

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-09546

Exam Date: 8/11/2016

1. Current Owner:
DIAMOND T RANCH 5361 RIVER RD CLARK FORK ID 83811 (208)266-0490
2. Accompanied by: Thomas Wagoner
Relationship to Permit Holder: Owner
3. **SOURCE:**
SPRING
- TRIBUTARY:**
SINKS

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: 96-4203

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

SPRING SW¼SW¼NW¼ Sec. 29, Twp 55N, Rge 03E, B.M. BONNER County

Method of Determination: Maps and GPS. POD location at 48° 05.259, 116° 06.973

2.

PLACE OF USE: FIRE PROTECTION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
55N	03E	29							X										

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
55N	03E	29							X										

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
	FLOTEC	3/4	FP4022-10	C48J2EC11C3	

*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:

E. FLOW CALCULATIONS

Measured Method: UNABLE TO PERFORM FLOW MEASUREMENT. SEE ATTACHED SPECIFICATIONS ON PUMP USED THAT SHOW MAXIMUM DIVERSION RATE.

X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses:

DOMESTIC USE FOR 7 CABINS WITH AVERAGE OCCUPANTS PER CABIN IS 2

14 OCCUPANTS X 100 GPD = 1,400 GPD

1,400 GPD X 365 DAYS = 511,00 GPY / 325,850 GAL/AF = 1.6 AF

G. NARRATIVE/REMARKS/COMMENTS

Field exam with Thomas Wagoner (Owner) showed a spring with small ¾ hp pump. The Diamond T Ranch had full time owner/caretaker home that was covered under statutory claim 96-4203. The ranch also had 7 guest cabins, 1 of which had burned down but had plumbing available for when it was rebuilt. The ranch was used by guests year round.

At time of exam, there were no guest's present and no demand on the system. There was also no proper place to measure because of very old out building with floorboards that were falling apart. Pump model number was looked up during license review and was found that pump had a maximum diversion rate of 12 gpm or 0.03 cfs.

Cabin's had an average occupancy of 2 guests per cabin. Average water usage at a luxury camp with full amenities is 100 gallons per day per guest. The 7 cabins annual usage is equal to 511,000 gallons or 1.6 acre feet. License will be issued for 0.03 cfs with an annual volume for domestic for 7 cabins at 1.6 acre feet. Fire protection will be given a diversion rate of 0.03 cfs with no annual volume. The source will be corrected at licensing to show spring tributary to sinks instead of unnamed springs tributary to sinks.

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>	<u>ANNUAL VOLUME</u>
FIRE PROTECTION	01/01 to 12/31	0.03 CFS	
DOMESTIC	01/01 to 12/31	0.03 CFS	1.6 AF
	<u>Totals:</u>	0.030 CFS	1.60 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

