

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 79-7251

Exam Date: 8/25/2011

1. Current Owner: STEVEN FELDMANN
PO BOX 29
White Bird, ID 83554
(208) 839-2738
2. Accompanied by: Not accompanied by anyone.

3. **SOURCE**

SPRING

TRIBUTARY

LITTLE HAMMER CREEK

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:**

SPRING SE1/4SE1/4NE1/4 Sec. 18, Twp 28N, Rge 01E, B.M. IDAHO County

Method of Determination: Garmin GPS map 76S

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
28N	01E	18				X													

Method of Determination:

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
A0016696	submersible pump (unknown size)		in the holding tank	unknown make	2 1/2" to frost-free hydrant

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

D. FLOW MEASUREMENTS1. **Measurements:**

No power was on, so the frost-free hydrant could not be used. There was no flow coming out of the overflow, so visible markings on the inside of the pipe were used, and the depression in the ground where the overflow had hit were used to calculate using the **California Pipe Method for flow in GPM from a Partially Filled Pipe**:
SEE ATTACHMENT = 0.01 cfs (low flow)

Pipe Capacity for 2 1/2 inch overflow pipe from the collection/storage tank:
 $Q = 5(3.1416) X (0.010850694) = 0.17$ cfs Maximum Capacity of a 2 1/2" pipe

Recommend: 0.02 cfs. Allowing Domestic internal use only, since no evidence was found that would determine there was external use, other than possibly transporting water from the hydrant to the fire pits to extinguish fires.

E. VOLUME CALCULATIONS

1. Volume Calculations for Domestic/1:

Recommend: IDWR's Standard for Domestic internal use only = 0.6 af

F. NARRATIVE/REMARKS/COMMENTS

You can get to the POU/POD from either the east or west entrances off of Pine Ridge Rd. The spring is located by the west entrance. The spring is piped with schedule 40 PVC pipe to 1000 gallon concrete collection/holding tank with a submersible pump (unknown size, make/model). There is a 1 1/2 inch overflow from the collection tank, and to the northwest is a frost-free hydrant and power pole. There are 2 areas that make up the place of use, one by the spring itself (by the west entrance), and another area that is leveled out with a fire ring (by the east entrance). At the time of the field exam, there was no overflow from the collection tank, and the Little Hammer Creek was dry. There was evidence that there had been overflow, due to markings on the inside of the pipe, and a depression in the ground where the overflow had discharged (a California Pipe Method for calculating flow in GPM from a Partially Filled Pipe could be determined as an estimate of live flow). The Little Hammer Creek looked like it had had flow, but not recently (probably runs in the spring or with run-off from rain, etc). Nothing was found at the time of the field exam to indicate that The Little Hammer Creek had a developed point of diversion (which coincides with Hammer Creek source not being listed on the Proof of Beneficial Use form submitted). Domestic use would not be for external use, since there was no evidence of a riser or method of watering the area over at the east section of the POU. The only external use would probably be for extinguishing the fire in the fire pits, that would require manually transporting the water from the hydrant to that location (recommend domestic internal use only).

Have conditions of permit approval been met? ☒ Yes ☐ No

G. RECOMMENDATIONS1. **Recommended Amounts**

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
DOMESTIC	01/01 to 12/31	0.020CFS	0.60 AF
Totals:		0.020CFS	0.60 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

