

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-10781

Exam Date: 7/17/2018

1. Current Owner:
MICHAEL HICKLE 10409 W LYNX TRAIL COEUR D ALENE ID 83814 (602) 432-3953
And/Or
DONNA HICKLE 10409 W LYNX TRAIL COEUR D ALENE ID 83814 (602) 432-3953

2. Accompanied by: Michael Hickle
Phone No:
Address:
Relationship to Permit Holder: Applicant

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: None

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

GROUND WATER NW¼NE¼ Sec. 35, Twp 50N, Rge 05W, B.M. KOOTENAI County

Method of Determination: Maps and GPS. POD D0040343 located at -116° 55.513, 47° 38.583 given IDWR tag A0020104.

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	
50N	05W	35		1.5															1.5

Total Acres: 1.5

Method of Determination: Google Earth and Arcmap.

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
D0040343	FRANKLIN	2			

*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: N/A

E. FLOW CALCULATIONS

Measured Method: Unable to perform flow measurement because there was no proper space and pipe was buried to pressure tank. Theoretical pumping equation estimates flow rate of 0.03 cfs or 13.3 gpm.

X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.5 \text{ AC} \times 3.0 \text{ AF} = 4.5 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ CFS} \times 246 \times 1.9835 = 14.6 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 4.5 \text{ AF}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

Field exam with applicant, Michael Hickie, showed a well serving water for the irrigation of 1.5 acres. The well, D0040343 was equipped with a 2hp Franklin pump and given IDWR tag A0020104. The water line from the well was buried and surfaced in a pump house where it fed a pressure tank. There was no proper location to perform a flow measurement so a theoretical equation will be used. Theoretical pumping equation estimates a flow rate of 13.3 gpm or 0.03 cfs.

The applicant had a large fenced off garden area that was equal to 1.5 acres. During the exam, there was limited irrigation due to a garden bug that had devastated most of the garden. The applicant said the garden was in high production but the last couple of years had been in decline because of the infestation. He was working with the University of Idaho to figure a way to beat or grow things that were resistant. Aerial photography from 2013 shows the garden in full production and will be used to determine the actual acreage.

License will be issued for a diversion rate of 0.03 cfs with an annual volume of 4.5 acre-feet. Condition 26A will be removed from license and conditions R66 and 004 will remain on license. There are no overlap concerns.

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>
IRRIGATION	03/15 to 11/15	0.03 CFS	4.5 AF
<u>Totals:</u>		0.030 CFS	4.50 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