Field Examiner's Name Adam Funch Date 3-31-2017

Reviewer Morgan Case Date 4/11/2017

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9546

DOMESTIC / SYSTEM DIAGRAM



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

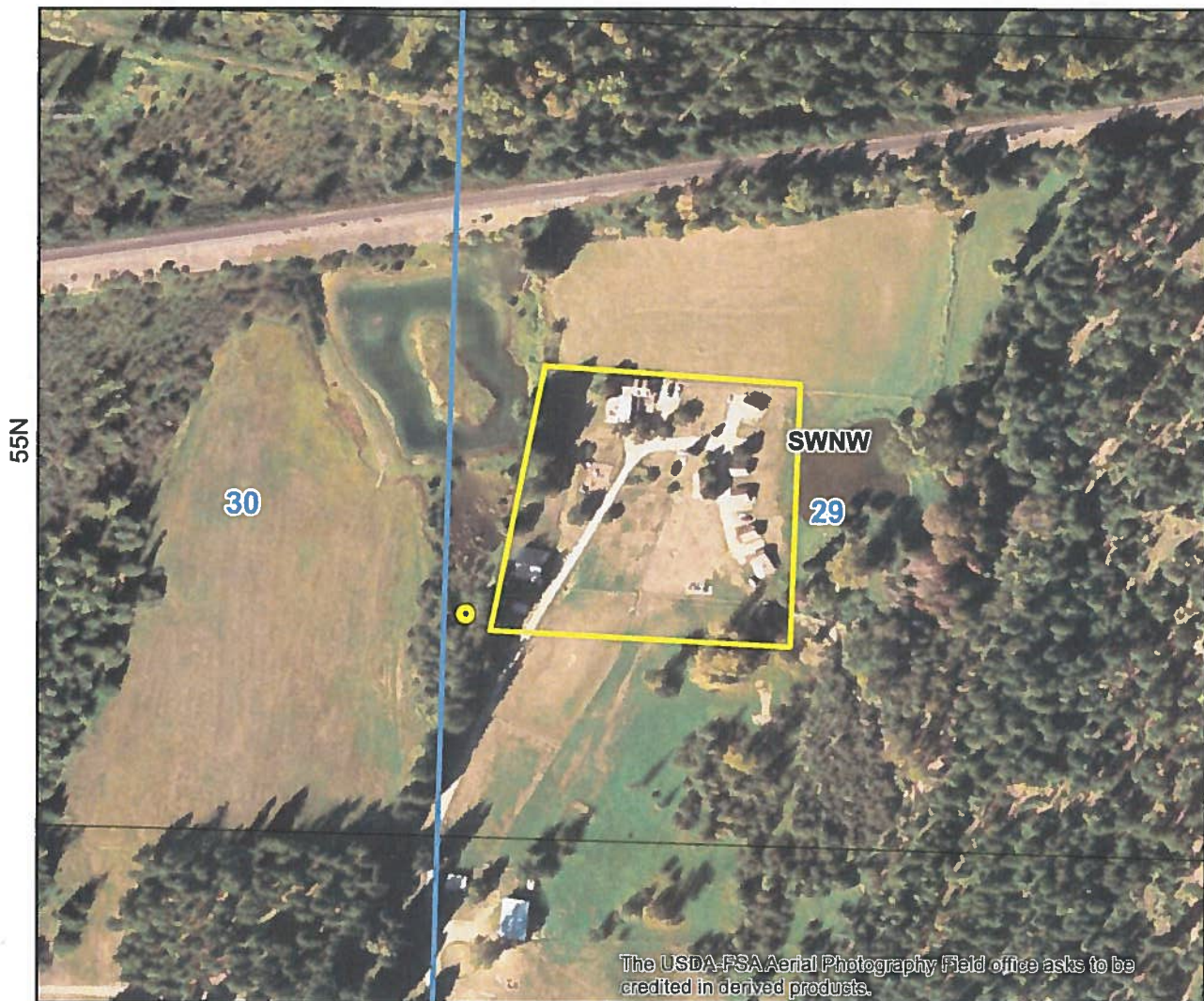
0 0.0225 0.045 0.09 Miles



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FIRE PROTECTION

03E



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

0 0.035 0.07 0.14 Miles




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FP4022-10 | 3/4 HP THERMOPLASTIC SHALLOW WELL JET PUMP

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Model FP4022-10

Thermoplastic Shallow Well Jet Pump 3/4 HP

This new revision of an "old hand" provides good pressure pumping from wells where the depth-to-water is 25' or less

KEY FEATURES

- Perfect for shallow wells (depth-to-water less than 25')
- Thermoplastic construction for higher corrosion resistance
- 1-1/4" Suction / 1" Discharge
- Comes with pre-wired 30/50 pressure switch

WARRANTY

1 year limited warranty



SPECIFICATIONS

RESOURCES

BODY CONSTRUCTION: Thermoplastic

HORSEPOWER: 3/4

MAXIMUM CAPACITY: 12 GPM

FLOW at 10' LIFT and 40 PSI: 9.7 GPM

MAX LIFT: 25'

MAXIMUM PRESSURE: 78 psi

PRESSURE SWITCH SETTING: 30/50

SUCTION PIPE SIZE: 1-1/4" NPT

DISCHARGE PIPE SIZE: 1" NPT

AMP DRAW (full load): 6.1 amps on 230v / 12.2 amps on 115v

VOLTAGE: 230v / 115v, 60 Hz

RECOMMENDED BREAKER: 15 amp on 230v / 20 amp on 115v

MAXIMUM WATER TEMPERATURE: 140 °F (60 °C)

Performance

Performance			
Flow (GPM)	Head (ft)	Pressure (psi)	Efficiency (%)
12	10	40	100
10	20	30	85
8	30	20	70
6	40	10	55
4	50	0	40

Accessories

- FP4022-08 OVERHAUL KIT
- SEAL AND GASKET KIT - FP4000-08 SERIES
- 1-1/4" BRASS FOOT VALVE
- 1-1/4" PLASTIC FOOT VALVE
- WELL SEAL 2" X 1-1/4"
- WELL SEAL 4" X 1-1/4"
- WELL SEAL 6" X 1-1/4"

Interactive Guide



VIRTUAL HOUSE

Use our interactive water solutions guide to find products for all your home waterflow needs. Take the tour to see how our products work throughout your home.

