

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-09431

Exam Date: 8/9/2016

1. Current Owner:

UPPER COLUMBIA MISSION SOCIETY PO BOX 19039 SPOKANE WA 99219 (208)263-3648

UPPER COLUMBIA CORP OF SEVENTH DAY ADVENTISTS PO BOX 19039 SPOKANE WA 99219
(208) 772-3484

2. Accompanied by: Nobody available.

3. **SOURCE:**

CHUCK SLOUGH

TRIBUTARY:

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

CHUCK SLOUGH NE¼SW¼ Sec. 21, Twp 57N, Rge 02W, B.M. BONNER County

Method of Determination: Maps and GPS. POD location at 48° 16.348, 116° 34.832

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	
57N	02W	21									2.7								2.7

Total Acres: 2.7

Method of Determination: Google Earth and Arc map.

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.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
GOULDS		1			

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

D. FLOW MEASUREMENTS

1.

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

2. Measurements: UNABLE TO PERFORM MEASUREMENT

E. FLOW CALCULATIONS

Measured Method: SEE ATTACHED PUMP CURVE THAT SHOWS DIVERSION RATE FOR SYSTEM.

X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.7 \text{ AC} \times 3.0 \text{ AF} = 8.1 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \times 214 \times 1.9835 = 29.7 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 8.1 \text{ AF}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

I attempted to schedule a time to perform exam but all contact information was no longer current. I was in the area and attempted to make contact with somebody at location but unsuccessful as well. I snapped photos of irrigation and took GPS location at point of diversion. During exam I was unable to verify what size the pump was. During licensing review I determined the control box was for a 1hp pump that produced 30 gpm. I attempted contacting the applicant on a new number to confirm information about the system. I was given the phone number of the Richard Tucker who engineered the system. He confirmed the pump produced 30 gpm and where the system irrigated. The system watered around the school, baseball field, and the west side of the church. The rest of the irrigation was from city water. Once irrigation was measured on Arc map it equaled 2.7 acres of irrigation. License will be issued for 0.07 cfs for the irrigation of 2.7 acres.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>
IRRIGATION	04/01 to 10/31	0.07 CFS
<u>Totals:</u>		0.070 CFS