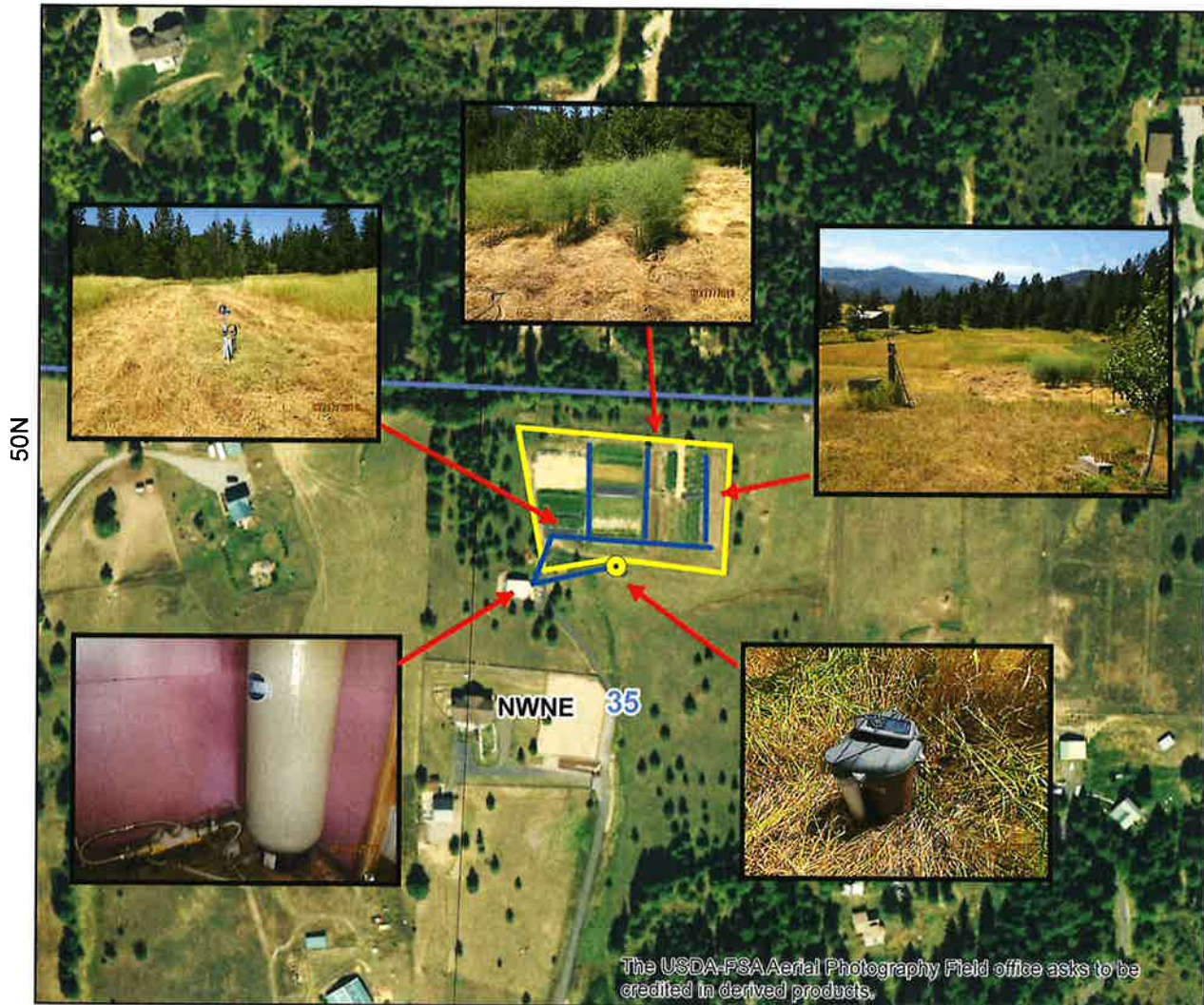
Field Examiner's Name Adi Fink Date 10/23/2018

Reviewer Douglas Jones P.E. Date 1/28/2019

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-10781

IRRIGATION / SYSTEM DIAGRAM

05W



0 0.035 0.07 0.14 Miles

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



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:	

1. WELL TAG NO. D0040343

Drilling Permit No: 834698
Other IDWR No.

2. OWNER

Name OROSZ, EMERY & MARY #2 Well Number: 998
Address 5603 MICA VIEW RD
City CD'A State ID Zip 83814

3. LOCATION OF WELL by legal description

sketch map location must agree with written location

N	
W	
E	
S	

Twp. 50 ☒ North or ☐ South
Rge. 05 ☐ East or ☒ West
Sec. 35 NW 1/4 NW 1/4 NE 1/4
Gov't Lot County KOOTENAI
Lat: : : Long: : : :

Address of Well Site LYNX TRAIL
OFF COUGAR GULCH City CD'A

(Give at least name of road + Distance to Road or Landmark)

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	18	150 LB	OVERBORE

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 18 F

Was drive shoe seal tested? ☒ Y ☐ N How? AIR

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	+2	90	.250	STEEL	☒	☐	☒	☐
5	64	400	.250	STEEL	☒	☐	☒	☐

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS

☒ Perforations Method TORCH

☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
380	400	1/4 X 5	48	5	STEEL	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

90 ft. below ground Artesian pressure lb.

Depth flow encountered ft. Describe access port or control devices;

