

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-10679

Exam Date: 9/25/2015

1. Current Owner: FRED B BIRDSALL
27988 N BOHN RD
ATHOL ID 83801
(208)683-2466

And/Or

DARCY K BIRDSALL
27988 N BOHN RD
ATHOL ID 83801
(208)683-2466

2. Accompanied by: Darcy Birdsall

3. **SOURCE****TRIBUTARY**

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 NW1/4SW1/4 Sec. 24, Twp 53N, Rge 03W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location at 47° 55.503, 116° 39.306 (A0015454)

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	
53N 03W 24										11.7							11.7

Total Acres: 11.7

Method of Determination:

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.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
D0039941	FRANKLIN	3			

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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N/A

2. Measurements:

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

Measured Method: UNABLE TO PERFORM FLOW MEASUREMENT, WELL PUMPED DIRECTLY INTO STORAGE TANKS. THEORETICAL PUMPING EQUATION ESTIMATES FLOW AT $(3\text{HP})(8.8)(0.8) / 435 + (40 \times 2.3087) = 0.04 \text{ CFS}$. ASSUMED AT 40 PSI AND PUMP SET AT 435 FEET.

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

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 11.7 \text{ AC} \times 3 \text{ AF} = 35.1 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \times 214 \times 1.9835 = 17.0 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 17.0 \text{ AF}$$

2. Volume Calculations for Other Uses:**G. NARRATIVE/REMARKS/COMMENTS**

FIELD EXAM SHOWED APPLICANT HAD WELL WITH 3 HP PUMP. UNABLE TO PERFORM FLOW MEASUREMENT BECUASE WELL DID NOT HAVE FROST FREE AND PUMPED DIRECTLY INTO TWO 3K STORAGE TANKS. THEORETICAL PUMPING EQUATION ESTIMATES FLOW AT 18 GPM OR 0.04 CFS. APPLICANT HAD BIG GUN THAT WOULD IRRIGATE LAND FOR LIVESTOCK AND FOR IRRIGATION AROUND HOME. IRRIGATION FOR LIVESTOCK IS NOT VERY VISIBLE BECUASE LAND IS OVER GRAZED. APPLICANT HAS HOSE LINES RUNNING ALL OVER PROPERTY TO FEED BIG GUN. LICENSE WILL BE ISSUED FOR 11.7 ACRES OF IRRIGATION WITH A DIVERSION RATE OF 0.04 CFS AND A ANNUAL VOLUME OF 17 AF.

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	04/01 to 10/31	0.040 CFS	17.00 AF
<u>Totals:</u>		0.040 CFS	17.00 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

