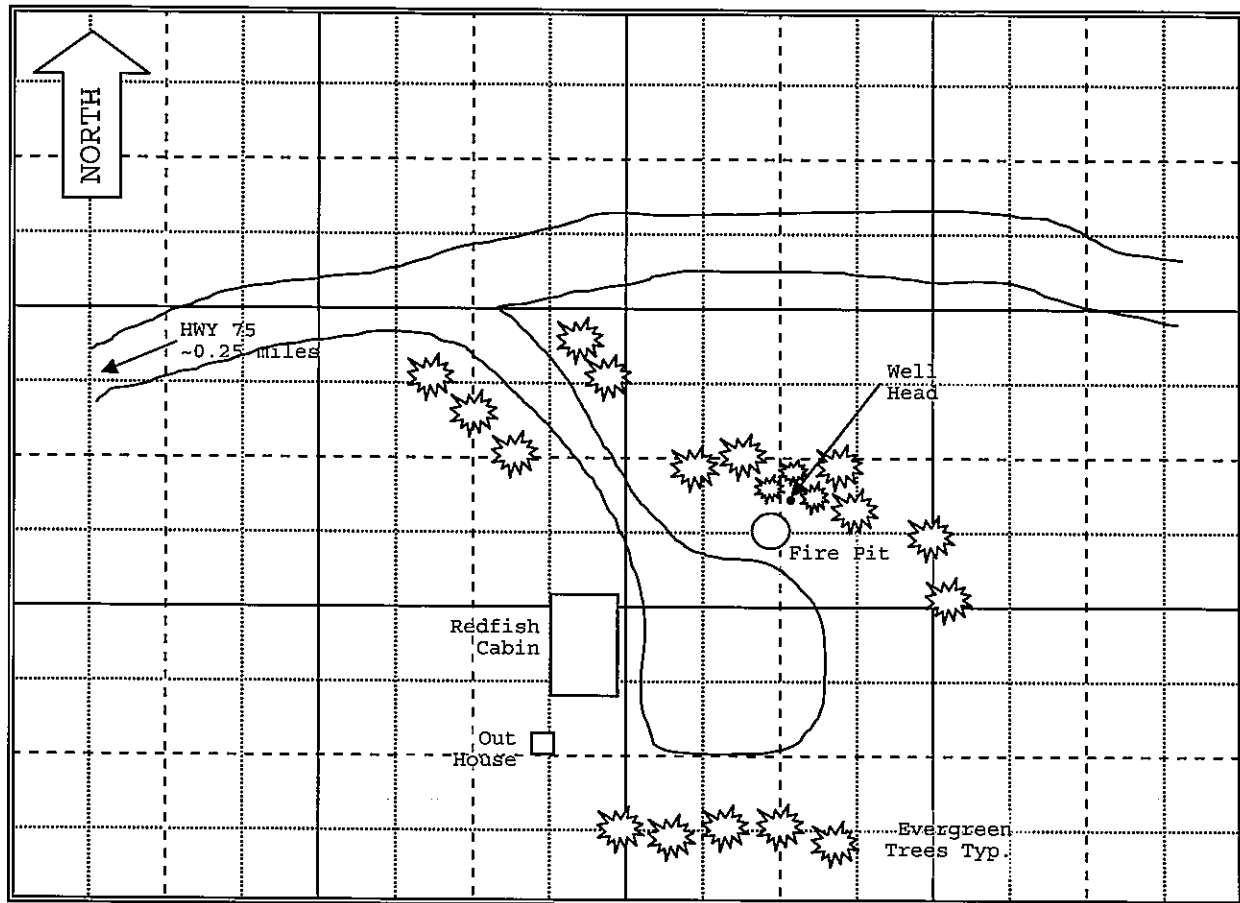


[illegible]

FR 2/11

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = NTS.

____ Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

☒ Aerial Photo Attached
(required for irrigation of 10+ acres)

☒ Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
MT# A0012097		0.5		Grundfos	10S 05 09

*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
N/A						

2. Measurements: N/A

FR 3/11

E. NARRATIVE/REMARKS/COMMENTS

Redfish Cabin was open and in use during my site visit, however, the well had been winterized a few days prior to my visit. None the less I was able to verify the well head and attached an IDWR metal tag, no. A0012097, to the exposed well casing. I believe the well ID# to be 392253. I confirmed the place of use at Redfish Cabin as consisting of kitchen and bathroom fixtures and one hose bid located at the rear of the cabin.

The well is pipe into a pressurized tank in the cabin where it is plumbed out to the various fixtures. The pressure tank has operating pressures from 20-45 PSI. There is no irrigation component associated with the use of water at this site.

Following my site visit Conservation Officer Merritt Horsman, with the IDFG, provided information on the well pump: $\frac{1}{2}$ hp Grundfos pump model number 10S 05 09.

Based upon the provided pump information and well driller's log for well ID# 392253 I prepared a theoretical calculation for flow rate associated with the permit, see attached.

See attached photos of well head and place of use.

Have conditions of permit approval been met? ☒ yes ☐ no



Picture 1, Fire pit with well head (POD) in background amongst the pine trees.



Picture 2, well head with attached metal tag, no. A0012097



Picture 3, Redfish Cabin (POU).



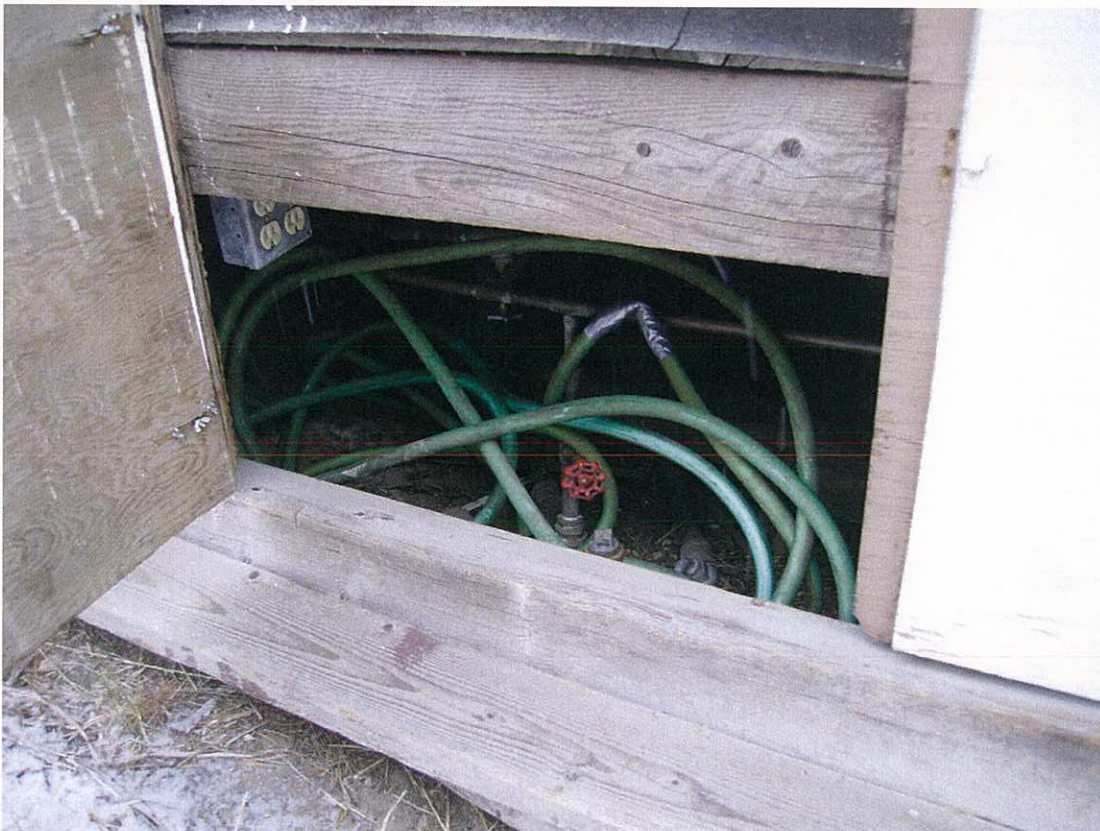
Picture 4, pressurize tank.