50 N 5W 35

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
35 - 40			1 HR

Water Temp. COLD Bottom Hole Temp COLD

Water Quality test or comments: CLEAR

Depth first Water encountered 90 FT

12. LITHOLOGIC LOG:(Describe repairs or abandonment)

				Water	
Bore Diam	From	To	Remarks: Lithology, Water Quality, Temperature	Y	N
8	0	3	TOP SOIL	☐	☒
8	3	18	BROWN CLAY W/SAND HARD PAN	☐	☒
6	18	84	BROWN CLAY W/SAND HARD PAN	☐	☒
6	84	90	DECOMPOSED GRANITE 1GPM	☒	☐
6	90	170	DECOMPOSED GRANITE	☐	☒
6	170	200	GRAN. WHT. BLK. BRN MED	☐	☒
6	200	220	GRAN. WHT. BLK. BRN MED 1GPM	☒	☐
6	220	260	GRAN. WHT. BLK. BRN. MED 6GPM	☒	☐
6	260	295	GRAN. BLACK & WHITE MED	☐	☒
6	295	310	GRAN. BLK & WHT W/BUE CLAY	☐	☒
6	310	330	GRAN. WH BLK BRN FRAC 2 GPM	☒	☐
6	330	380	GRAN. WHT. BLK. BRN MED	☐	☒
6	380	400	GRAN. WHT. BLK. BRN 25+GPM W/	☒	☐

RECEIVED
AUG 15 2005
DWR North

Completed Depth 400 (Measurable)
Date: Started 7/18/2005 Completed 7/20/2005

13. DRILLER'S CERTIFICATION

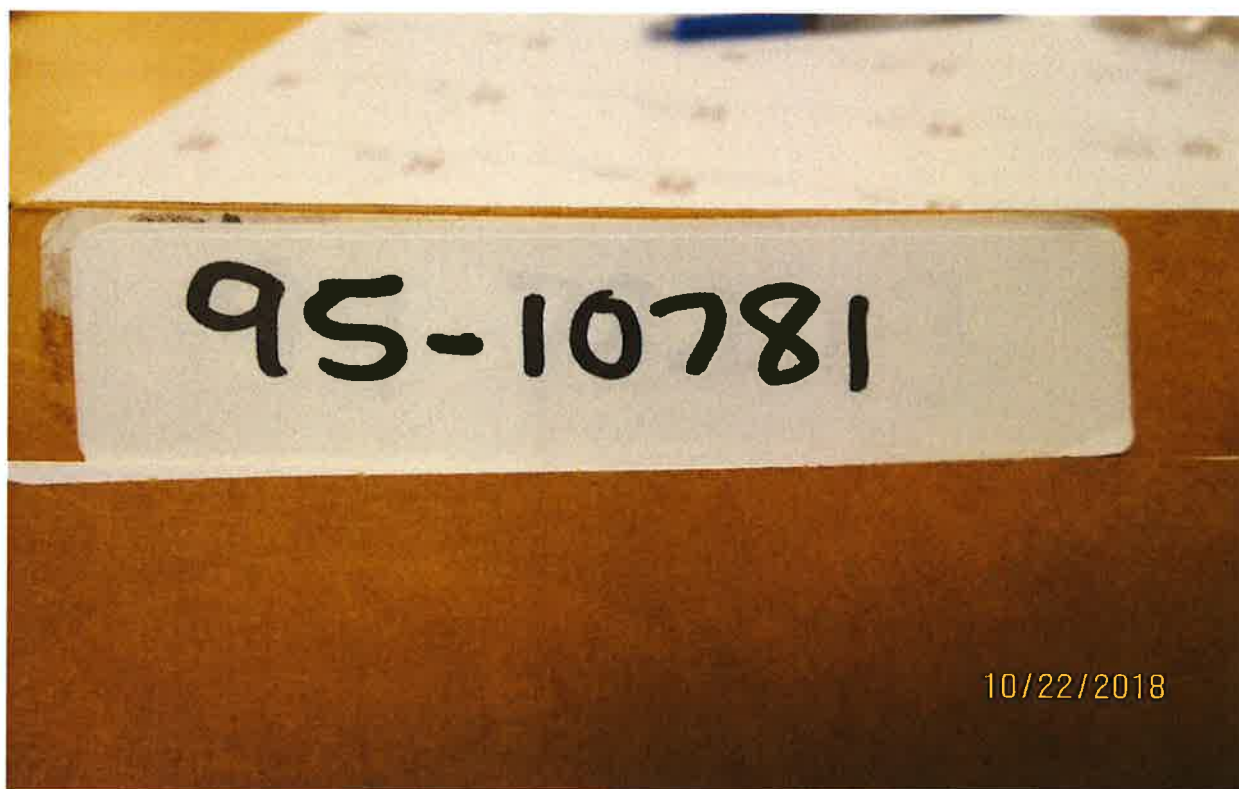
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name H2O Well Service Inc. Firm No. 448
Firm Official [Signature] Date 7-26-05
and
Supervisor or Operator [Signature] Date 7-26-05
MIKE HALTERMA (Sign Once if Firm Official and Operator)

Theoretical Pumping Equation for Water Right 95-10781

Theoretical pumping equation is required because water is diverted from the well directly into pressure tank. Well had a 2hp Franklin pump that is estimated to be set at 385 feet and running at 40 psi.