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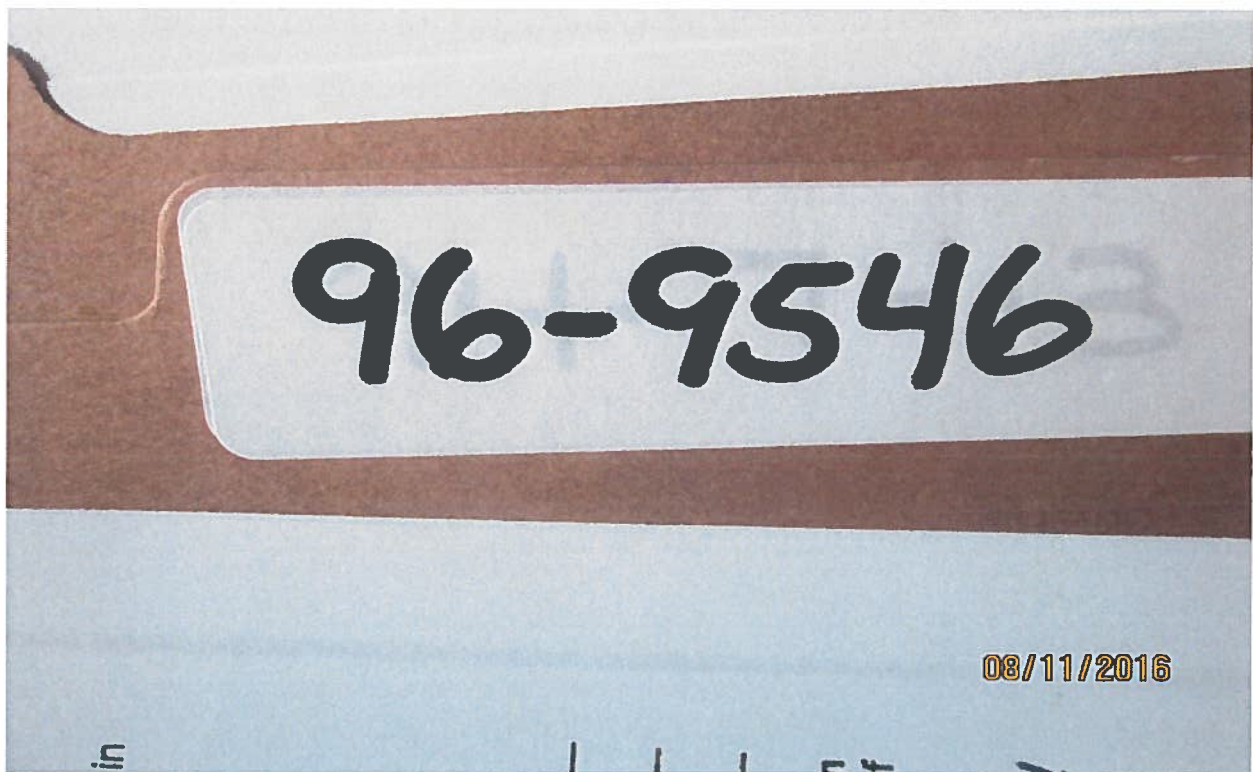
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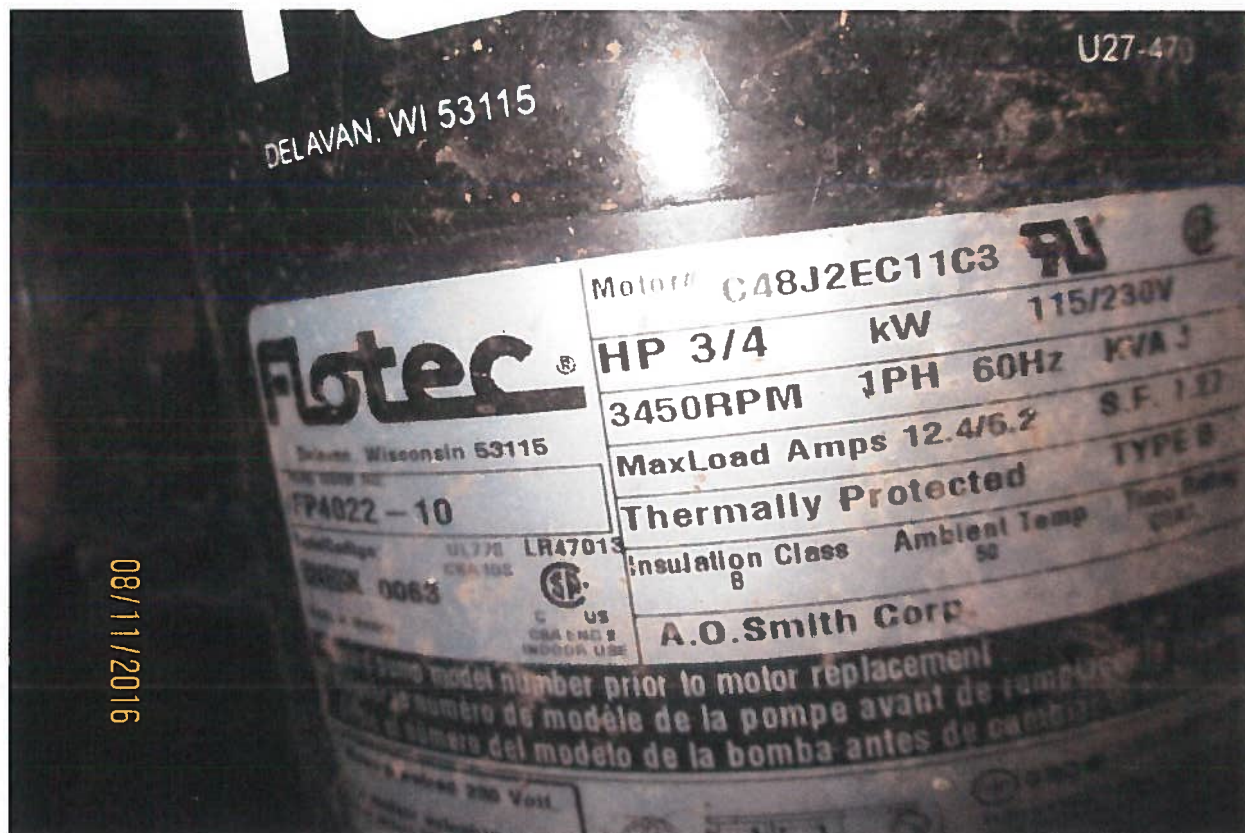
Table 3