Picture 5, tank-less water heater (POU).



Picture 6, cabin kitchen area (POU)



Picture 7, external hose bib (POU).

FIR 7/11

F. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

Q = 0.02 CFS (See attached theoretical calculations)

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

2. Volume Calculations for Other Uses: 0.6 ac-feet/year (default minimum for domestic in-house use)

H. RECOMMENDATIONS

1. Recommended Amounts

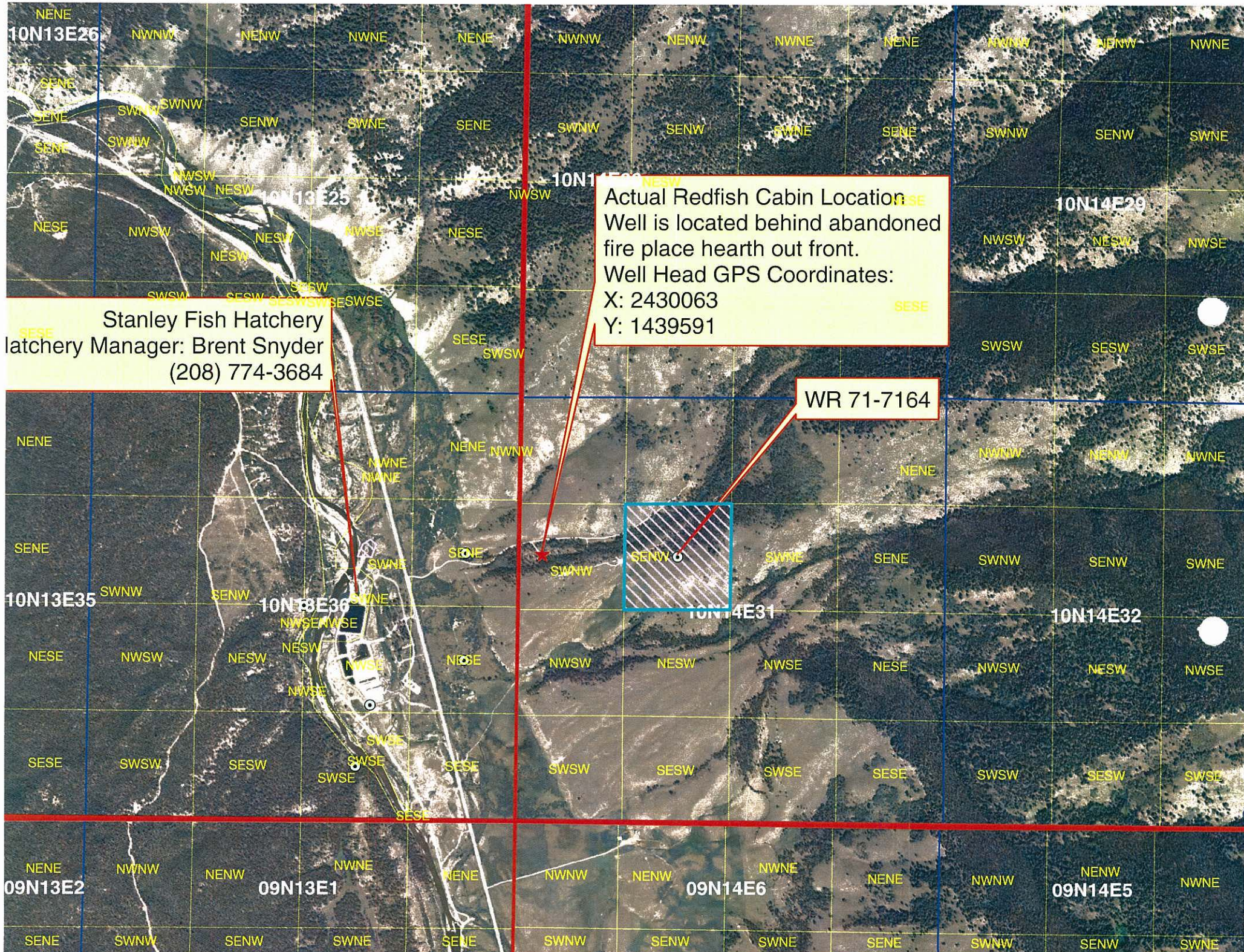
Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
	1/1	12/31	0.02	0.6
Totals:			0.02	0.6

