

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-8297

Exam Date: 4/26/2012

1. Current Owner: STEVE GIBSON

And

GLENDIA GIBSON
PO BOX 173
BLISS ID 83314
(208) 352-1083

2. Accompanied by: Steve Gibson

Phone No: See AboveAddress: See AboveRelationship to Permit Holder: Permit Holder

- 3.
- SOURCE**

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: King Hill Irrigation District
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

L4 SW1/4SW1/4

Sec. 7, Twp 06S, Rge 13E, B.M.

TWIN FALLS County

Method of Determination: GPS and Aerial Photography and in-field inspection.

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
06S	13E	7	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
													X						
													L 4						

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
06S	13E	7	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
													12.2						12.2
													L 4						

Total Acres: 12.2

Method of Determination: Aerial Photography and in-field inspection.

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- YES Aerial Photo Attached (required for irrigation of 10+ acres).
- YES 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
Site Tag # A0018600	Unknown	5	Unknown Submersible	Submersible	Unknown submersible

*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
Fuji Flow Meter	Polysonic			240332		3/28/2012

2. Measurements: The flow was measured using a Fuji Flowmeter. The owner supplied information concerning the sprinklers usage while the well is operation that was very similar to the flow measurement taken. The actual flow measurement was used to determine flow rate. Please see attached sheet for flow measurement information.

E. FLOW CALCULATIONS

YES Additional Computation Sheets Attached

Measured Method:

Flowmeter Measurement = 0.13 cfs

Sprinkler Estimation = 0.12 cfs

Use Actual Flow Measurement = 0.13 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 12.2 \text{ acres} \times 4 \text{ af/ac} = 48.4 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.13 \text{ cfs} \times 246 \text{ days} \times 1.9835 = 63 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 48.4 \text{ af}$$

2. Volume Calculations for Other Uses:

Domestic Use = 1.5 af (see attached sheet)

G. NARRATIVE/REMARKS/COMMENTS

The water for this permit is diverted from a well approximately 25 to 30 feet east of the home. The water from the well can travel northwest to the home where it is used for in-house use and to fill a small 0.5 acre foot pond. The pond is northeast of the home and is used for fire protection purposes and feed a system of garden hoses and sprinklers on top of the home. The water also travels southeast in a buried pipeline to a buried mainline that runs east-west through the property to irrigate the pastures to the south of the home and yard. In approximately the middle of the mainline a leg of the mainline takes off due north to irrigate the pasture to east of the house and in front of the home. King Hill Irrigation District water comes into the mainline from a pipeline out of the canal at the southwest side of the property. The canal water directly connected to the mainline and uses natural pressure from the canal company pipeline when the canal water is being used.

There are overlapping water rights in this forty acre tract, but all of those water rights appear to be for other property owners. Other than the King Hill Irrigation District water, there are no other overlapping water rights.

The permit suggests that the point of diversion should be in Gov't Lot 10 (NESESE) of Section 12, Township 6 South, Range 12 East. The Departments ArcMap PLS shapes also suggest that at least a portion of this could be in Section 12. However, after a discussion with the Department's GIS Analyst, Michael Ciscell, it was determined that the entire place of use and point of diversion were located in Gov't Lot 4, (SWSW) of Section 7, Township 6 South, Range 12 East. Therefore, a licensing amendment is needed to correct the point of diversion. Please see the communication memo with Michael Ciscell.

The permit stated that King Hill Irrigation District was not available on this property, so they needed to well for a primary irrigation source. During the field exam, it was discovered that the system did in fact use King Hill Irrigation District water, and the well water was only used for supplemental purposes. I contacted Gib Brown of King Hill Irrigation District, and he confirmed that the only time that water was not available to this property was for a two month period in 1979. Therefore, this permit was developed as a supplemental water right and should be licensed as a supplemental water right. Please see the communication document with Gib Brown.

The domestic use for this permit included several different minimal uses. Instead of listing out each use, the original applicant listed all of these minimal uses as a Domestic use. The total use of water under this domestic use is minimal, so it should be licensed as a Domestic use. Domestic uses for this right include In-house use, fire protection, fire protection storage, and stockwater. The yard irrigation is over a ½ acre and is included with the irrigation component for this water right. Please see the attached volume calculation sheet for the various Domestic uses.