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

 Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION

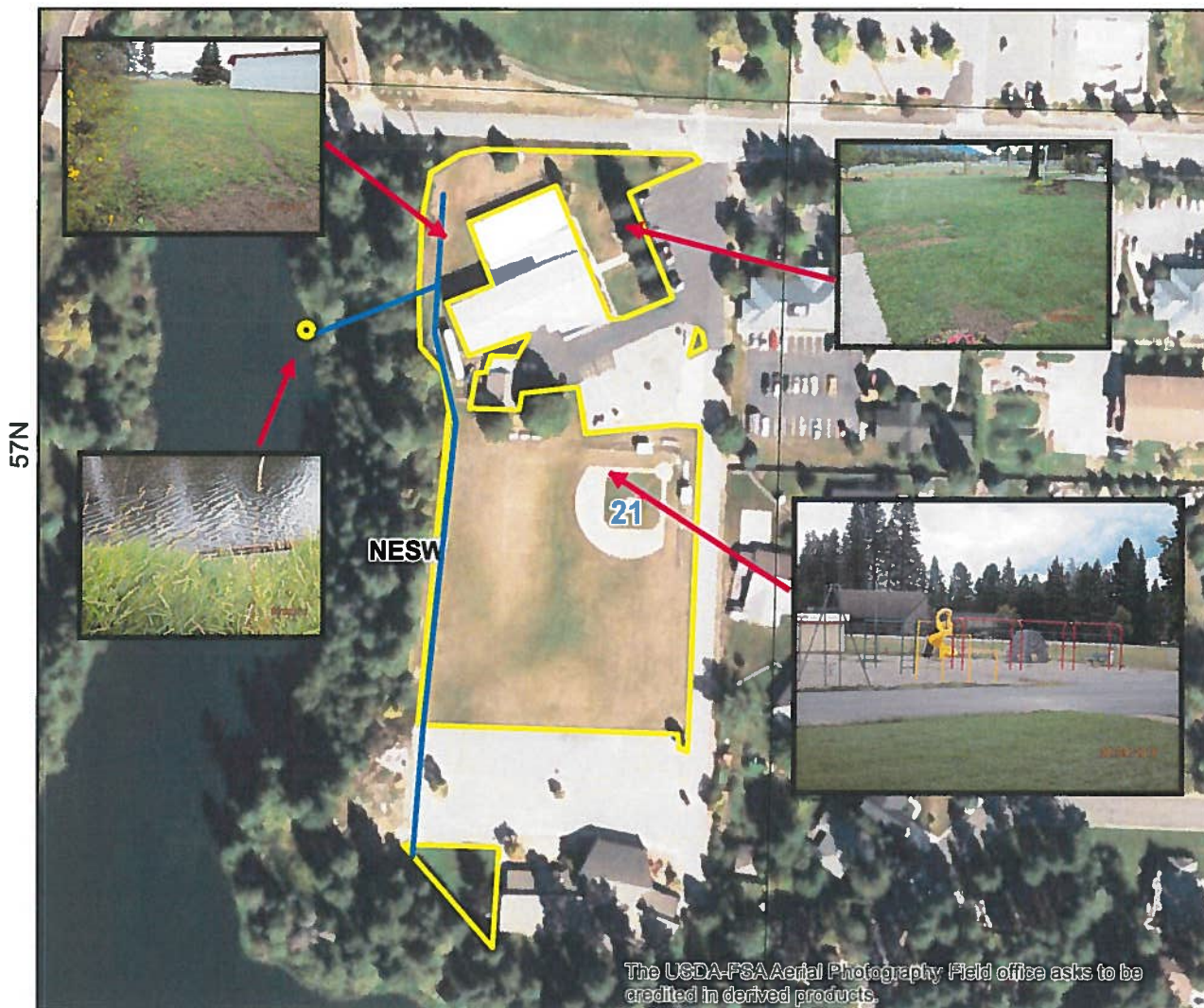
Field Examiner's Name Adm Franklin Date 3-22-17

Reviewer Morgan Cox Date 3/24/17

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9431

SYSTEM DIAGRAM

02W



0 0.0225 0.045 0.09 Miles

-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections



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IRRIGATION

02W

57N



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

0 0.035 0.07 0.14 Miles



SPECIFICATIONS

ALL BALANCED FLOW CONTROLLERS

Controller Temperature Range:

- Minimum Ambient Temperature: 0°F
- Maximum Ambient Temperature: 122°F (50°C)

Input Voltage: single-phase, 230 Volt, two (2) wire grounded system.

Output Voltage: variable frequency, variable voltage, three-phase power to the motor.

Speed Selector Switch: Selects Output Frequency of either –

- 30 - 60 Hz - Use matched HP WE and Motor
- 30 - 80 Hz - Use mis-matched WE and Motor

Enclosure Dimensions:

- Height: 18.6"
- Width: 9.9"
- Depth: 5.3"

Packaged Dimensions:

- Height: 21"
- Width: 13"
- Depth: 8"

BF20 SPECIFICATIONS

- HP Range: $\frac{3}{4}$ to 2
- Unit Weight: 19 lbs.
- Packaged Weight: 23 lbs.
- Pressure Set point adjustable from 20 - 85 psi using the standard 100 psi sensor. ①

