

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17441
Exam Date: 10/11/2019

1. Current Owner:
MEL WACH 1110W W PARK PL STE 312 COEUR D ALENE ID 83814 AND/OR
SANDRA WACH 1110 W PARK PL STE 312 COEUR D ALENE ID 83814-2784
2. Accompanied by: Sandra Wach
Relationship to permit Holder: Permit holder
3. **SOURCE:**
GROUND WATER

Method of Determination: Arcmap and DRG

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

2. Other water rights with the same point-of-diversion: Yes

Water Right No.	Source	Purpose of Use	Basis
95-15314	Groundwater	Domestic	Recommendation

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER L9 (NE¼ SE¼), Sec. 9, Twp 48N, Rge 04W, B.M. KOOTENAI County

Method of Determination: Maps and GPS. POD located at -116° 51.296, 47° 31.056

PLACE OF USE: WILDLIFE STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	04W	9													X L9				

PLACE OF USE: FIRE PROTECTION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	04W	9													X L9				

PLACE OF USE: AESTHETIC STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	04W	9													X L9				

Method of Determination: Google Earth and Arcmap

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
95-93-N-169-000	FRANKLIN	3			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: N/A

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method: Unable to perform flow measurement. Theoretical pumping equation estimates flow rate at 19.8 gpm or 0.04 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

 $V_{I.R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ $V_{D.R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$ $V = \text{Smaller of } V_{I.R} \text{ and } V_{D.R} =$

2. Volume Calculations for Other Uses: See attached pond analysis sheet.

G. NARRATIVE/REMARKS/COMMENTS

Field exam with the applicant, Sandra Wach, showed a well being used to fill a pond. The well was equipped with a 3 hp pump and there was no way to perform a measurement as all pipe was buried. A theoretical pumping equation was used to estimate the flow at 19.8 gpm or 0.04 cfs. The well also served a home with irrigation up to ½ acre which is covered under adjudication recommendation 95-15314. The pond had a surface area of 0.2 acres with a maximum depth of 10 feet which is equal to 0.8 acre-feet of storage. The original pond analysis had a surface area of 0.25 acres so the licensed annual volume will be a little less than the permit. The seepage and evaporation is equal to 0.5 acre-feet. The license will be issued with a diversion rate of 0.04 cfs and an annual volume of 1.3 acre-feet.

Condition 046 will be removed at time of licensing. Condition F06 will be added to the license to show the well serves this right and Recommendation 95-15314. All other conditions will remain and conditions 219 and 220 will have the numbers changed to address the smaller annual volume and size of pond. There are no overlap concerns.

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>Rate of Diversion</u>	<u>Annual Volume</u>
WILDLIFE STORAGE	01/01 to 12/31		1.3 AF
FIRE PROTECTION STORAGE	01/01 to 12/31		1.3 AF
AESTHETIC STORAGE	01/01 to 12/31		1.3 AF
DIVERSION TO STORAGE	05/01 to 10/31	0.04 CFS	

Totals: 0.04 CFS 1.3 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

Adam Frederick - Water Resource Agent, Senior

Field Examiner's Name Adam Frederick Date 10/17/2019

Reviewer Douglas Jones P.E. Date 10/17/2019

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17441

WILDLIFE STORAGE, FIRE PROTECTION STORAGE, and AESTHETIC STORAGE / SYSTEM DIAGRAM



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

0 0.035 0.07 0.14 Miles



THEORETICAL PUMPING EQUATION FOR WATER RIGHT 95-17441

There was no proper location to perform any type of measurement during exam. Theoretical pumping equation will be used to estimate diversion rate. Well is equipped with a 3hp Franklin pump at an assumed depth of 387 feet and psi of 40.

PUMP EQUATIONS WATER RIGHT No.						
						95- 17441
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	3	479.517	0.8	387	40
Q = 0.044 cfs		19.8 gpm				

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTVED Use Typewriter
or
Ball Point Pen

FEB 11 1994

Department of Water Resources

092723

1. DRILLING PERMIT NO. 95 - 93 - n - 169 - 000

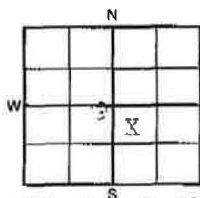
Other IDWR No. _____

2. OWNER:

Name Jacque VauxAddress P.O. Box 2324, Santa Rosa, CA, 95405

City _____ State _____ Zip _____

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.T. 43 North ☒ or South ☐
E. 4 East ☐ or West ☒
Sec. 9 1/4 40 acres 1/4 40 acres 1/4 40 acres
Gov't Lot _____ County Yontenai

Address of Well Site _____

(Give at least Direction + Distance to Road or Landmark)

Lot No. A Block No. _____ Subd. Name _____

4. PROPOSED USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK

☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD

☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	40		

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

8. CASING/LINER:

Diameter	From	To	Gauge	Casing	Liner	Steel	Plastic	Welded	Threaded
6	12	157	.250	X		☒	☐	☐	☐
4	-7	399	160	psi	X	☐	☒	☐	☐

Final location of shoes 157'

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method skill saw in pvc liner
☐ Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tail Pipe Size	Casting	Liner
359	399	1/4"	90	4"		☐	☒
						☐	☐
						☐	☐

NWSE 9 48N 4W

10. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time
20 + gpm	350		2 hrs

Temperature of water _____ Was a water analysis done? Yes ☐ No ☒

By whom? _____

Water Quality (odor, etc.) _____

Bottom Hole Temperature _____

11. STATIC WATER LEVEL:

280 ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port _____

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
10	0	6	sandy loam soil		
	6	27	tan clay with sand		
	27	32	course sand		
	32	76	fractured brown basalt		
	76	125	tan clay with sand		
	125	149	tan clay with brown seams		
	149	157	clay, brown-tan, hard		
	157	167	clay, tan, hard		
	167	186	basalt, brown, fractured		
	186	194	basalt, dark grey, hard		
	194	200	basalt, fractured, clay, with soft spots, tan		
	200	228	basalt, fractured, grey-brown		
	228	355	basalt, dark grey, hard		
	355	357	basalt, fractured, grey-brown	X	
	357	395	basalt, dark grey, hard		
	399	402	sand with water approx 20 gpm	X	

Date: Started 8/23/93Completed 8/26/93

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 E20 Well Service, Inc. Firm No. 440Firm Official John W. Wally Date 9-2-93and Supervisor or Operator LEP Date 9-2-93

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Total Storage Calculations

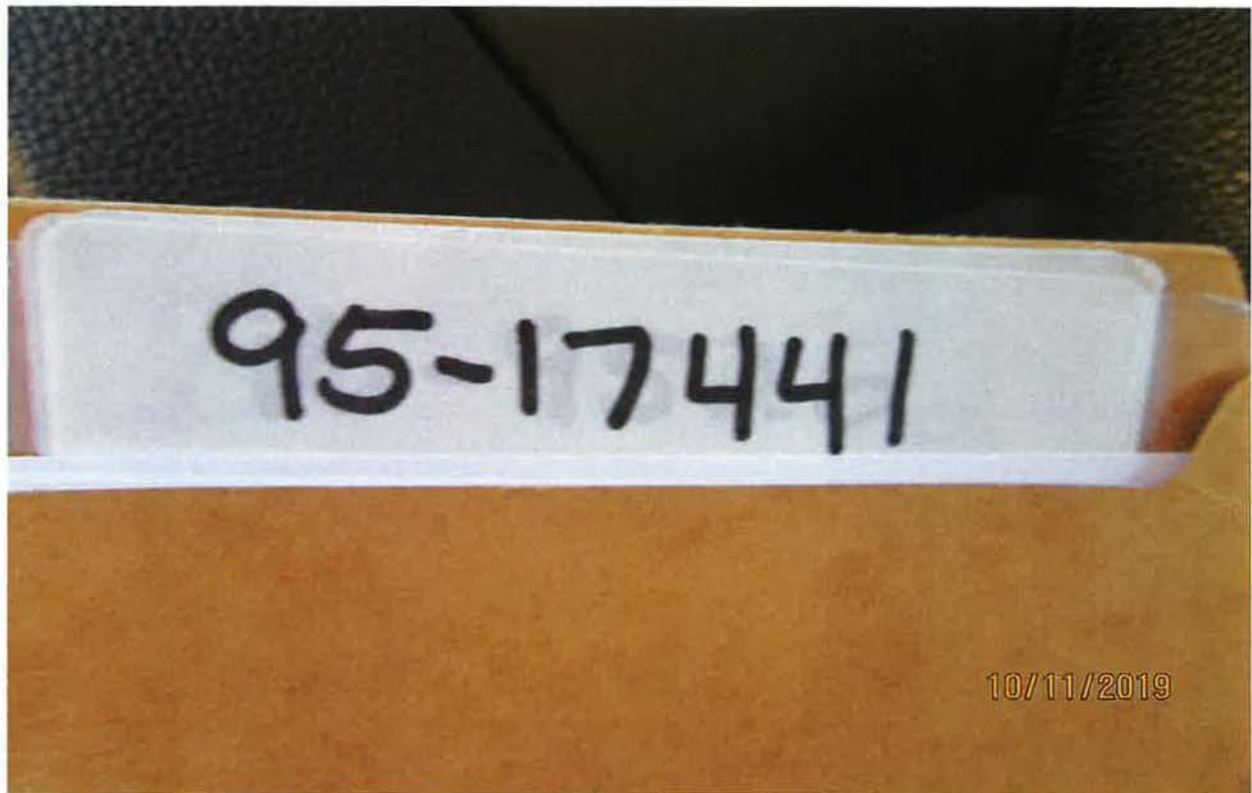
FILE NUMBER	95-17441
REVIEWER	Adam Frederick
DATE	10/16/2019

