

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-7566

Exam Date: 05/06/2008

1. Current Owner: DAVID C TVRDY
4606 RIVER RD
BUHL ID 83316
2. Accompanied by: COREY EDDINGTON
Phone No: (208) 543-5360
Address: 4606 RIVER RD
Relationship to Permit Holder: Current property owner, purchased property from David Tvrdy in ~1998

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 SE1/4NE1/4 Sec. 9, Twp 09S, Rge 14E, B.M. TWIN FALLS County

Method of Determination: GPS, Satellite Imagery, GIS

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	
09S	14E	9				1.0													1.0

Total Acres: 1.0

DOMESTIC same as IRRIGATIONRECREATION same as IRRIGATIONHEATING same as IRRIGATION

Method of Determination: Satellite Imagery, GIS

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. ATTACHMENT B
- ☐ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater. ATTACHMENT A
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres). ATTACHMENT A
- ☒ Photo of Diversion and System Attached. ATTACHMENT C & D

4.

<u>Well or Diversion 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 Size</u>
A0001476	NONE	N/A	N/A	N/A	N/A

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Bucket	Plastic	Grainger	N/A	N/A	5.5 gallon	05/05/2008

2. Measurements:

I measured the discharge from each of the pipes separately using a 5.5 gallon bucket and a stopwatch. The sum of each pipe's average discharge quantifies the system total.

4" Blue PVC Pipe

<u>Volume</u>	<u>Time</u>
5.5 gallons	4.25 seconds
5.5 gallons	4.50 seconds
5.5 gallons	4.37 seconds
5.5 gallons	4.19 seconds
5.5 gallons	4.31 seconds

Average = 5.5 gallons in 4.32 seconds
 = 76.4 gallons per minute
 = 0.17 cfs

2" White PVC Pipe

<u>Volume</u>	<u>Time</u>
5.5 gallons	23.13 seconds
5.5 gallons	22.82 seconds
5.5 gallons	23.37 seconds

Average = 5.5 gallons in 23.11 seconds
 = 14.3 gallons per minute
 = 0.03 cfs

TOTAL = 0.20 cfs**E. FLOW CALCULATIONS**

_____Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.0 \text{ acres} \times 4.0 \text{ af/acre} = 4.0 \text{ AFA}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 4.0 \text{ AFA}$$

2. Volume Calculations for Other Uses: See Memorandum from Corey Skinner dated 09/04/1998 for detailed description and volume computation for all beneficial uses.

$$\text{DOMESTIC} = 1 \text{ home} \times 0.6 \text{ af/home} = 0.6 \text{ AFA}$$

$$\text{HEATING} = (0.06 \text{ cfs} \times 1.9835 \times 227 \text{ days}) + (0.06 \text{ cfs} \times 1.9835 \times 138 \text{ days}/2) = 35.2 \text{ AFA}$$

$$\text{RECREATION} = 0.14 \text{ cfs} \times 1.9835 \times 365 \text{ days/year} = 101.4 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS

See prior field report and memorandum completed by Corey Skinner in 1998 for detailed information regarding the beneficial use of water established during the authorized development period. This reexamination was requested and paid for (\$50) by the new property owner since prior measurements of the system total were questioned.

The irrigation works have changed since the original examination from a gravity ditch and pump sprinkler system to a fully closed conduit buried sprinkler system. The total irrigated land is still approximately one acre. The water delivery system for domestic, heating, and recreation use remains unchanged since the initial examination.

The blue 4" PVC pipe drains water from the top of the pool to maintain the water level. The white 2" PVC pipe is connected to a drain at the bottom of the pool to withdraw sediment, debris, and cooler water. Both pipes discharge water into the west end of the pond. This outlet point is where the flow measurement was conducted.

According to the current property owner, both pipes were in place at the time of the original examination. However, the larger pipe can be moved to discharge water to different areas after it is drained from the pool.

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>
DOMESTIC	01/01 to 12/31	0.02 CFS	0.6 AF
IRRIGATION	03/15 to 11/15	0.03 CFS	4.0 AF
RECREATION	01/01 to 12/31	0.14 CFS	101.4 AF
HEATING	01/01 to 12/31	0.06 CFS	35.2 AF
<u>Totals:</u>		0.14 CFS	101.4 AF

2. Recommended Amendments

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

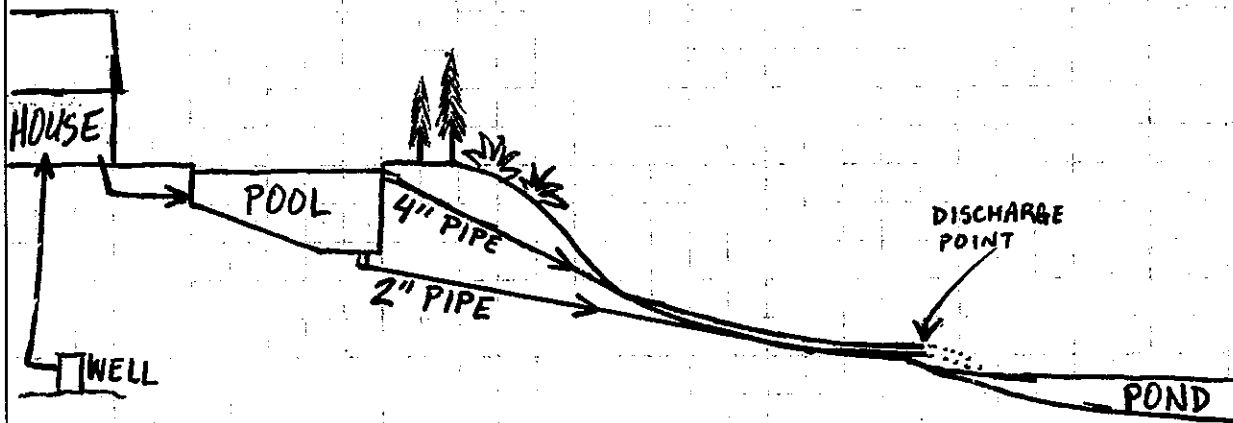
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ Other:
no fish propagation use found, increase rate for
irrigation, increase rate and volume for heating

