

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-11705

Exam Date: 5/17/2016

1. Current Owner:
SUSAN E DREDGE 7475 E YELLOWSTONE TRAIL COEUR D ALENE ID 83814 (208) 691-6738

2. Accompanied by: 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 SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER L3 (NE¼SW¼) Sec. 34, Twp 50N, Rge 03W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location at 47° 38.062, 116° 41.604 (A0015444) (D0054494)

2.

PLACE OF USE: DIVERSION TO STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

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	
50N	03W	34									X L 3								

PLACE OF USE: WILDLIFE STORAGE

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	03W	34									X L 3	X L 4							

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	03W	34									1.3 L 3	1.7 L 4							3.0

Total Acres: 3

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.

 X

 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
D0054494		5			

*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
5 GALLON BUCKET						

2. Measurements: 5 GALLON BUCKET TEST PERFORMED. BUCKET FILLED IN 15 SECONDS WHICH IS EQUAL TO 20 GPM OR 0.04 CFS.

E. FLOW CALCULATIONS

Measured Method:

 Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3 \text{ AC} \times 3 \text{ AF} = 9 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \text{ CFS} \times 246 \times 1.9835 = 19.5 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 9 \text{ AF}$$

2. Volume Calculations for Other Uses: SEE ATTACHED POND ANALYSIS SHEET

DOMESTIC FOR 2 HOMES = 1.2 AF

G. NARRATIVE/REMARKS/COMMENTS

FIELD EXAM SHOWED APPLICANT HAD WELL WITH 5 HP PUMP. FIELD EXAMINER WAS ABLE TO PERFORM 5 GALLON BUCKET TEST THAT FILLED IN 15 SECONDS. DIVERSION RATE WILL GIVEN AT 0.04 CFS. APPLICANT HAD BUILT SHOP WITH FULL DOMESTIC USES OF WATER INSIDE AND THAT WILL BE COUNTED AS DOMESTIC FOR 1 HOME. APPLICANT HAD PLANNED ON BUILDING HOME NEXT TO SHOP BUT BECUASE OF ECONOMY HAD NOT, BUT HAD STUBBED LINE IN AND HAD RV HOOKED UP TO WATER. CREDIT WILL BE GIVEN FOR STUBBED OUT AREA FOR DOMESTIC USE FOR 2ND HOME. APPLICANT HAD TWO PONDS FOR WILDLIFE PURPOSES THAT WERE FED BY WELL AND WERE BOTH LINED WITH PLASTIC AND BENTONITE. TOTAL STORAGE FOR BOTH PONDS COMES OUT TO 0.3 AF. LICENSE WILL AMENDED TO SHOW IRRIGATION OCCURING IN ANOTHER QQ THAT WAS NOT APPLIED FOR IN APPLICATION.

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	1.2 AF
IRRIGATION	03/15 to 11/15	0.04 CFS	9.0 AF
DIVERSION TO STORAGE	01/01 to 12/31	0.04 CFS	
WILDLIFE STORAGE	01/01 to 12/31		0.3 AF
<u>Totals:</u>		0.040 CFS	10.50 AF

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

 Change P.U. as reflected above X Add P.U. as reflected above None

I. AUTHENTICATIONField Examiner's Name Adam Fendrich Date 5-18-2016Reviewer Morgan Case Date 5/31/2016

Total Storage Calculations

FILE NUMBER	95-11705
REVIEWER	Adam Frederick
DATE	5/18/2016

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

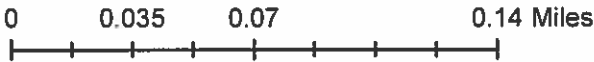
Surface Area (AC.)	0.03	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	7	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook 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)	0.21	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)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.0	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.3	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.

