

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-10203

Exam Date: 5/3/2016

1. Current Owner:
TIMOTHY KASTNING 10035 N HAPPY TRAIL RATHDRUM ID 83858 (208) 699-3700

2. Accompanied by: Timothy Kastning and Mike Rudbeck

3. SOURCE: GROUND WATER**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: 95-9112

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

GROUND WATER SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 17, Twp 51N, Rge 04W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location at 47° 45' 812, 116° 51' 762 (A0015446)

2.

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	
51N	04W	17									X								

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	
51N	04W	17									7.4								7.4

Total Acres: 7.4

Method of Determination: GPS and maps.

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.

XX

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
D0022457					

*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
ULTRA SONIC FLOW METER	GE	PANAMETRIC	PT878	281889	2MG	3-29-2016

2. Measurements: MEASUREMENT OF SYSTEM CAPACITY WAS AT 75.0 GPM MEASURED OVER 10 MINUTES.

E. FLOW CALCULATIONS

Measured Method:

_____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 7.4 \text{ AC} \times 3.0 \text{ AF} = 22.2 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15 \times 246 \times 1.9835 = 73.2 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 22.2 \text{ AF}$$

2. Volume Calculations for Other Uses: DOMESTIC USE FOR 1 HOME = 0.6 AF

G. NARRATIVE/REMARKS/COMMENTS

FIELD EXAM SHOWED APPLICANT HAD WELL TO SUPPLY HOME AND THE IRRIGATION OF 7.4 ACRES. IDWR WAS ABLE TO PERFORM FLOW MEASUREMENT USING GE PANAMETRIC METER AND MEASURED 75.0 GPM OR 0.17 CFS FOR IRRIGATION. IDWR ASKED APPLICANT TO TURN IRRIGATION SYSTEM ON AT FULL CAPACITY TO GET MEASUREMENT. BECAUSE LICENSE WILL BE ISSUED FOR 7.4 ACRES, DIVERSION RATE WILL BE GIVEN AT 0.15 CFS. APPLICANT APPLIED FOR 0.20 CFS OF TOTAL DIVERSION AND WHEN DOMESTIC USE IS ADDED LICENSE WILL GIVEN AT 0.19 CFS WITH ANNUAL VOLUME OF 22.8 AF.

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>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF
IRRIGATION	03/15 to 11/15	0.15 CFS	22.2 AF
	<u>Totals:</u>	0.190 CFS	22.80 AF

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 Adam Funder Date 5-6-2016

Reviewer Morgan Cox Date 5-20-2016

State of Idaho
Department of Water Resources
Water Right License
95-10203



0 0.035 0.07 0.14 Miles

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



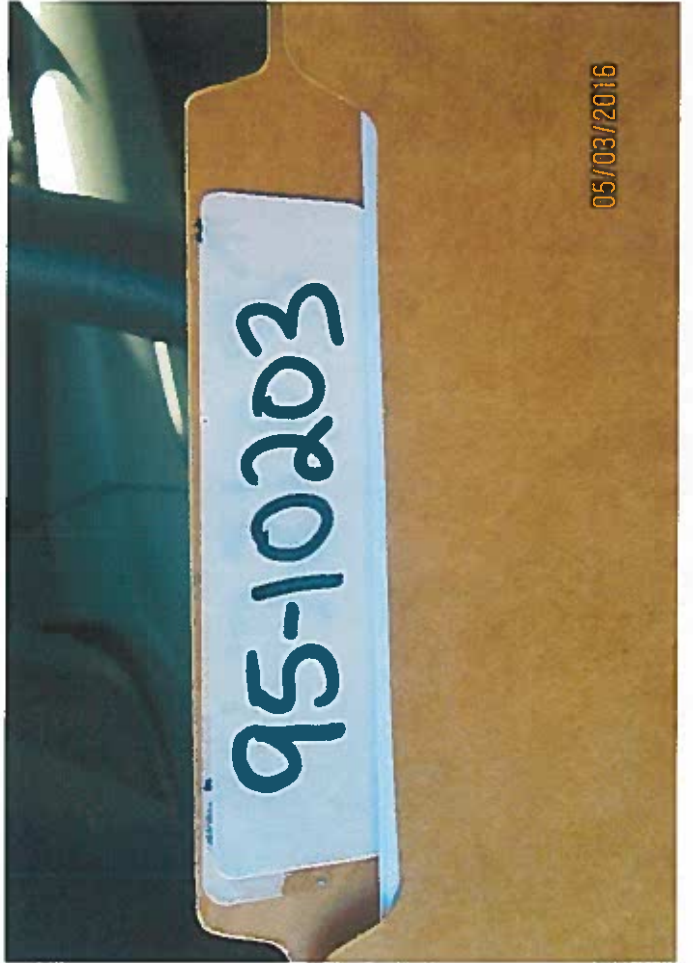
State of Idaho
Department of Water Resources
Water Right License
95-10203