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 MAT WEAVER Date 10/31/08

Reviewer _____ Date _____

SEAL



Stanley Fish Hatchery
Hatchery Manager: Brent Snyder
(208) 774-3684

Actual Redfish Cabin Location
Well is located behind abandoned
fire place hearth out front.
Well Head GPS Coordinates:
X: 2430063
Y: 1439591

WR 71-7164

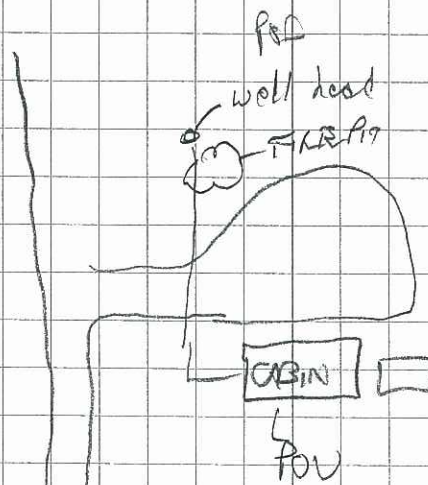
FR 9/11

10-10-00 REDFISH CABIN 1/12 71-7169

GPS 240063
1439591
6605'

merritt horsmon
(208) 274-2735

METAL TAG No. A0012097



MERRITT HORSMON
Senior Conservation Officer
Idaho Department of Fish & Game

Le Rain

99 Hwy 93 North
Box 1336
Salmon, ID 83467

(11) 774-2735
Business Phone (208) 756-2271
Mobile (208) 940-2735
Email: mhorsmon@idfg.idaho.gov

FR 10/11

GROUNDWATER FLOWRATE THEORETICAL ANALYSIS

FILE: Permit 71-7164 (IDFG Redfish Cabin)

DATE: 31-Oct-08

BY: MDW

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (HP) \times (EFF.)}{TDH}$

- Q = Flowrate (CFS)
 HP = Total Brake Horsepower of pumping plant (including booster)
 Eff. = Pumping plant efficiency (assume 70% or 0.70)
 TDH = Total Dynamic Head = [Lift + (PSI x 2.31)]
 LIFT = Depth to water in FEET from land surface to pumping water level
 PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

$$Q = \frac{8.8 \times (0.5) \times 0.70}{[(89) + (45 \times 2.31)]} = 0.02$$

Denotes Cells Requiring Input

LIFT FROM:

Measurement ☐
 Owner ☐
 Area Estimate ☐
 Well Logs ☒
 Booster (Y) ☐ (N) ☒

PSI FROM:

Measurement ☐
 Owner ☐
 Estimate ☐
 Owner Gage ☒

NOTES ON PUMP:

Motor Make, Serial or ID

Pump Make, Serial or ID

Grundfos 10s 05 09

REMARKS: Pump information provided by IDFG. Lift information obtained from well driller's log.

FR 11/17

AUG 13 1926

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER <u>STATE OF IDAHO</u> Name <u>DEPARTMENT OF FISH & GAME</u> Address <u>600 So. WALNUT, BOISE, ID.</u> Owner's Permit No. _____	7. WATER LEVEL Static water level <u>10</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>49</u> °F. Quality <u>GOOD</u> Describe artesian or temperature zones below.																																																																																																				
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td style="text-align: center;"><u>7.5</u></td> <td style="text-align: center;"><u>89</u></td> <td style="text-align: center;"><u>4</u></td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>7.5</u>	<u>89</u>	<u>4</u>																																																																																														
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG 86666 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Bore Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>0</td> <td>4</td> <td>TOP SOIL</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>4</td> <td>8</td> <td>GRAVELLY</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>8</td> <td>18</td> <td>BOULDERS</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>18</td> <td>22</td> <td>GRAVELLY BOULDERS</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>22</td> <td>26</td> <td>SANDY GRAVEL 3 Gpm</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>26</td> <td>32</td> <td>SANDY GRAVEL BOULDERS</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>32</td> <td>42</td> <td>GOLD GRANITE ROCK</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>42</td> <td>50</td> <td>GRANITE HARD</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>50</td> <td>60</td> <td>GOLD GRANITE ROCK</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>60</td> <td>61</td> <td>SOFT GRANITE</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>61</td> <td>62</td> <td>GRANITE HARD</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>62</td> <td>68</td> <td>SOFT GRANITE 4 Gpm</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>68</td> <td>73</td> <td>HARD GRANITE</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>73</td> <td>80</td> <td>SOFTER</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>80</td> <td>84</td> <td>GOLD GRANITE ROCK</td> <td>X</td> <td></td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	6	0	4	TOP SOIL		X		4	8	GRAVELLY	X			8	18	BOULDERS		X		18	22	GRAVELLY BOULDERS		X		22	26	SANDY GRAVEL 3 Gpm	X			26	32	SANDY GRAVEL BOULDERS	X			32	42	GOLD GRANITE ROCK	X			42	50	GRANITE HARD	X			50	60	GOLD GRANITE ROCK	X			60	61	SOFT GRANITE	X			61	62	GRANITE HARD	X			62	68	SOFT GRANITE 4 Gpm	X			68	73	HARD GRANITE	X			73	80	SOFTER	X			80	84	GOLD GRANITE ROCK	X	
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4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____	10. Work started <u>7/18/86</u> finished <u>7/19/86</u>																																																																																																				
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>250</u> inches</td> <td><u>6</u> inches</td> <td><u>1</u> feet</td> <td><u>33</u> feet</td> </tr> <tr> <td><u>PVC</u> inches</td> <td><u>4 1/2</u> inches</td> <td><u>24</u> feet</td> <td><u>89</u> feet</td> </tr> </tbody> </table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☒ Yes ☐ No How perforated? ☐ Factory ☒ Knife ☐ Torch Size of perforation <u>3/16</u> inches by <u>1 1/4</u> inches <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>100</u> perforations</td> <td><u>24</u> feet</td> <td><u>30</u> feet</td> </tr> <tr> <td><u>PVC</u> perforations</td> <td><u>33</u> feet</td> <td><u>74</u> feet</td> </tr> </tbody> </table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____ Sealing procedure used: ☒ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port <u>SANITARY WELL SEAL</u>	Thickness	Diameter	From	To	<u>250</u> inches	<u>6</u> inches	<u>1</u> feet	<u>33</u> feet	<u>PVC</u> inches	<u>4 1/2</u> inches	<u>24</u> feet	<u>89</u> feet	Number	From	To	<u>100</u> perforations	<u>24</u> feet	<u>30</u> feet	<u>PVC</u> perforations	<u>33</u> feet	<u>74</u> feet	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>HARBER DRILLING</u> Firm No. <u>430</u> Address <u>305 Hwy 93 North</u> Date <u>7/21/86</u> Signed by (Firm Official) <u>SALMON</u> and <u>Alan Hauler</u> (Operator)																																																																															
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6. LOCATION OF WELL Sketch map location must agree with written location. N <table border="1" style="width: 100px; height: 100px; border-collapse: collapse;"> <tr><td></td><td></td><td></td></tr> <tr><td></td><td>31</td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table> W E S Subdivision Name <u>REDFISH</u> <u>LAKE CABIN WELL</u> <u>STANLEY</u> Lot No. _____ Block No. _____ County <u>SE 1/4 NW 1/4 Sec. 31, T. 10 N. 14, R. 14 E.</u>					31					Department of Water Resources Department of Water Resources																																																																																											
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USE ADDITIONAL SHEETS IF NECESSARY -- FORWARD THE WHITE COPY TO THE DEPARTMENT