A well log was found for the previous owner of this water right for a domestic well with a 6 inch casing. The well being used for this home has an 8 inch casing. The owner showed me a well casing that was located next to an old home site where the home had been removed. This well did have a six inch casing, but it was not connected to the system. The six inch well supplied water to the neighboring property.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE

PERIOD OF USE

DIVERSION RATE

ANNUAL VOLUME

DOMESTIC

01/01 to 12/31

0.040 CFS

1.50 AF

IRRIGATION

03/15 to 11/15

0.130 CFS

Totals: 0.130 CFS

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 Daniel A. Nelson (Staff Hydrologist)

Field Examiner's Name



Date

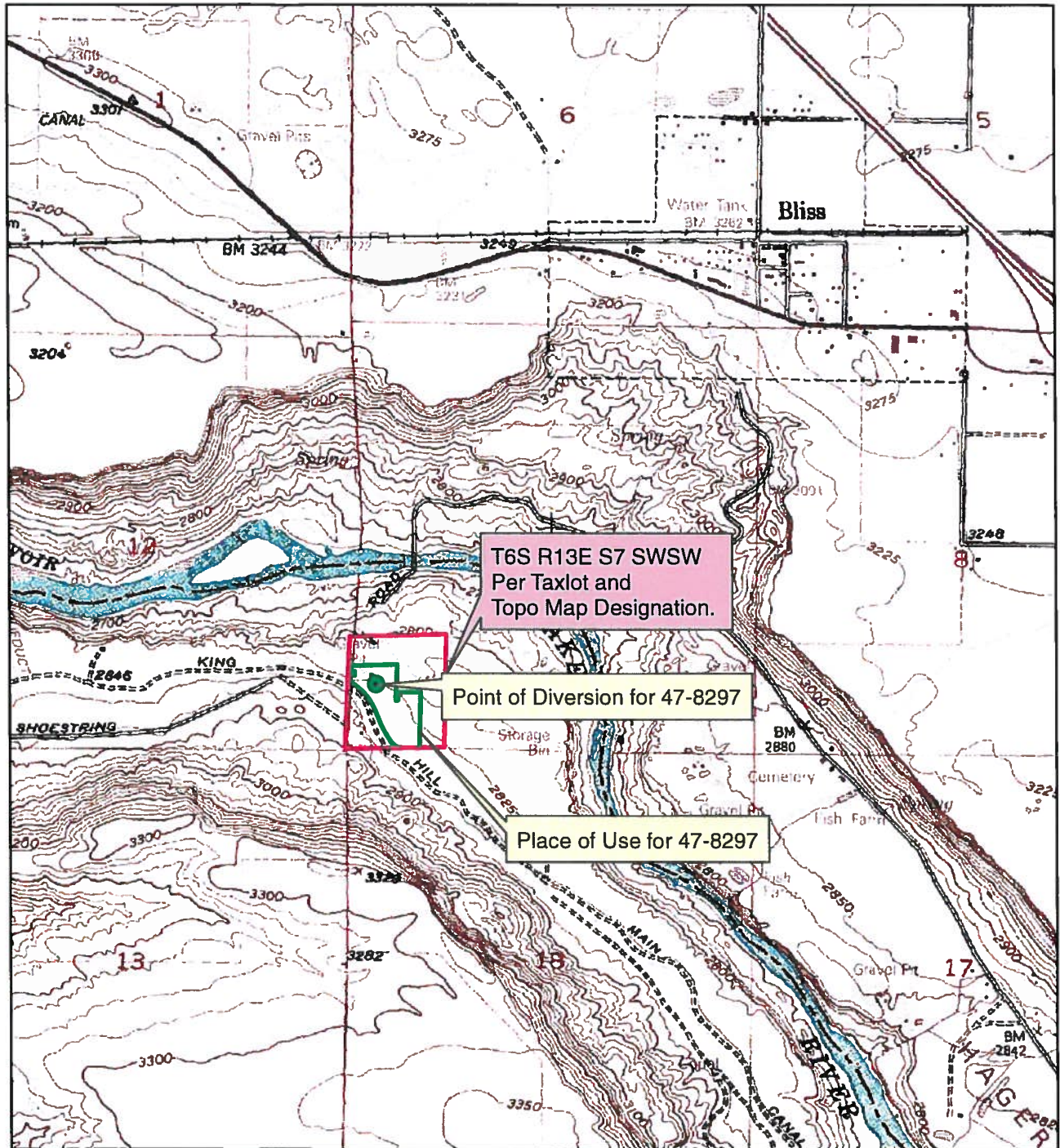
5-4-2012

Reviewer

Date

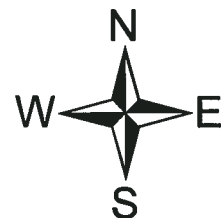
Field Exam Map for 47-8297

Place of Use and Point of Diversion



7.5 Minute Topographical Map
by Dan Nelson
5/3/2012

1.5 0.75 0 Miles

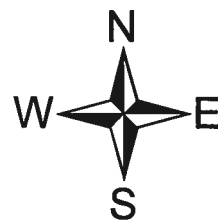


Field Exam Map for 47-8297
Place of Use and Point of Diversion



2011 Naip Aerial Photo
by Dan Nelson
5/3/2012

0.3 0.15 0 Miles

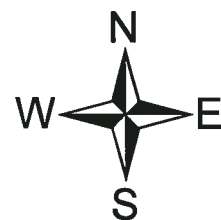


Field Exam Map for 47-8297
Place of Use and Point of Diversion