BF30 SPECIFICATIONS

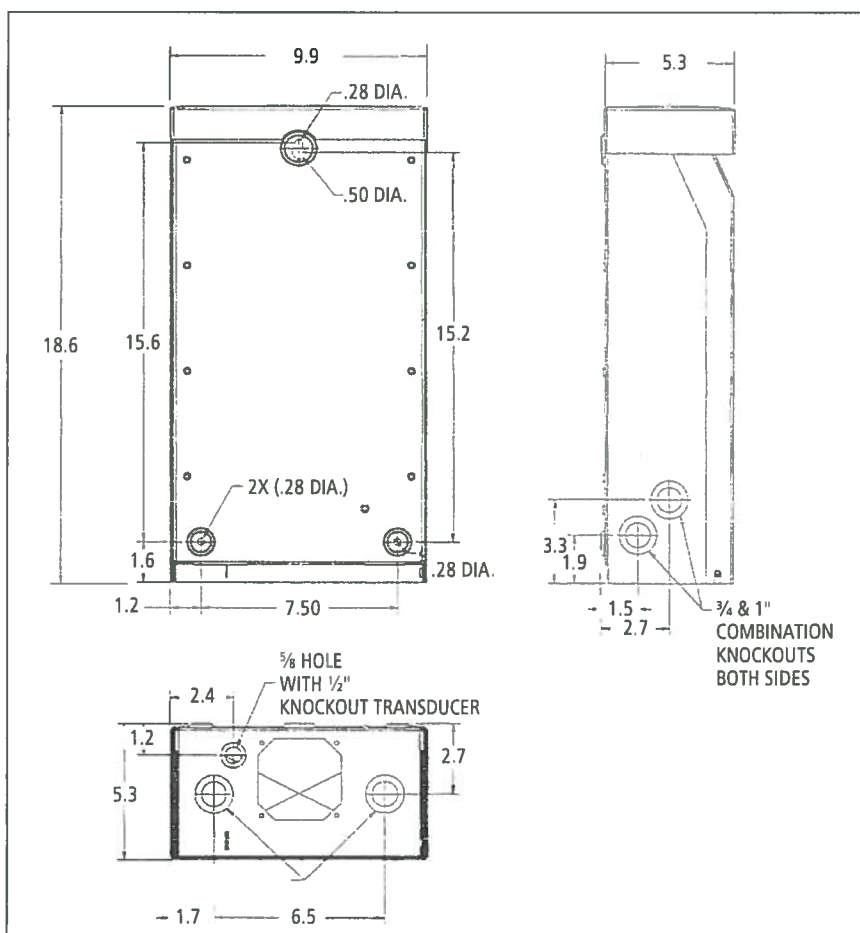
- HP Range: $\frac{3}{4}$ to 3
- Unit Weight: 20 lbs.
- Packaged Weight: 24 lbs.
- Pressure Set point adjustable from 20 - 85 psi using the standard 100 psi sensor. ①

BF50 SPECIFICATIONS

- HP Range: 3 to 5
- Unit Weight: 25 lbs.
- Packaged Weight: 29 lbs.
- Pressure Set point adjustable from 20 - 100 psi using the standard 200 psi sensor. ①

① Higher pressures are available using a higher pressure sensor. See page 7.