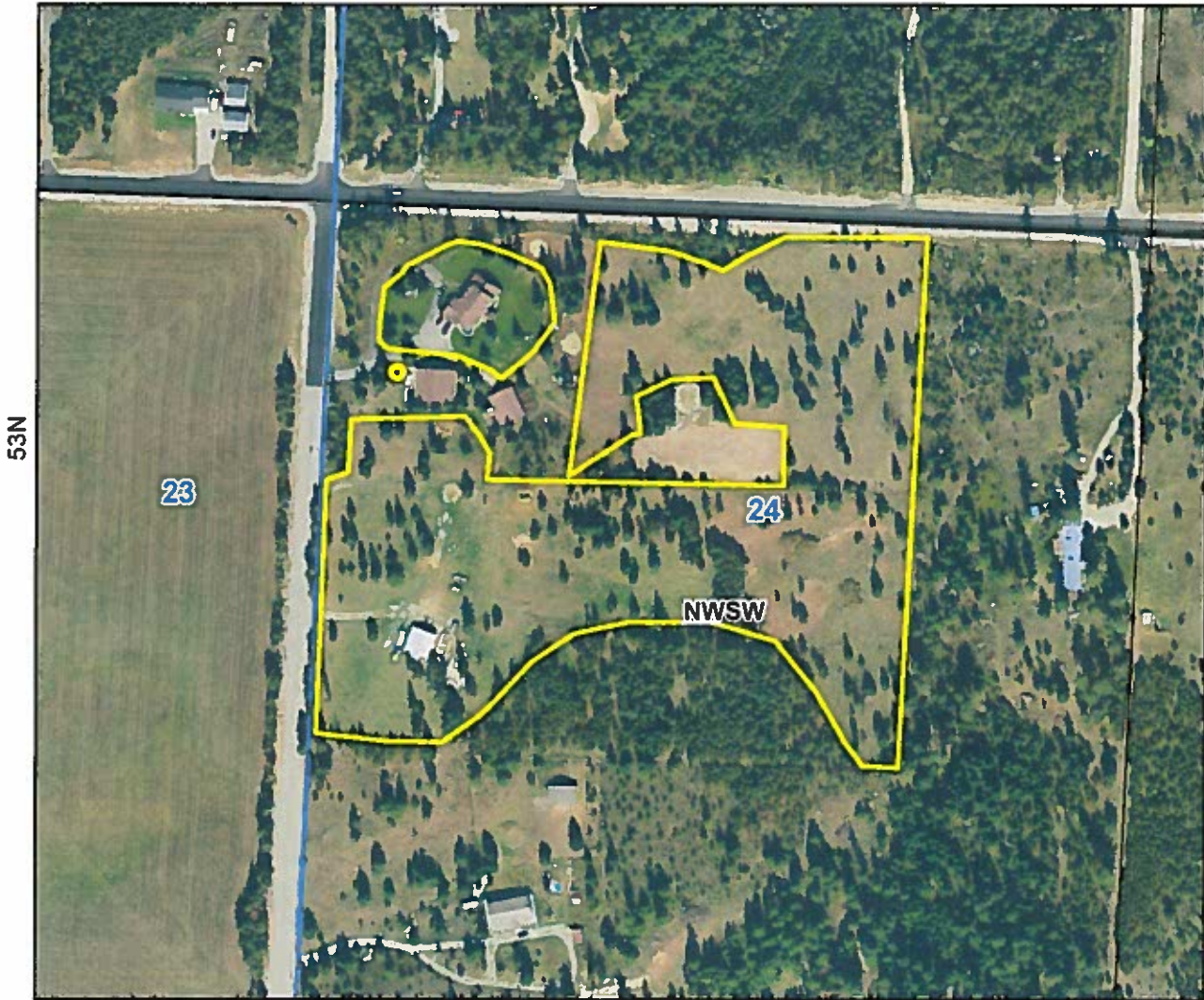
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Adam Fendell Date 1-13-2016
 Reviewer Emmeline Date 1-14-2016

State of Idaho
Department of Water Resources
Water Right License
95-10679

03W



0 0.035 0.07 0.14 Miles

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



PUMP EQUATIONS WATER RIGHT No.	95- 10679
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		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	$\frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	3	527.517	0.8	435	40
Q =		0.040 cfs	18.0 gpm			

WELL DRILLER'S REPORT

Office Use Only			
Inspected by			
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat	Long		

1. WELL TAG NO. D0039941

Drilling Permit No. _____

Other IDWR No. _____

2. OWNER

Name Birdsall, Fred

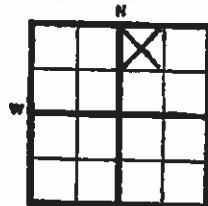
Well Number: _____

918

Address PO Box 985City AtholState ID Zip 83801

3. LOCATION OF WELL by legal description

sketch map location must agree with written location

Twp. 53 ☒ North or ☐ SouthRge. 3 ☐ East or ☒ WestSec. 23 NW 1/4 NE 1/4 1/4Gov't Lot _____ County KOOTENAI

Lat: : : Long: : :

Address of Well Site Parks RdCity Athol

(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		
BENTONITE	0	18	550lbs	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Inner Welded	Threaded
4	-10	450	.200	PVC	☐	☒	☐
6	+2	260	.250	Steel	☒	☐	☒

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method _____ Skill Saw☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Inner
-130	-150	1 1/4 X 8	48	4	PVC	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