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	0.2	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	0.8	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.2	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.3	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	1.3	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

Flow Rate into Pond (CFS)	0.04	The "Flow Rate into Pond" depicts the actual flow, either measured or estimated, into the pond. For offstream facilities, this will be equivalent to "diversion to storage" rate.
Highest Daily Evaporation Rate From Evaporation Tab. (mm/Day)	3.93	This number is carried over from the "Evaporation Loss" sheet. It is the highest recorded number in the "Precipitation Deficit Table".
Required Daily Maintenance Volume (AF/Day)	0.00	"Required Daily Maintenance Volume" is the maximum volume of water needed on any given day during the year to maintain pond volume. It is calculated by adding the highest daily evaporation loss to the average daily seepage loss in acre feet. The average daily seepage loss is calculated by dividing the "Estimated Seepage Loss" by 365 days. This is acceptable, since the seepage rate shouldn't vary throughout the season unless the pond completely freezes over during the winter months. The highest daily evaporation loss is calculated by dividing the Highest Daily Evaporation Rate by the 304.8 conversion factor and multiplying this number by the pond surface area to attain a combined daily acre feet requirement.
Minimum Maintenance Flow (CFS)	0.00	The "Minimum Maintenance Flow" is the minimum amount of flow required to maintain the level of the pond. This number is determined by dividing the "Maximum Required Daily Maintenance Volume" by 1.9835. This flow can be used to determine if the flow rate into the pond is adequate to maintain the pond level.
Days Required to Fill the Pond	11	The "Days Required to Fill the Pond" is calculated by dividing the "Pond Capacity" by the "Flow Rate" minus "Minimum Maintenance Flow" multiplied by 1.9835. This section will assist you in determining if the flow rate being diverted to the pond is adequate to fill the pond while maintaining the pond level. The length of time to fill the pond will help determine if the flow rate is adequate for the size of pond being proposed. If this number is approximately 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond.
Days Required to Fill the Pond at 13,000 Gallons per Day	22	Some water users may want to fill a pond under the 13,000 gallons per day domestic exemption. The "Days Required to Fill the Pond at 13,000 Gallons per Day" is calculated by converting the "Pond Capacity" and the "Required Daily Maintenance Volume" to gallons. The "Pond Capacity" is then divided by 13,000 gallons minus the "Required Daily Maintenance Volume" in gallons to determine the number of days to fill pond. If this number is approximately 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond. Negative values indicate that the supply of 13,000 gallons per day is not enough volume to overcome the required daily maintenance volume; the pond will never fill.



Well 95-93-N-169-000 with 3hp pump.

BOX, PIPES, CABLE, PUMP OR MOTOR UNLESS ALL
METAL PARTS HAVE BEEN PROPERLY GROUNDED
ACCORDING TO APPLICABLE CODES.