State of Idaho
Department of Water Resources
Water Right License
95-11705

03W

50N



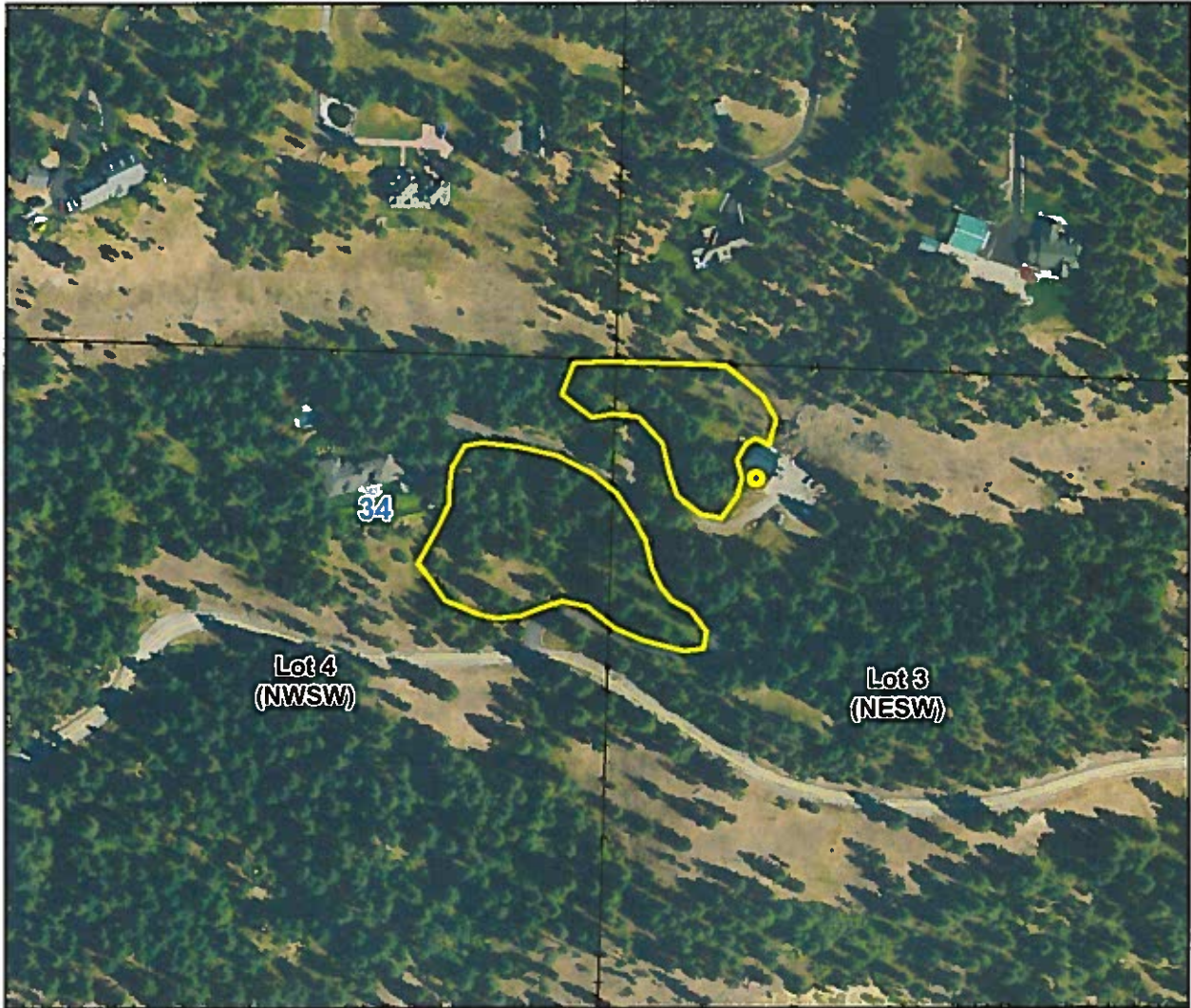
- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections



State of Idaho
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03W

50N

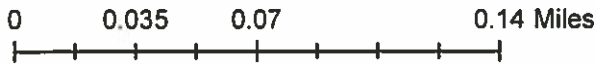


0 0.035 0.07 0.14 Miles

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

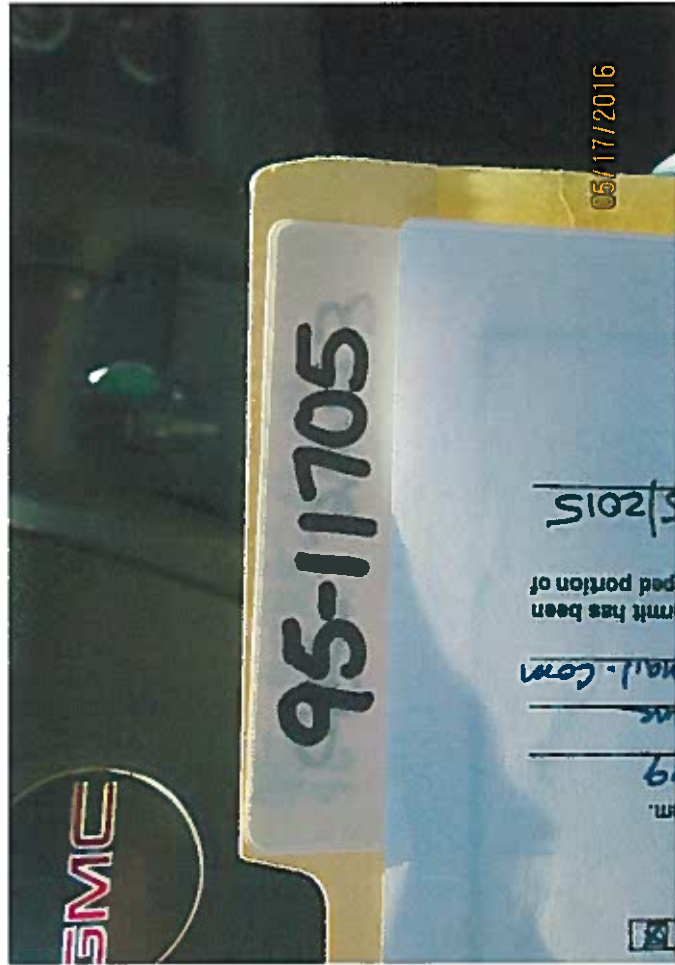
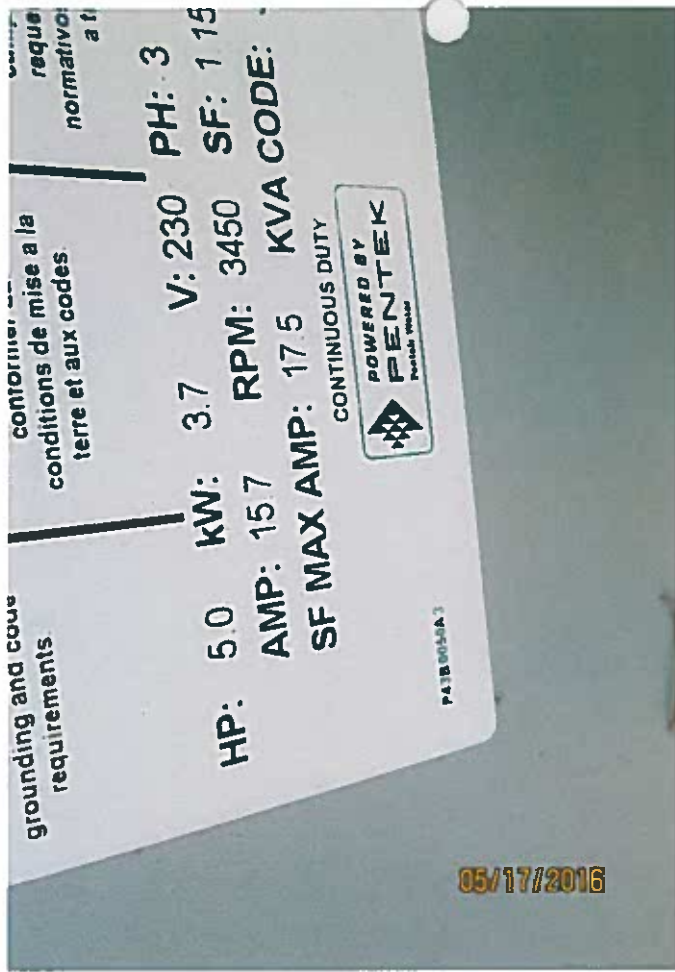


State of Idaho
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- Point of Diversion
- Place Of Use Boundary
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- PLS Sections