250 ft. below ground Artesian pressure _____ lb.Depth flow encountered 250 ft. Describe access port or control devices: Welded Cap

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
20			1 hr

Water Temp. Cold Bottom Hole Temp ColdWater Quality test or comments: ClearDepth first Water encountered 250

12. LITHOLOGIC LOG:(Describe repairs or abandonment)

Bore Diam	From	To	Remarks: Lithology, Water Quality, Temperature	Water	Y	N
10	0	3	Top Soil		☐	☒
10	3	18	Gravels, Clay		☐	☒
8	18	75	Gravels Cemented		☐	☒
8	75	130	Gravels small		☐	☒
8	130	135	Boulder		☐	☒
8	135	215	Gravels, Sand		☐	☒
8	215	230	Gravels Large		☐	☒
8	230	235	Boulder		☐	☒
8	235	250	Gravels		☐	☒
8	250	260	Granite 1 2 gaps		☒	☐
6	260	430	Granite Gray & White		☐	☒
6	430	435	Granite Green 4 gaps		☒	☐
6	435	440	Granite gray & white		☐	☒
6	440	450	Granite Green fracture w. h2o		☒	☐

Corrected Legal

RECEIVED
MAY 01 2007
IDWR/NorthCompleted Depth 450 (Measurable)
Date: Started 3/3/2005 Completed 3/8/2005

13. DRILLER'S CERTIFICATION

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

Firm Name H2O Well Services, Inc. Firm No. 448Firm Official Mark R. Rube Date 3-10-05

and

Supervisor or Operator Jim McLeslie 03/08/05
(Sign Once if Firm Official and Operator)