155661101 REV. 6



Franklin Electric
Bloomington, Indiana 47414



MOTOR & CONTROL BY

Franklin Electric

 LISTED

MODEL 2823028110

INDOOR/OUTDOOR USE (ENCL. 3)

HP 3

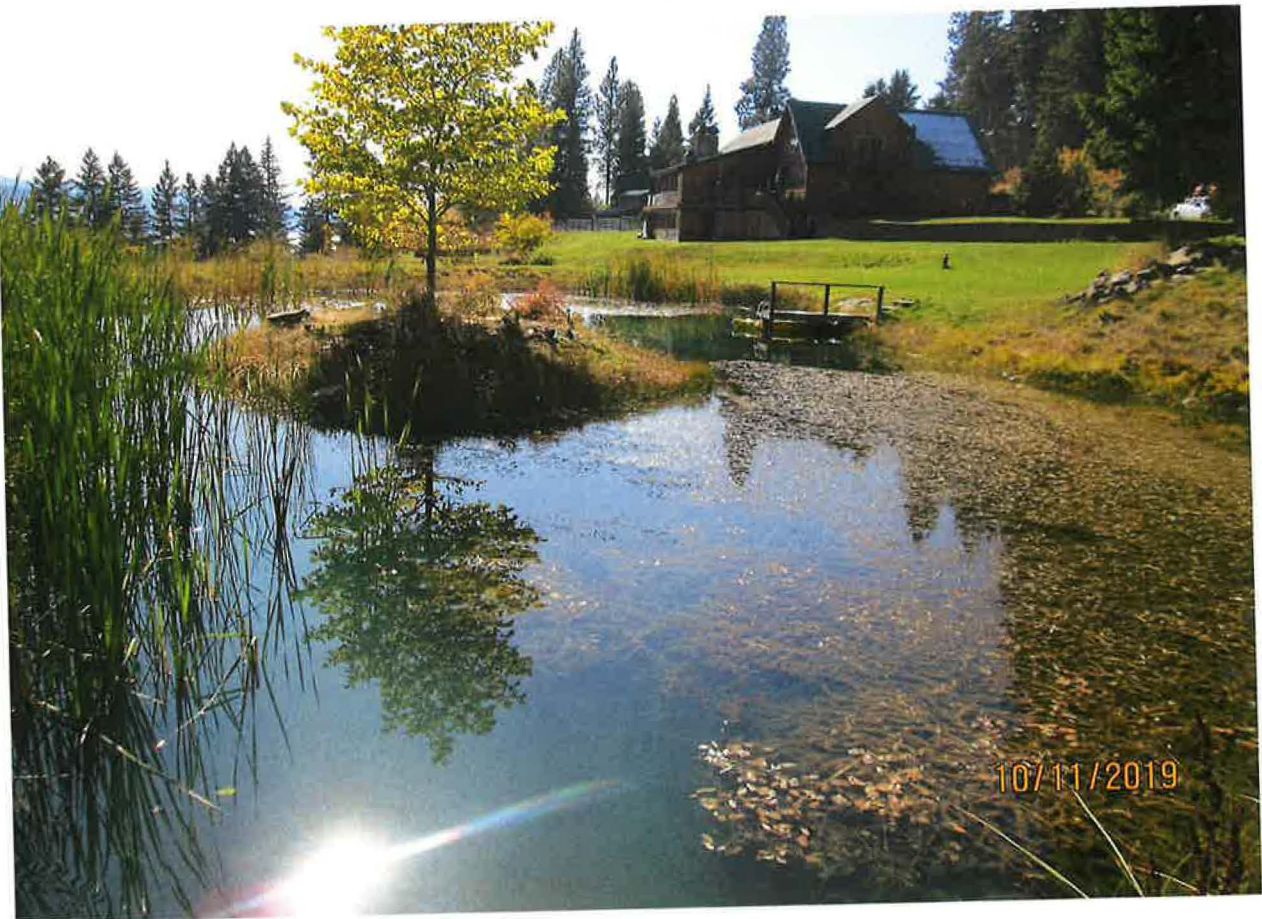
VOLT 230

S.F. MAX AMP 12

BOTH OVERLOADS MUST BE  RESET FOR MOTOR TO START

10/11/2019

3hp Franklin pump in well.



Place of use.



Place of use.





Place of use.