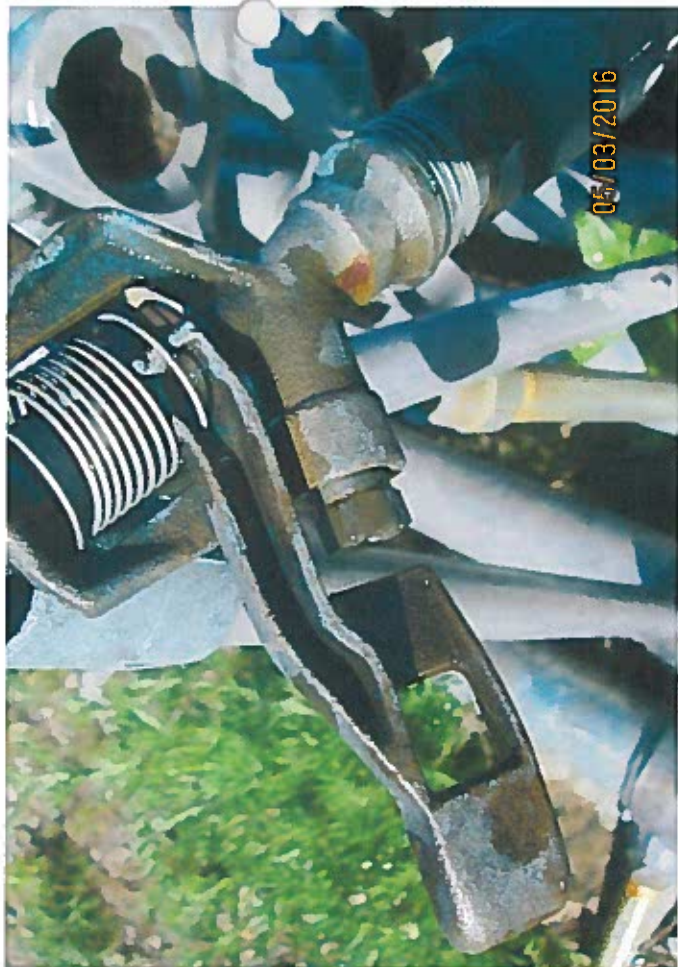
0 0.035 0.07 0.14 Miles

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

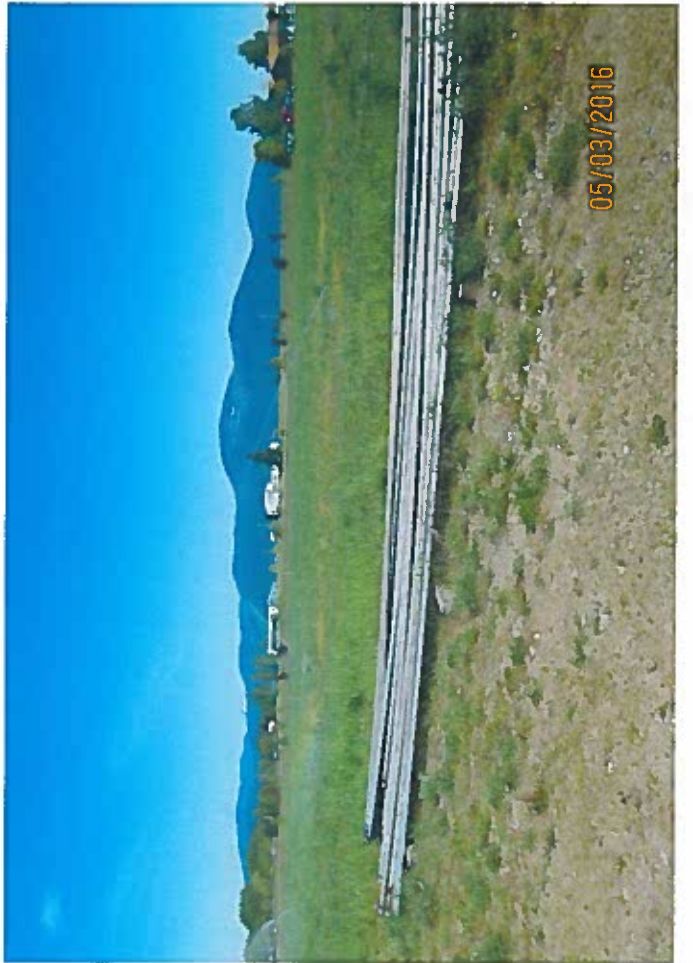
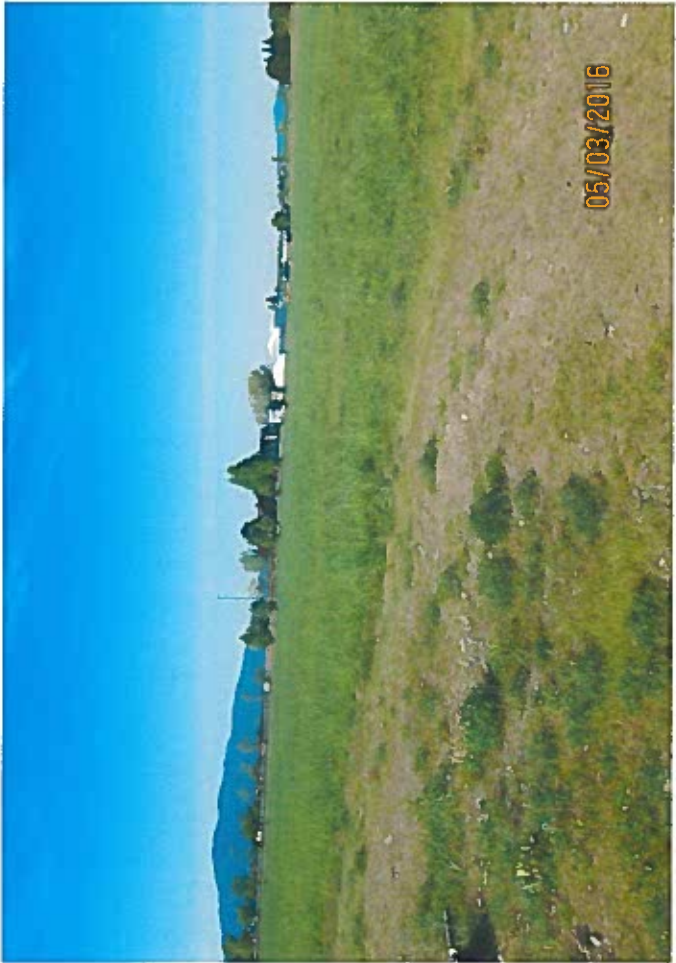




95-10203



95-10203



95-10202



95-10702

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat _____ Long _____
☒ Air ☐ Flowing Artesian

1. WELL TAG NO. D 0022457
DRILLING PERMIT NO. 779078
Other IDWR No. _____

2. OWNER:
Name Tim Kastning
Address 10035 N. Happy Trails Rd.
City Rathdrum State ID Zip 83858

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

Tw. 51 North ☒ or South ☐
Rge. 4 East ☐ or West ☒
Sec. 17 1/4 NE 1/4 SW 1/4
Gov't Lot _____ County Kootenai
Lat _____ Long _____
Address of Well Site 10035 N. Happy Trails Road
City Rathdrum

Lt. _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
Bentonite	0	20	10 sacks	dry granular	

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	+2	309	250	Steel	☒	☐	☐	☐

Length of Headpipe 2' Length of Tailpipe 0

9. PERFORATIONS/SCREENS

Perforations Method _____
Screens Screen Type Johnson Stainless

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
309	314	80		8"	S.S.	☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

258 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

51N 4W 17

11. WELL TESTS:

Yield gal/min.	Drawdown	Pumping Level	Time
100+			

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	9	Gravel, coarse		
	9	12	Cobbles, gravel		
12	12	20	Gravel, coarse		
10	20	46	Gravel, coarse		
	46	87	Gravel, sand		
	87	92	Cobbles, sand		
	92	131	Gravel, sand		
	131	143	Sand, gravel		
	143	166	Sand, coarse		
	166	200	Sand, silt		
	200	216	Silt		
	216	241	Sand, gravel, silt		
	241	260	Sand, gravel	x	
	260	285	Gravel, sand	x	
	285	290	Gravel, sand, fine	x	
	290	299	Gravel, sand, medium	x	
	299	310	Sand, gravel, coarse	x	
	310	314	Gravel, sand, coarse	x	

RECEIVED
AUG 21 2002
IDWR North

Completed Depth 314' (Measurable)
Date: Started 6/20/02 Completed 7/01/02

13. DRILLER'S CERTIFICATION

We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name McCarty Drilling & Pump Inc. Firm No. 586

Firm Official [Signature] Date 7-4-02
and _____

Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES