

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-10044
Exam Date: 05/18/2023

1. Current Owner:
BRUCE LINES 6218 113TH PL SE BELLEVUE WA 98006-6324 AND/OR
LAURA LINES 6218 113TH PL SE BELLEVUE WA 98006-6324
2. Accompanied by: Bruce Lines
Phone No: (425) 283-8683
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
PEND OREILLE RIVER

Tributary
COLUMBIA RIVER

Method of Determination: **Arcmap and DRG**

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
96-7113	Spring	Domestic	License
96-8812	Ground Water	Municipal	License

Comments: Licensed water rights 96-7113 & 96-8812 are owned by Southside Water & Sewer District and uses water for domestic and municipal uses respectively, which overlap this rights POU. The applicant is service connected for in-home water use with Southside Water & Sewer District but doesn't irrigate from the in-home connection which mitigates overlap concerns between water uses/rights. I do not recommend licensing this right with combined use condition (X35).

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

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

PEND OREILLE RIVER L4 (SW¼ SE¼), Sec. 33, Twp 57N, Rge 02W, B.M. BONNER County

Method of Determination: **GPS; POD is a screened intake submersible pump attached to the applicant's dock, located at -116°34.6716, 48°14.3101.**

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	
57N	02W	33															0.5 L4		0.5

Total Acres: 0.5

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Centrifugal Pump	MYERS	2	0504		

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE TAKEN						

2. Measurements: This exam qualifies for an in-office exam and no measurement is required for an in-house exam.

E. FLOW CALCULATIONS

Measured Method: Flow measurement not required as per IDAPA RULE 37.03.02.035.01.r.iii.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \text{ acres} \times 3 \text{ af} = 1.5 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 12.7 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 1.5 \text{ af}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-house field examination. A field exam was conducted on 5/18/2023 with the applicant, Bruce Lines, to obtain current photographs of the POU to verify irrigation areas. Aerial imagery was used to prove there is green space from irrigation occurring on the property and coupled with photographs enabled me to accurately trace out the active irrigation acreage, resulting in sufficient information to license this permit.

The permit was authorized for **0.03 CFS** or 13.5 GPM diversion for the irrigation of 0.5 acres, which is recommended for licensing purposes. During the drive-by exam, the applicant's pump was observed & attached to the lake front dock. The river level was low and the irrigation system was not active for that reason. The pump specification identifies a maximum discharge of 47 gpm or 0.10 cfs.

It is reasonable to assume once the diverted water from a foot valve is restricted to a 1 ½ inch poly pipe routed up-grade approx. 30 ft to 2 HP pump which goes to a pressure tank and then to a sprinkler system, that the maximum discharge is greatly reduced. This mitigates concerns for enlargement of the permit due to over diverting. There are 8 stations on the sprinkler system.

The irrigation POU was traced out using Arcmap aerial imagery equaling 0.5 acres in size. The annual volume associated with irrigating 0.5 acres = 1.5 AF, but as this is a surface water source there is no volume metrics applied to the face of the

water right license. Condition R66 was replaced with X31 to better quantify diversion rate and diversion volume associated with licensing this permit. There are no overlap concerns for this water right.

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	04/01 to 10/31	0.03 CFS	~~0.1 AF~~ 1.5
<u>Totals:</u>		0.03 CFS	~~0.1 AF~~ 1.5

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 Tammy Alleman -

Field Examiner's Name Tammy Alle Date 1-2-23

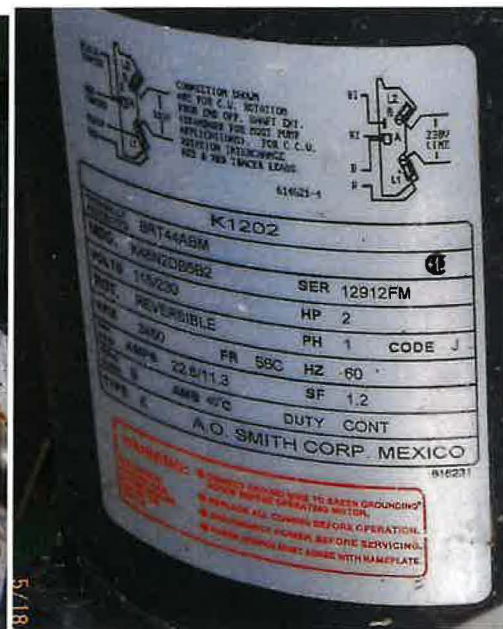
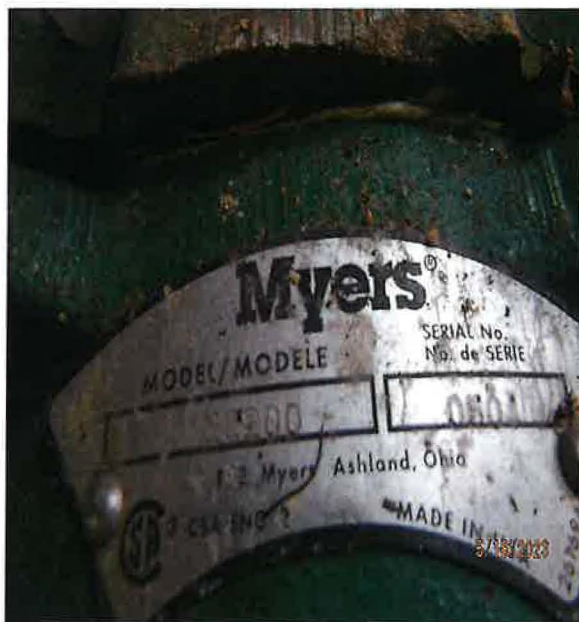
Reviewer _____ Date _____