I. AUTHENTICATION

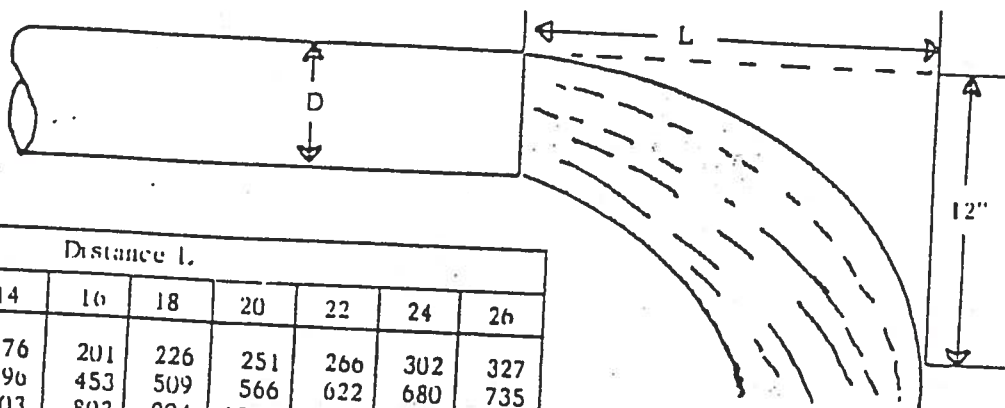
Field Examiner's Name

Sandy Hemmaway Date *9/21/2011*

California Pipe Method RATE OF FLOW IN GPM

FLOW IN GPM FROM A HORIZONTAL PIPE

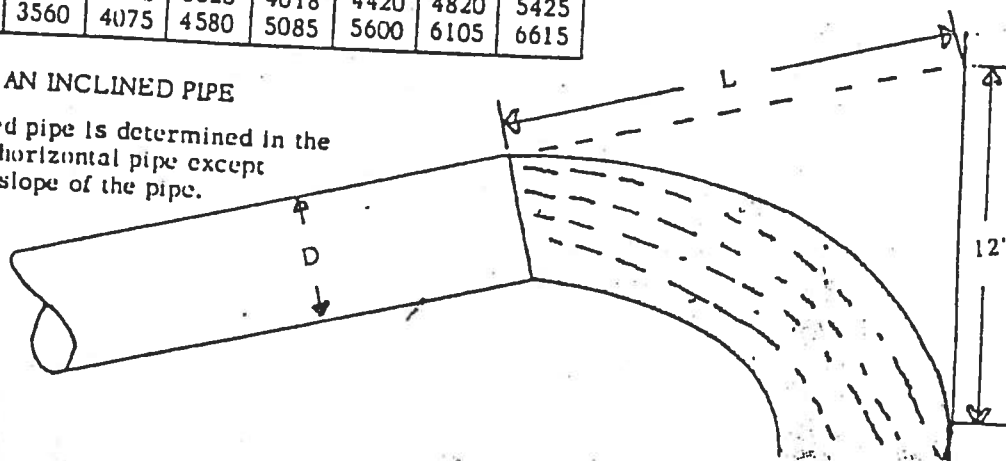
$$\text{GPM} = (0.785) D^2 L$$



Pipe Diam D	Distance L								
	10	12	14	16	18	20	22	24	26
4	126	151	176	201	226	251	266	302	327
6	284	340	396	453	509	566	622	680	735
8	502	603	703	803	904	1005	1105	1205	1305
10	785	944	1100	1255	1412	1570	1725	1885	2040
12	1132	1359	1580	1809	2035	2260	2485	2715	2940
14	1540	1846	2155	2465	2770	3080	3380	3690	4000
16	2060	2415	2801	3220	3620	4018	4420	4820	5425
18	2542	3050	3560	4075	4580	5085	5600	6105	6615

FLOW IN GPM FROM AN INCLINED PIPE

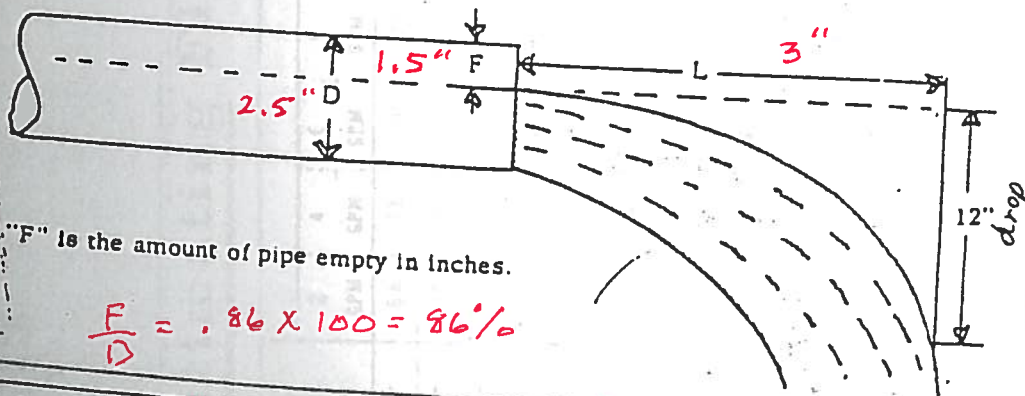
The GPM for an inclined pipe is determined in the same manner as for a horizontal pipe except "L" is taken along the slope of the pipe.



FLOW IN GPM FROM A PARTIALLY FILLED PIPE

For partially filled pipes, measure the freeboard (F) and the inside diameter (D) and calculate the ratio of F/D (in percent). Measure the stream as explained for full pipes and calculate the discharge. The actual discharge will be approximately the value for a full pipe of the same diameter multiplied by the correction factor from the following table.

F/D %	Factor
5	.981
10	.948
15	.905
20	.858
25	.805
30	.747
35	.688
40	.627
45	.564
50	.500
55	.436
60	.375
65	.312
70	.253
75	.195
80	.142
85	.095
90	.052
95	.019
100	.000



"F" is the amount of pipe empty in inches.

