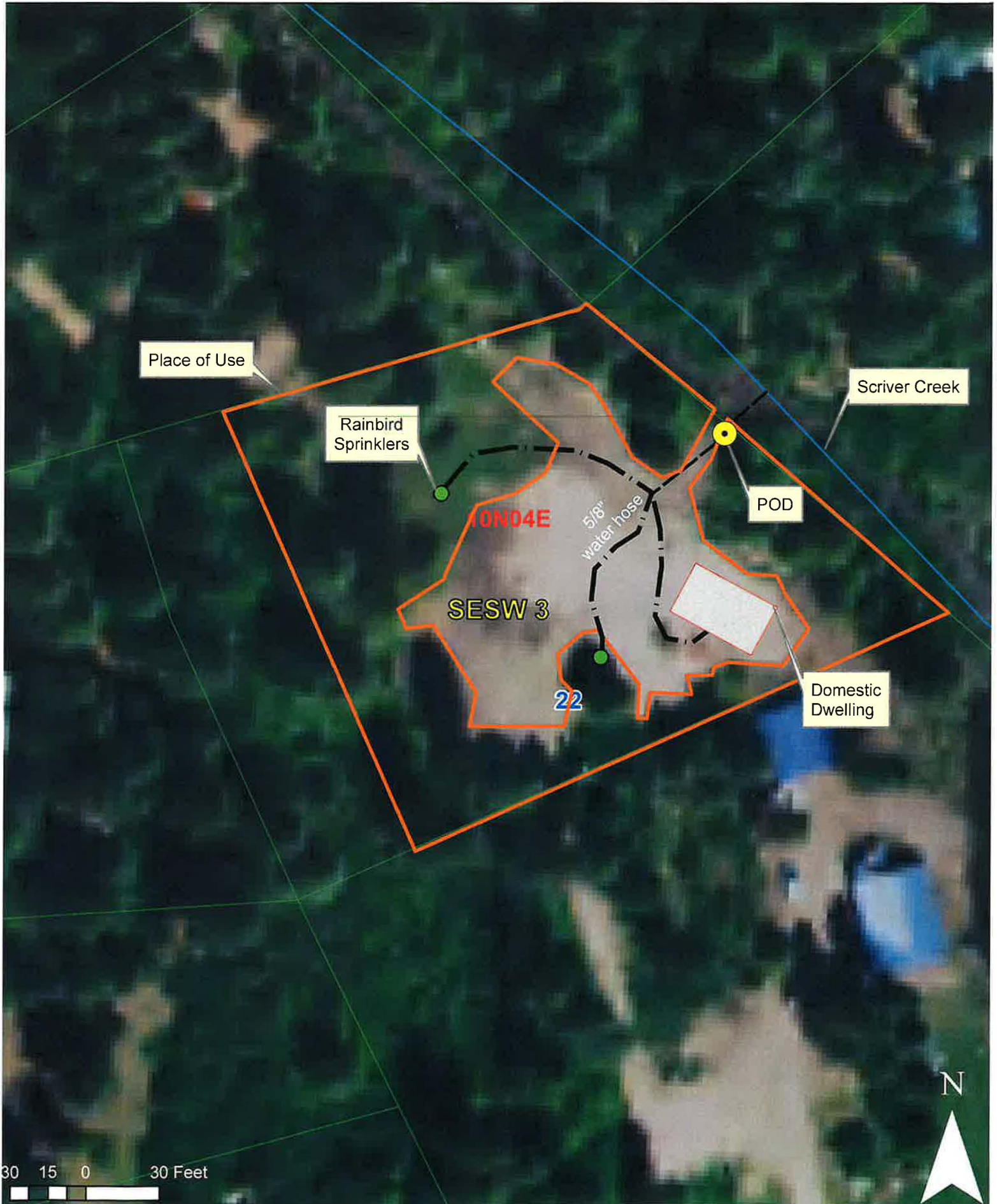
I. **AUTHENTICATION** Laura McSherry – Water Resource Agent

Field Examiner's Name  Date 6.29.2022

Reviewer  Date 6/29/2022

DELIVERY SYSTEM DIAGRAM

Water Right No. 65-23971





LAWN & IRRIGATION

Overview

Sprinkler Pump

Cast Iron Sprinkler Utility Pump

Stainless Steel Sprinkler Utility Pump

Cast Iron Industrial Sprinkler Pump



CAST IRON SPRINKLER UTILITY PUMP

APPLICATIONS

Ideal for pressure boosting, sprinkler systems, and general purpose applications where portability is important.

FEATURES & BENEFITS

- 115 Volt motor with 8' power cord
- Rugged cast iron construction
- Steel handle for portability
- Self-priming to 25'
- Garden hose adapter included

PRODUCT INFO

DOWNLOADS

Product Info

Model	Item Number	UPC	HP	Amps/Volts	Cord Length	Intake	Disc.	Suction Lift	Discharge Pressure (PSI)										Max PSI	Max Flow GPM
									20	25	30	35	40	45	50	55	60			
									Gallons Per Minute											
RJSE-50	614430	0 10121 12456 1	1/2	12.4/115	8'	1-1/4" FNPT	1" FNPT	5'	12.8	12.5	12.3	12.1	11.2	9.5	6.9	4.3	2	64.2		
								10'	11.5	11.3	11	10.8	10.4	8.5	6	3.4	1	62		
								15'	9.8	9.7	9.6	9.5	9.4	7.3	4.7	2	-	59.9	12.8	
								20'	8.3	8.1	7.8	7.7	7.6	5.7	3.5	1	-	57.7		
								25'	5.6	5.55	5.5	5.4	5.3	4.1	2.3	0.2	-	55.5		

Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
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Fig. 1 – POD is in Scriber Creek. View looking NE.

GPS'd at:

44° 10' 46.56" N

115° 58' 10.38" W



Fig. 2 – Close up view of POD. Red Lion pump and Century motor are fixed to a wood board.



Fig. 3 – Pump specs:

Make: Red Lion

Serial #: Unknown

HP: 1/2

Hz: 60



Fig. 4 – 3 5/8" water hose connects to the main hose.



Fig. 5 – Rainbird B impact sprinklers with PJ nozzle on hand-lines.



Fig. 6 – Rainbird B impact sprinklers with PJ nozzle on hand-lines.



Fig. 7 – 1 5/8" water hose connects to an RV trailer.



Fig. 8 – View of POU looking NE.



Fig. 9 – View looking N towards place of use.