I. AUTHENTICATION

Field Examiner's Name Aaron Marshall Date 05/20/2008

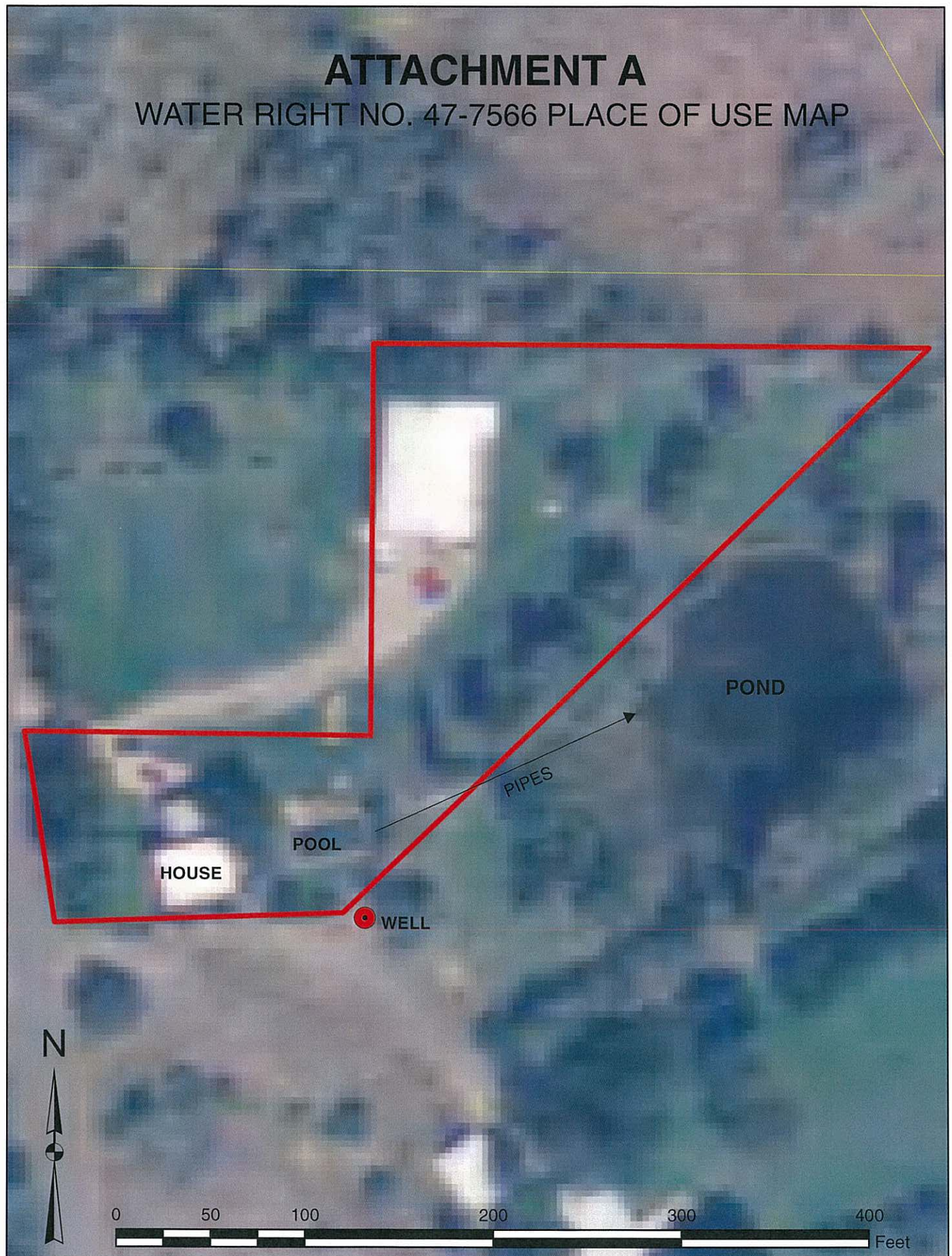
Reviewer _____ Date _____

ATTACHMENT B
SCHEMATIC CROSS-SECTION DIAGRAM
VIEW FACING NORTH, NOT TO SCALE



ATTACHMENT A

WATER RIGHT NO. 47-7566 PLACE OF USE MAP



ATTACHMENT C
PHOTOGRAPH OF WELL
VIEW FACING EAST



ATTACHMENT D
PHOTOGRAPH OF DISCHARGE POINT
VIEW FACING WEST, UPSLOPE TOWARDS POOL