PUMP EQUATIONS WATER RIGHT No. 95- 10781						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	2	477.517	0.8	385	40
Q =	0.030 cfs		13.3 gpm			



POD, D0040343 given IDWR tag A0020104.



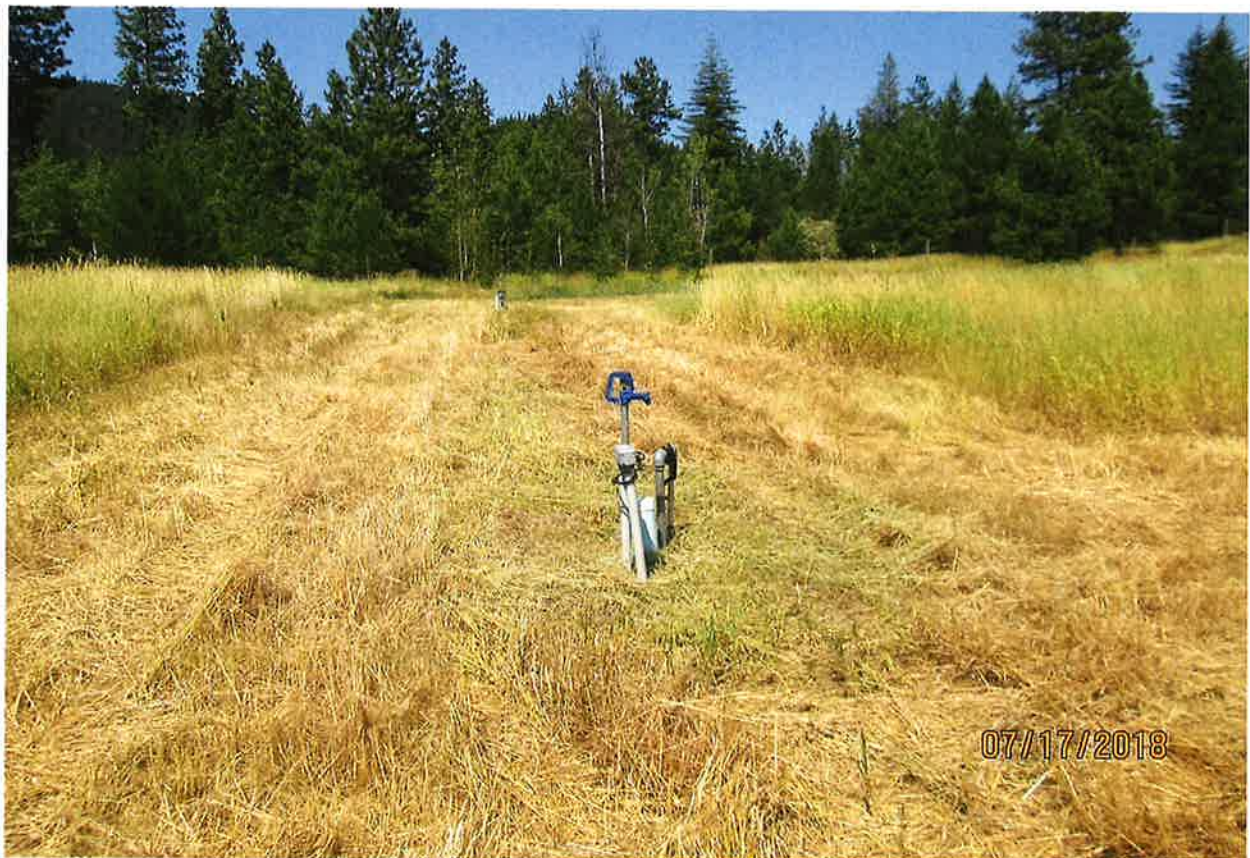
Well tag.



2hp Franklin pump in well.



Unable to perform flow measurement because water diverted to pressure tank and then to irrigation.



Irrigation POU.



Irrigation POU.





Irrigation POU.