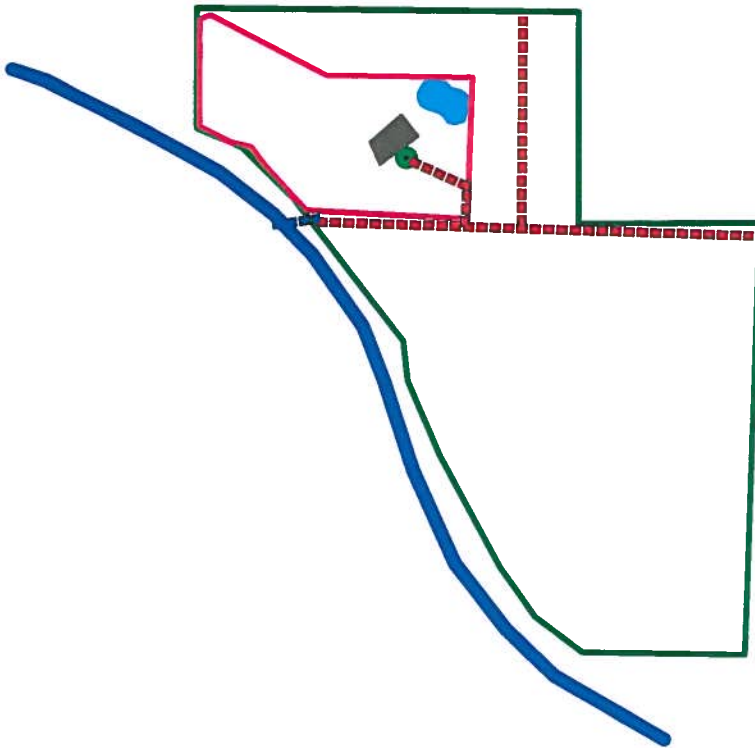
7.5 Minute Topographical Map
by Dan Nelson
5/3/2012

0.3 0.15 0 Miles



SYSTEM DIAGRAM FOR WATER RIGHT 47-8297:

The water for this permit is diverted from the well designated in green. From the well the water can travel in a northwesterly direction to home designated in Grey. The home currently houses three people, but could have housed up to 4 as is the standard occupancy for a home. From the home the water is delivered to a small pond designated in blue. The pond has a surface area of approximately 0.1 acres and is approximately 5 feet deep. The pond appears to hold approximately 5 acre feet of water. The water in the well can also travel in a southeasterly direction to the buried underground lawn sprinkler system designated by the red border and to a mainline that provides irrigation to 3 pastures or the remaining property. The well can provide water for 17 sprinklers with 9/64 nozzels at approximately 30 psi. King Hill Irrigation District water enters the property from the canal designated in a solid blue line through a pipeline (dashed blue line) that connects into the mainline system. The King Hill Irrigation District water can be used to irrigate the lawn area, but the well is generally used for this purpose.



VOLUME CALCULATIONS FOR DOMESTIC USE FOR 47-8297

This permit was filed with domestic and irrigation uses. The standard of 0.6 af would not provide adequate water under this use due to a number of subsequent uses that all fall under the domestic description. This sheet provides the domestic volume for this permit with the varied water uses under the domestic right.

TYPE OF LIVESTOCK	NUMBER OF ANIMALS	RATED GALLONS PER DAY	ANNUAL USE
CATTLE	15	12 GPD	65,700 GPY
SHEEP	5	2 GPD	3,650 GPY
GOATS	2	2 GPD	1460 GPY
CHICKENS	10	.1 GPD	365 GPY
TOTAL GALLONS OF WATER PER YEAR			71,175 GPY

$71,175 / 325850 = 0.2$ ANNUAL ACRE FEET OF DOMESTIC STOCKWATER

POND VOLUME:

Pond Surface Area = 0.1 acre feet surface area.

Pond Depth = 5 ft

Pond Volume = $0.1 \times 5 = 0.5$ acre feet

Evaporation = 0.1 acres surface X 4.0 acre feet per acre alfafa = 0.4 acre feet evaporation

Total Pond Volume needs = $0.5 \text{ af} + 0.4 \text{ af} = 0.9 \text{ af}$.

IN-HOUSE USE:

Standard People per Household = 4.3 people (Please Note: There are currently only 3 people occupying the home, but we used the standard number of people per home.)
In-house use per person = 75 gpd

$(4.3 \times 75 \times 365) / 325850 = 0.4 \text{ af}$

RECOMMENDED DOMESTIC VOLUME WITH ALL USES:

$0.2 + 0.9 + 0.4 = 1.5 \text{ af}$ for Annual Domestic Volume

LD01

No.01

LOG NAME:GIBSON

START :04-26 11:23

END :04-26 11:33

INTERVAL:00:01:00

4/26/2012 11:29

+2.763E+0 ft/s

+5.681E+1 gal/m

+TOTAL 0000344 gal

NORMAL

4/26/2012 11:30

+2.738E+0 ft/s

+5.630E+1 gal/m

+TOTAL 0000401 gal

NORMAL

4/26/2012 11:31

+2.740E+0 ft/s

+5.634E+1 gal/m

+TOTAL 0000457 gal

NORMAL

4/26/2012 11:32

+2.795E+0 ft/s

+5.746E+1 gal/m

+TOTAL 0000514 gal

NORMAL

4/26/2012 11:33

+2.708E+0 ft/s

+5.567E+1 gal/m

+TOTAL 0000571 gal

NORMAL

4/26/2012 11:26

+2.790E+0 ft/s

+5.736E+1 gal/m

+TOTAL 0000171 gal

NORMAL

4/26/2012 11:27

+2.777E+0 ft/s

+5.709E+1 gal/m

+TOTAL 0000229 gal

NORMAL

4/26/2012 11:28

+2.809E+0 ft/s

+5.777E+1 gal/m

+TOTAL 0000287 gal

NORMAL

PERMIT 47-8297

DISCUSSION:

The Fuji Flowmeter provided a measurement of 57.1 gpm or 0.13 cfs
($57.1/448.8 = 0.1272228$)

The owner told us during the field exam that well can provide 17 sprinklers with 9/64 nozzels at a pressure of 30 psi. Using the standard chart for sprinklers, this provides 3.26 gpm per nozzel or 55.42 gpm for all 17 sprinklers.
($17 \times 3.26 = 55.42$)

$55.42 \text{ gpm} / 448.8 = 0.12 \text{ cfs.}$

The estimated sprinkler rating and the actual measurement are very close, so I am recommending that the actual measurement be used.

I recommend that this water right be licensed for 0.13 cfs

FUJI= 57.1 GPM

TELEPHONE CONVERSATION SHEET

WATER RIGHT NUMBER 47-8297

NAME OF CONTACT Gib Brown, King Hill Irrigation District

PHONE NUMBER (208)
366-2243

ADDRESS N/A

DIRECTIONS: N/A

TYPE OF USES Irrigation and Domestic

LEGAL DISCRITION:

TOWNSHIP 6S **RANGE** 13E **SECTION** 7 1/4 SW 1/4 SW 1/4
GOV'T LOT # 4

ADDITIONAL INFORMATION:

I spoke with the manager of King Hill Irrigation District, Gib Brown, to address some questions regarding a field exam that I and the Southern Region staff performed during a field exam training exercise. Questions arose on permit 47-8297 concerning whether or not this permit should be considered a supplemental water right or a primary water right since supplemental conditions were not included on the permit, and there is no proof it was supplemental at the time that proof was filed.

