

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-9117

Exam Date: 10/11/2007

1. Current Owner: PINEVIEW ESTATES WATER DISTRICT
PO BOX 1177
HAYDEN ID 83835
(208)772-2673
2. Accompanied by: *Bob Kuch*
Phone No: *208-603-5054*
Address: *PO Box 468 ATHOL ID, 83801*
Relationship to Permit Holder: *Manager of Water*

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use:
2. Other water rights with the same point of diversion:

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SE1/4NE1/4 Sec. 11, Twp 51N, Rge 04W, B.M. KOOTENAI County

Method of Determination: *GPS / map*

2.

PLACE OF USE: MUNICIPAL

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
51N 04W 12							X			X							

Method of Determination:

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- Y Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- Y 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
45-78-N-19		50hp	B-HDF420B3	Goulds	8RJLC
Municipal					092806-06

*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
Flow	CALCULATIONS					

2. Measurements:

$$\frac{50\text{hp} \times 8.8 \times 0.8\text{eff}}{315\text{H}} = 1.117\text{ cfs}$$

MAX DIVERSION RATE
OF PERMIT 1.11 cfs

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Measured Method:

PUMP EQUATIONS WATER RIGHT No.			WELL 95-9117		
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q = HP*8.8*Eff/H	50	317.3129252	0.8	315	1
Q = 1.111 cfs			498.7 gpm		

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = N/A$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = N/A$$

2. Volume Calculations for Other Uses:

Municipal

G. NARRATIVE/REMARKS/COMMENTS In this field exam I found out that well has been updated with a new Goulds Turbine 3600 Pump. Please see attached pump data sheet for all the pump information.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>
MUNICIPAL	01/01 to 12/31	1.060 CFS
<u>Totals:</u>		1.060 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 ___ Other

I. AUTHENTICATIONField Examiner's Name *Eric J. [Signature]* Date 12-17-2007Reviewer *[Signature]* Date 12/27/7

H2O Well Service
 Mike Colante
 Pineview Water

PUMP DATA SHEET Goulds Turbine 60 Hz

Goulds Turbine Pump Selection ver: 6.02
 06/21/99

Selection file: (untitled)
 Catalog: TURB60.MPC v 1.4.3

Curve: E6208REPCD

Design Point: Flow: 475 US gpm
 Head: 314 ft

Fluid: Water Temperature: 60 °F
 SG: 1
 Viscosity: 1.122 cP
 Vapor pressure: 0.2568 psi_a
 Atm pressure: 14.7 psi_a

Pump: TURBINE - 3600 Size: 8RJLC (4 stages)
 Speed: 3450 rpm Dia: 5.25 in

NPSHr: --- ft

Limits: Temperature: --- °F Sphere size: 0.43 in
 Pressure: 425 psi_g Power: --- bhp

Piping: System: ---
 Suction: --- in
 Discharge: --- in

Specific Speed: Ns: 2699 Nss: ---

Dimensions: Suction: 5 in Discharge: 5 in

Vertical Turbine: Bowl Dia: 7.5 in Max Lateral: 0.63 in
 Thrust K Factor: 4

Motor: 50 hp Speed: 3600 Frame: 326TS
 NEMA Standard TEFC Enclosure
 sized for Max Power on Design Curve

6" Disch dia also avail.

--- Data Point ---

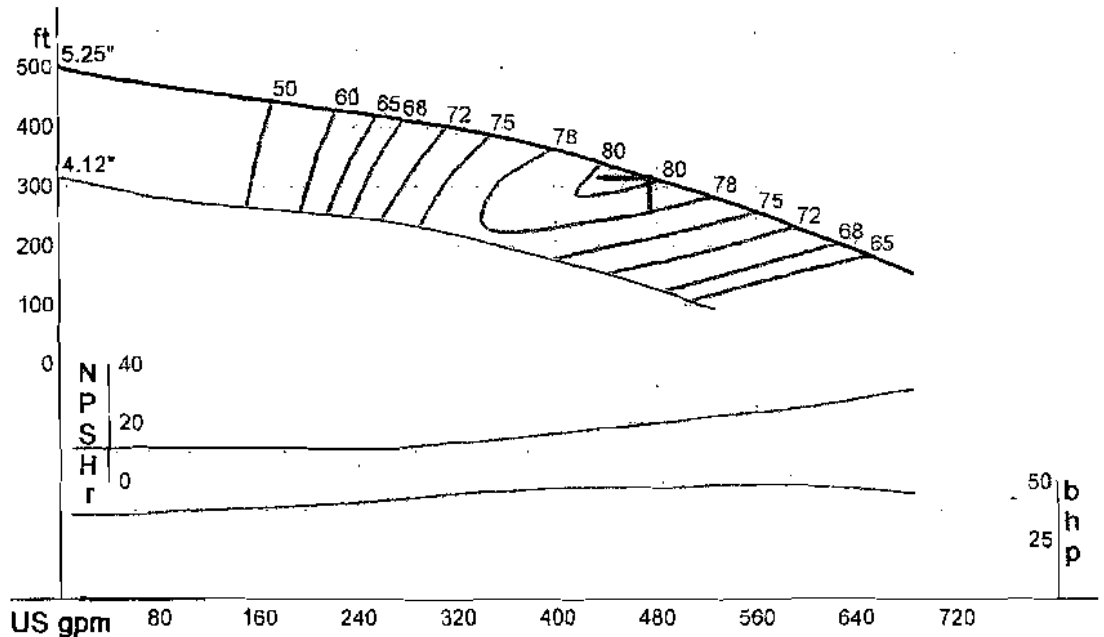
Flow: 475 US gpm
 Head: 315 ft
 Eff: 80%
 Power: 47.3 bhp
 NPSHr: 19.5 ft

-- Design Curve --

Shutoff Head: 502 ft
 Shutoff dP: 217 psi
 Min Flow: - US gpm
 BEP: 80% eff
 @ 465 US gpm
 NOL Pwr: 48.4 bhp
 @ 563 US gpm

-- Max Curve --

Max Pwr: 48.4 bhp
 @ 563 US gpm



-- PERFORMANCE EVALUATION --

Flow US gpm	Speed rpm	Head ft	Pump %eff	Power bhp	NPSHr ft	Motor %eff	Motor hp	Hrs/yr	Cost kW
570	3450	250	74.3	48.4	23.9				
475	3450	315	80	47.3	19.5				
380	3450	372	76.9	46.3	15.3				
285	3450	410	68.8	42.8	11.8				
190	3450	439	53.4	39.2	11				

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WELL SITE.JPG



WELL ID.JPG



WELL LOCATION.JPG



PUMP DATA.JPG

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MODEL/SCHEMATIC #		B-HDP42083	
VOLTAGE	460	PHASE	3 HERTZ 60
LARGEST HP.	50	LARGEST MOTOR F.L.A. 65.0	
DATE MFGR.	10-06	TOTAL F.L.A. 67.5	
ENCL. TYPE	4X	SERIAL # 092806-06	
SHORT CIRCUIT CURRENT: 5 kA RMS			
SYMMETRICAL, 460 V MAXIMUM JEH			
CSI controls			
Chandler Systems, Inc. - 220 Ohio Street - Ashland, Ohio 44805			



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