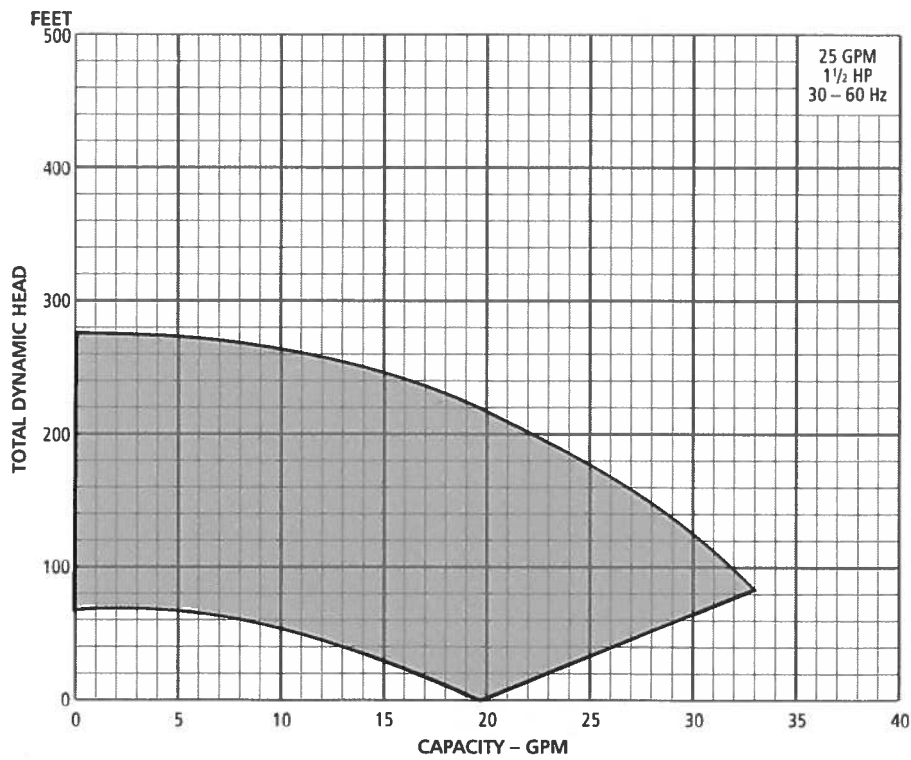
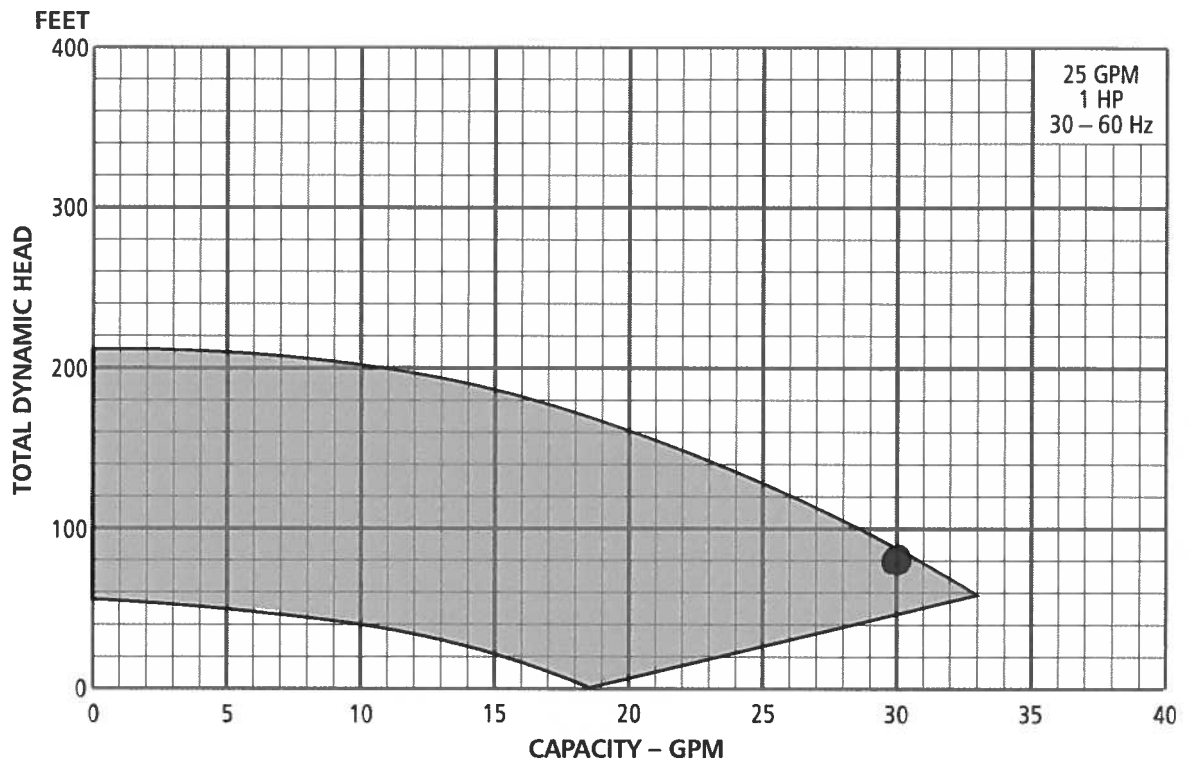
DIMENSIONS (inches)