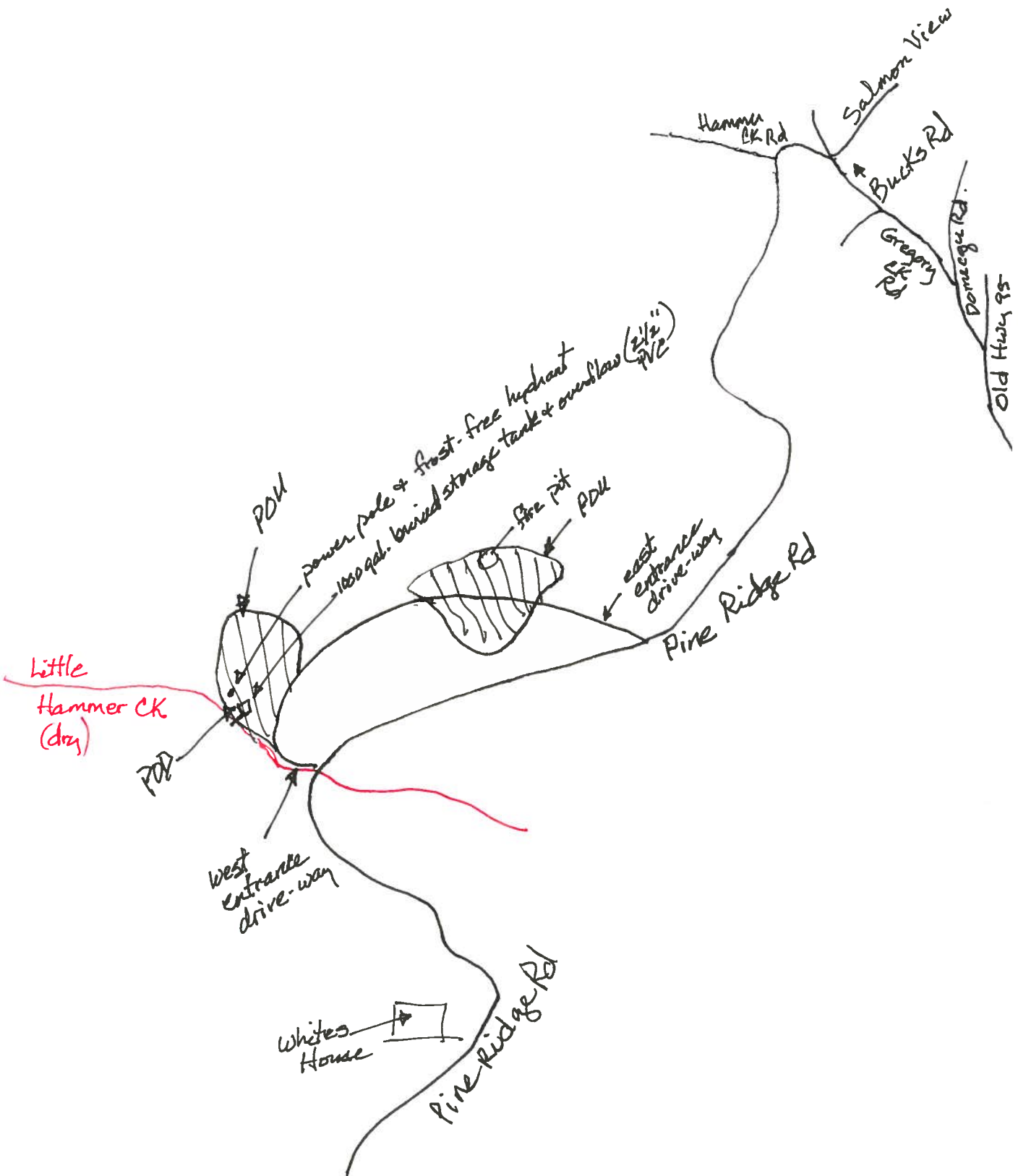
$$\frac{F}{D} = .86 \times 100 = 86\%$$

Factor is 0.095 (0.095)

$$\text{GPM} = (0.095) (6.25) (3) = 1.78125 \times 0.00223 = 0.01 \text{ cfs low flow}$$

* Pipe Capacity for 2 1/2" overflow pipe:

$$Q = 5\pi r^2 = 5(3.1416)(0.010850694) = 0.17 \text{ cfs}$$



NWNE

NENE

NWNW

Twin River Ranch Sub.
Lot 77

SWNE

28N01E

SENE

SWNW

Little Hammer Creek

NWSE

NESE

NWSW

east entrance

west entrance

PO
Sandra Jank
Crown Creek
last few years

Red
Willow



east
entrance
to the
property



Fire
Pit

POU
on
east
side

79-7251 Feldmann

S. Hemerway



PO4
on
east
side

08/25/2011



power
pole
+
hydrant

2 1/2
overflo
from
burner
1000ga
collectio
holding
tank

08/25/2011

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S. Hemerway



power
pole
+
frost
free
hydrant

+
POU
on
west
side

08/25/2011

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S. Hemerway