Mr. Brown informed me that Mr. Gibson's property was without water for the first two months of the 1979 irrigation season. During this two month period, King Hill Irrigation District was replacing the siphon from the Malad River with the existing pumps from the Snake River. According to Mr. Brown, the siphon from the Malad River never actually failed. Mr. Brown also informed me that after the 2 month period in 1979 water was available for the Gibson property.

Therefore, this use should have had the supplemental conditions placed on it at the time of permitting.

Mr. Brown also informed me that they do not have shares, but do allot acres to the water users within the Water District. Mr. Gibson has 14.9 acres worth of water for their King Hill Irrigation District allotment. This allotment is broken down into two parcels, one for 9.9 acres and one for 5 acres. According to the Department'

CONVERSATION SHEET

WATER RIGHT NUMBER 47-8297

NAME OF CONTACT Michael Ciscell, GIS Analyst IDWR

PHONE NUMBER N/A

ADDRESS N/A

DIRECTIONS: N/A

TYPE OF USES Irrigation and Domestic

LEGAL DISCRITION:

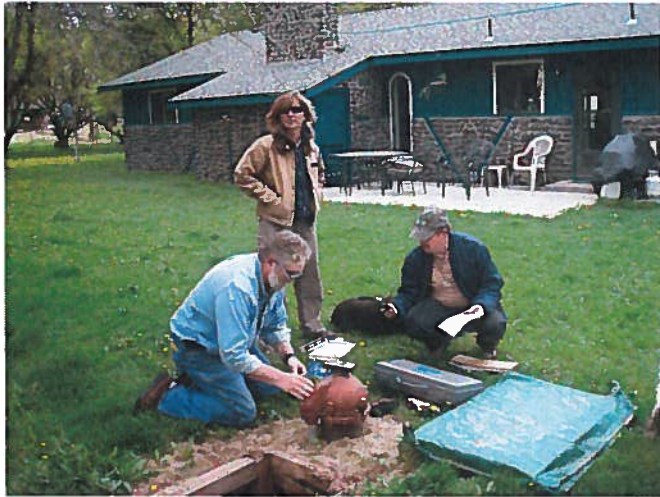
TOWNSHIP 6S **RANGE** 13E **SECTION** 7 1/4 SW 1/4 SW 1/4
GOV'T LOT # 4

ADDITIONAL INFORMATION:

I spoke with the Department's GIS Analyst, Michael Ciscell, to address some questions regarding a field exam that I and the Southern Region staff performed during a field exam training exercise. Questions arose on permit 47-8297 concerning whether or not this permit should be listed as being totally in T6S R13E S7 NWSW, or whether it should be listed with a portion of the irrigation use as being in the T6S R12E S12 SESE.

Mr. Ciscell reviewed the maps and told me that the DRG or topographical map lines up pretty closely with the tax lot information supplied by Twin Falls County for IDWR's mapping uses. If we go by the tax lot/topographical map conclusion, then this permit should be described as all 12.2 acres as being in Government Lot 4, (SWSW) of Section 7, Township 6 South, Range 13 East, Twin Fall County. The GIS map created for workflow and the department records will still show the a portion of the property being in T6S R12E S12 SESE, the water right will list the proper legal description.

PHOTOGRAPHER AND DATE OF PHOTOS COREY SKINNER 4/26/2012
FILE NUMBER 47-8297



The top photo shows the well and staff placing the site tag on the well. The back of the home is shown in the background.



This photo shows the pressure tanks in the home and the power panel for the well pump. The power panel did not have the make of the well, but it state that the pump was a 5 Hp pump.



This photo shows the point where the well was measured. The measurement was made on the far side of the blocked off sprinkler head where the pipe starts traveling up.

PHOTOGRAPHER AND DATE OF PHOTOS COREY SKINNER 4/26/2012
FILE NUMBER 47-8297



The picture above shows the eastern pasture and the measurement site. The measurement site was on the pipeline in the field.



The pictures above and below show the pond and the home from different angles. I have denoted the well location in the picture shown below.

Well is
located
here.