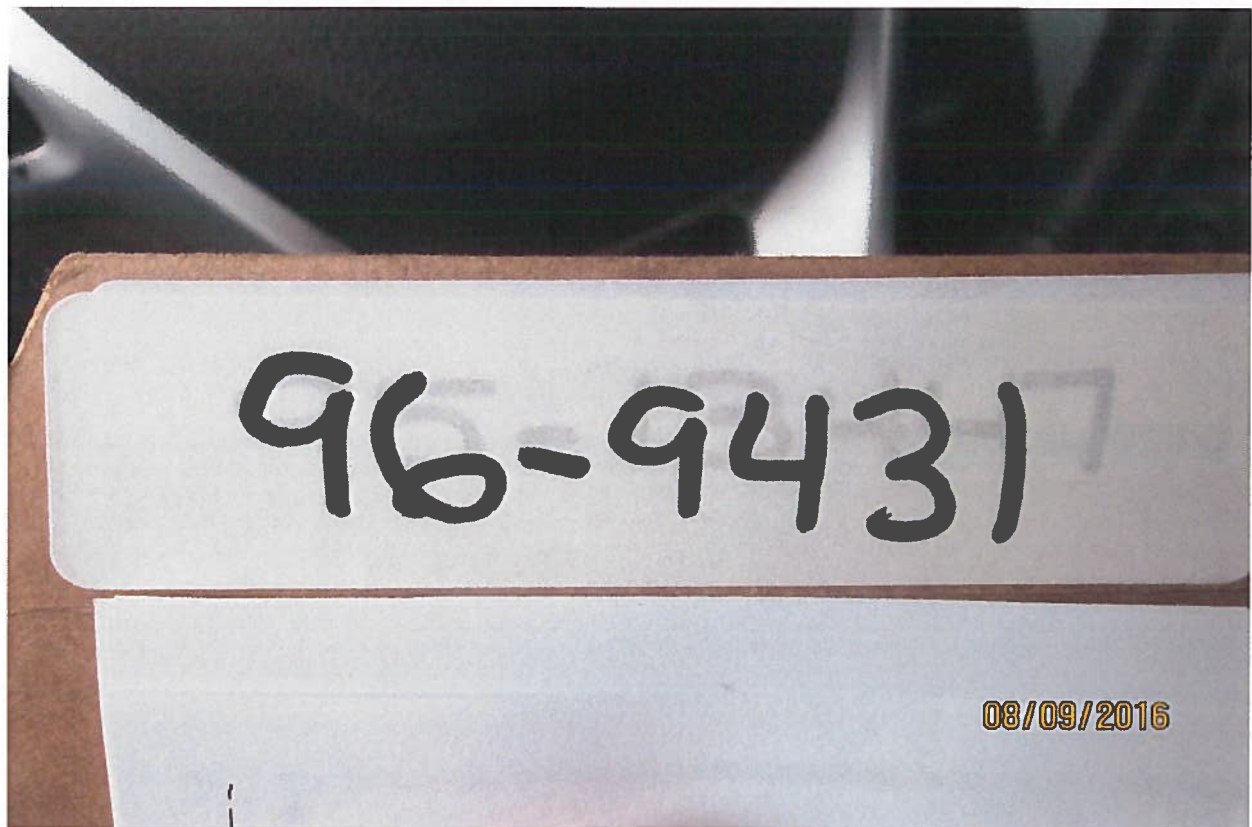




ITT

GOULDS PUMPS Residential Water Systems





Point of diversion. Could not get any close because it was very marshy.



Control box on shore.



Irrigation in front of school.



Irrigation in back of school.



Irrigation along Pine St.



Irrigation at baseball field.