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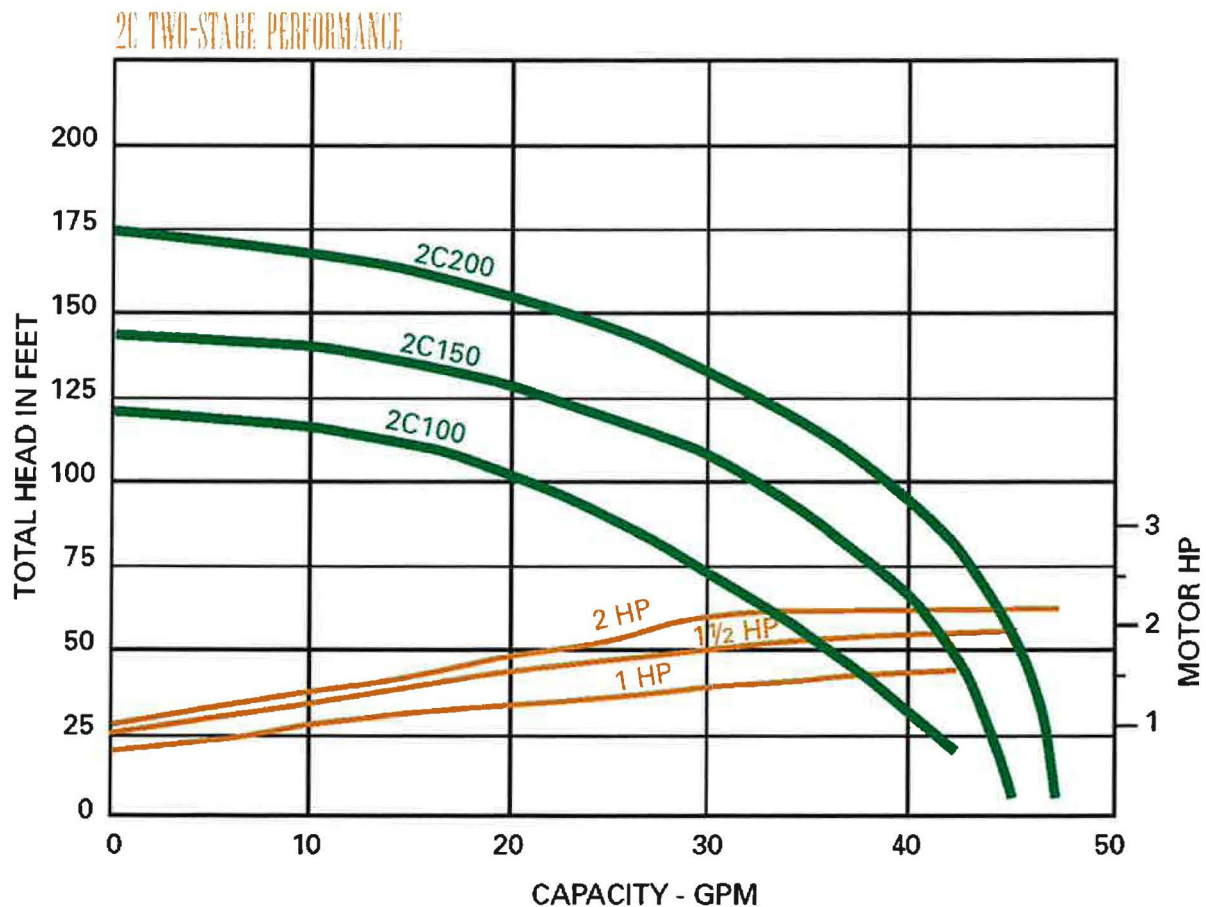
MYERS PUMP 20200 SN 0504



Myers Model 2C200 Two-Stage Centrifugal Specifications

- VOLTAGE: 230V, 60Hz
- HORSEPOWER: 2.0 HP
- MOTOR TYPE: Capacitor Start, Double Ball-Bearing
- MAXIMUM HEAD: up to 175'
- MAXIMUM CAPACITY: up to 47 GPM
- DISCHARGE PIPE SIZE: 1.0" NPT
- SUCTION SIZE: 1-1/4" NPT
- IMPELLER: Lead-Free Bronze
- BODY CONSTRUCTION: Cast Iron
- MAXIMUM LIQUID TEMPERATURE: 160°F (71°C)
- DUTY RATING: Continuous Duty

Myers Model 2C Two-Stage Centrifugal Pump Performance Data





POD - SCREENED INTAKE FROM PEND ORIELLE RIVER





POD - IRRIGATION LINE FROM DOCK TO PRESSURE TANK (BEOW) AND PUMP





POU - IRRIGATION BACKYARD





POU - IRRIGATION SIDE YARD





POU - IRRIGATION FRONT YARD





POU - IRRIGATION FRONT YARD