NON-IRRIGATION WATER REQUIREMENTS

Types of Establishments	<u>Gallons/day</u>
Airports (per passenger)	3-5
Apartments, multiple family (per resident)	60
Bathhouses (per bather)	10
Camps:	
Construction, semi-permanent (per worker)	50
Day with no meals served (per camper)	15
Luxury (per camper)	100-150
Resorts, day & night, limited plumbing (per camper)	50
Tourist, central bath & toilet facilities (per person)	35
Cottages with seasonal occupancy (per resident)	50
Courts, tourist with individual bath units (per person)	50
Clubs:	
Country (per resident member)	100
Country (per non-resident member)	25
Dwellings:	
Boardinghouses (per boarder)	50
Kitchen requirements (per boarder)	10
Multiple family apartments (per resident)	40
Roominghouses (per resident)	60
Single family (per resident)	50-75
Estates (per resident)	100-150
Hotels:	
With private baths (2 persons/room)	60
Without private baths (per person)	50
Hospitals (per bed)	250-400
Institutions other than hospitals (per person)	75-125
Laundries (per washing/customer)	50



Spring and spring box.



Flotec ¾ hp pump from spring. Specs show max diversion rate is 12 gpm or 0.03 cfs.



Cabin 1.



Cabin 2.



Cabin 3 stub in.



Cabin's 4, 5, 6 and 7.