53N 3W 23



95-10679



95-1x-79

ADULLA FLUID

mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
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mm	O	mm	sec	l/min	m³/hr	m³	%	mm									
								5	10	15	20	25	30	35	40	45	50
6	15	0.46	28	16	13	26	22	146	73	48	36	29	24	18	14	25	
	2	0.53	32	19	14.5	29	25	152	76	5	38	3	25	19	15	3	
	3	0.65	39	23	16.5	33	28	164	82	54	41	33	27	2	16	4	
	4	0.75	45	27	17.5	35	30	18	9	6	45	36	3	22	18	5	
8	15	0.81	49	29	15.5	31	26	202	111	74	55	44	37	27	22	25	
	2	0.95	57	34	17	34	29	234	117	78	58	47	39	29	23	3	
	3	1.15	69	41	19	38	32	256	128	85	64	51	43	32	25	4	
	4	1.33	80	48	20.5	41	35	274	137	91	69	55	46	34	27	5	
10	15	1.26	70	45	17	34	29	31	155	103	72	62	51	39	31	6	
	2	1.46	88	53	18	36	31	342	171	114	85	68	57	43	34	7	
	3	1.78	107	64	20.5	41	35	364	182	121	91	73	6	45	36	8	
	4	2.05	124	74	22	44	38	388	194	129	97	77	65	48	38	9	
12	15	2.43	146	88	27	54	46	468	234	158	114	83	69	52	41	10	
	2	2.68	166	98	30	56	48	504	252	168	124	93	75	55	44	11	
	3	3.17	188	110	33	62	53	568	284	188	138	104	83	62	49	12	
	4	3.65	208	124	36	68	58	612	306	204	148	110	87	65	51	13	
14	15	2.85	170	100	30	60	51	510	255	168	124	93	75	55	44	11	
	2	3.15	190	110	33	65	55	550	275	182	132	99	79	58	45	12	
	3	3.65	216	124	36	68	58	612	306	204	148	110	87	65	51	13	
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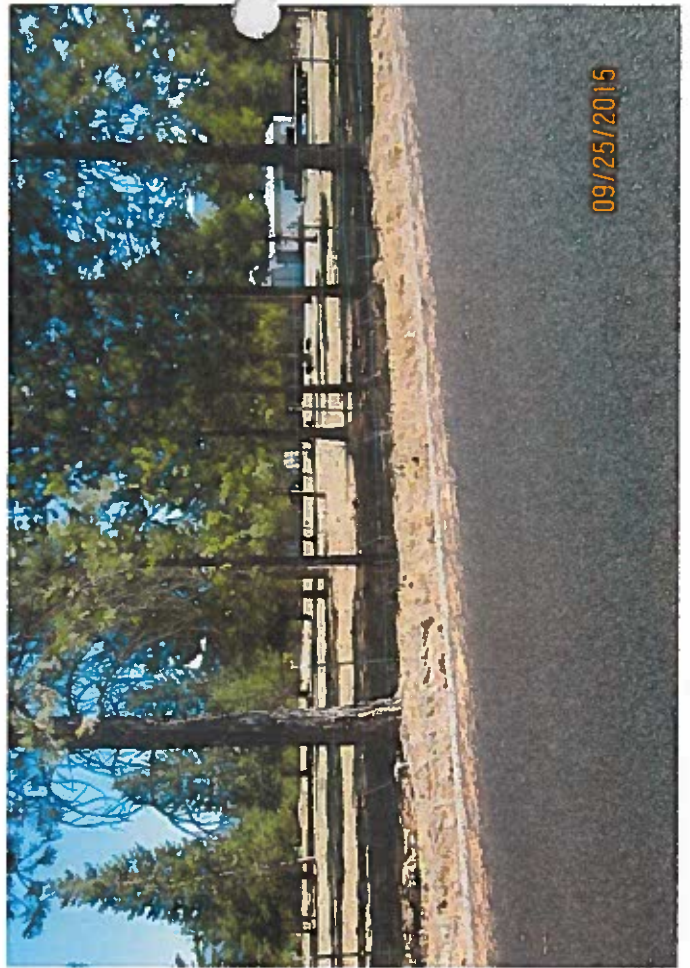
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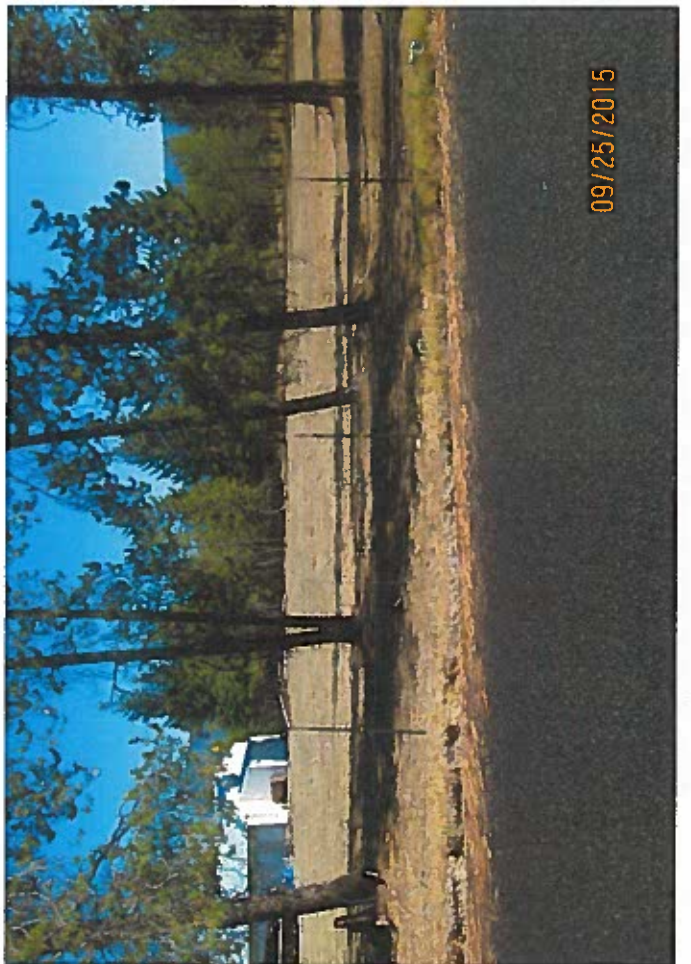
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