95-11705



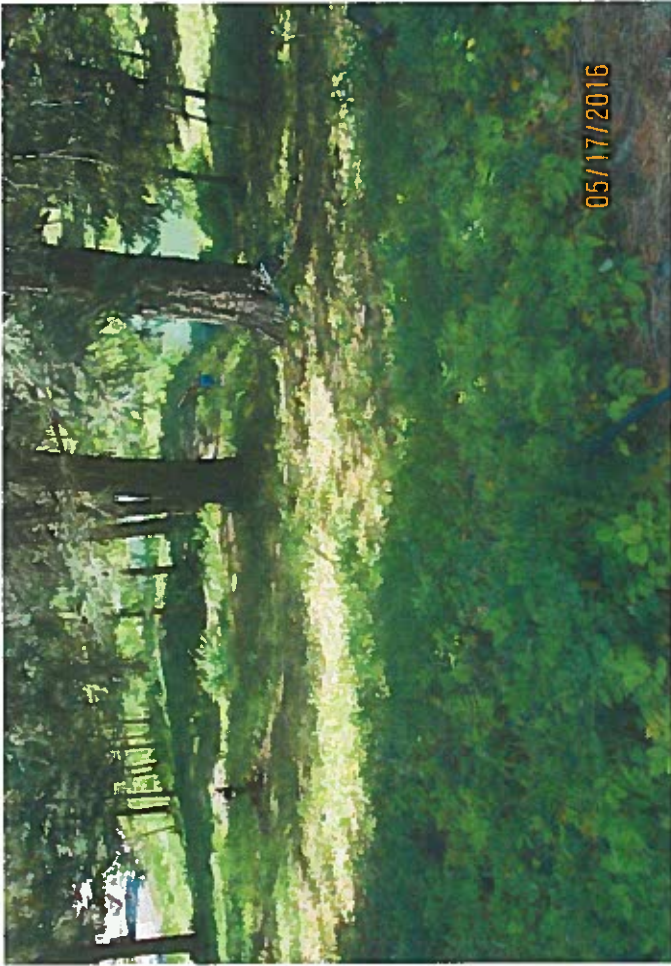
Shop

95-11705



Stub in and RV

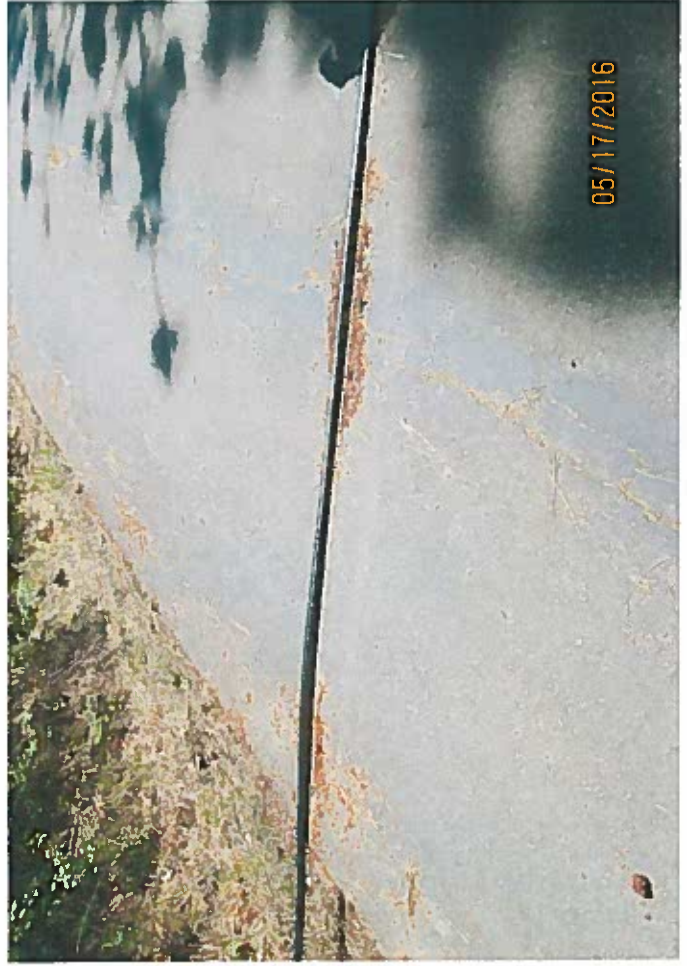




95-11705



Pond 2

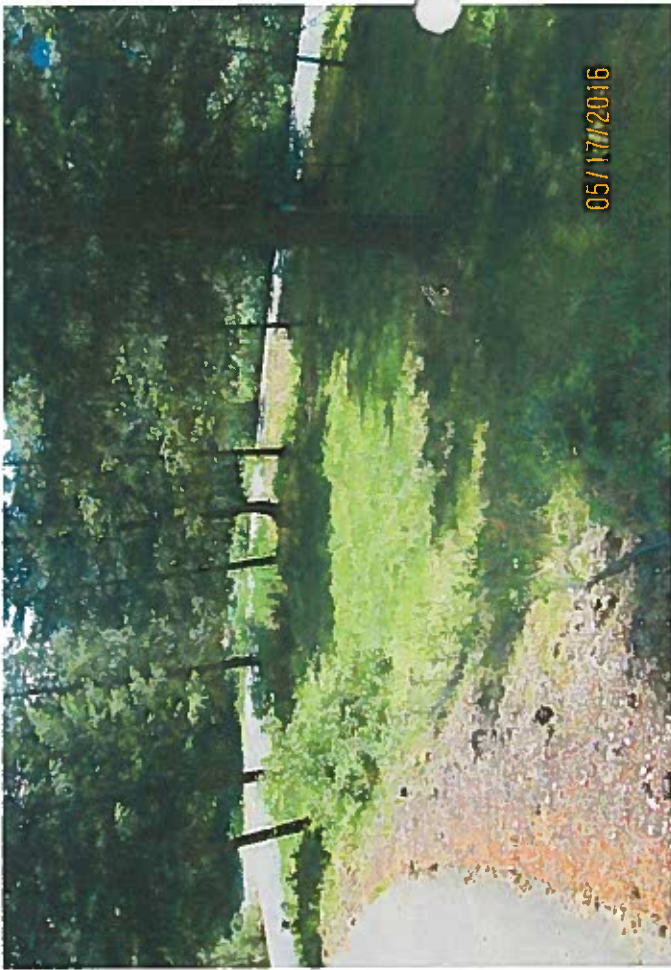


Diversion to Storage line



Pond 1







95-11705



95-11705

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. D0054494

DRILLING PERMIT N 85110.22
Other IDWR No _____

2. OWNER:

Name Susan Dredge
Address _____
City Coeur d'Alene State ID _____ Zip 83814

3. LOCATION OF WELL by legal description:

N		Twp	50N	North	☒ or	South	☐
Rge		03W	East	☐ or	West	☒	
Sec		34	1/4	SE	1/4	NW	1/4
Gov't Lot		County		Kootenai			
Lat		47:38:03		Long		116:41:37	

Address of Well Site: (see next line)

yellowstone trail City cda
Lot _____ Blk _____ Sub. Name (see next line)

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/Lbs	
Bentonite	0	20	15 sacks	dry pour

Drive Shoe Used? ☐ Y ☒ N Shoe Depth(s) _____
Drive Shoe Seal Tested? ☐ Y ☒ N How? _____

8. CASING/LINER

Diam	From	To	Gauge	Material	Casng	Liner	Weld	Thrded
8	+2	80	0.250	steel	☒	☐	☒	☐
6	+2	670	0.250	steel	☒	☐	☒	☐
					☐	☐	☐	☐

Length Headpipe n/a Length Tailpipe n/a

9. PERFORATIONS/SCREENS

☐ Perforations? Method _____
☐ Screens? Screen Type n/a

From	To	Slot	Nmbr	Diam	Material	Casng	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL or ARTESIAN PRESSURE

480 ft. below ground. Artesian pressure 0 lb.
Depth flow encountered 800 ft. Describe access port or control devices: cap welded

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pump Level	Time
80+	n/a	800	1hr

Water Temp. cold Bottom hole temp. cold
Water Quality test or comments: (below) Depth first Water Encountered 280
clear

12. LITHOLOGIC LOG (Describe repairs or abandonment)

Bore Diam	From	To	Remarks: Lithology, Water Quality and Temperature	Water	
				Y	N
10	0	20	clay brown	☐	☒
8	20	125	clay brown	☐	☒
8	125	280	basalt 3 gpm 280 cased off	☒	☐
8	280	355	clay brown	☐	☒
8	355	520	basalt gravel mix 4 gpm cased off	☒	☐
8	520	670	clay brown gravel seams mixed	☐	☒
8	670	800	basalt fractured 80 gpm 800	☒	☐

RECEIVED

JUL 16 2008

IDWR/North

Completed Dept _____ 800 (Measurable)
Date: Started 5/30/2008 Completed 6/18/2008

13. DRILLERS CERTIFICATION

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

Firm Name United Drilling Inc. Firm No 414
Firm Official Timothy R. Volking Date 6/19/2008
Supervisor or Operator Timothy R. Volking Date 6/19/2008

50N 03W 34