

[illegible]

Method of Determination: GPS in field, USGS Quad, Aerial Photo, GIS

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

Well or Diversion

Spring box collector with buried 1 1/4 " poly pipe to 495 gallon trough.

D. FLOW MEASUREMENTS

1. None made – Pipe at spring source had been disconnected by cattle, Fence ex-closure around spring had failed

E. FLOW CALCULATIONSTheoretical flow capacity based on chart (attached) for 1 1/4 pipe: $Q = 5 \times 3.1416 \times .0027 = .04 \text{ cfs}$ **F. VOLUME CALCULATIONS**

2. Volume Calculations for Stockwater Use: 300 cow/calf pairs @ 12gpm/day/pair, $300 \times 12 \times 153 \text{ days} / 325,850 = 1.7 \text{ afa.}$

G. NARRATIVE/REMARKS/COMMENTS

System consists of a wood spring head-box connected to a 1 1/4" poly pipe outflow. Buried pipe runs east to west approximately 425 ft and daylight into 425 gallon trough.

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>
STOCKWATER	05/01 to 09/30	0.020 CFS	1.70 AF
WILDLIFE	01/01 to 12/31	0.010 CFS	1.70 AF
<u>Totals:</u>		0.020 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

Field Examiner's Name RB Whitney Date 1-9-13

Reviewer _____ Date _____

PIPE FLOWS -- PUMPING SYSTEMS

[properly designed @ 5 ft. / sec.]

$$Q = 5 \pi r^2 \text{ (r in ft.)}$$

$$Q = 5 \pi R^2 \text{ (R in ft.)}$$

$$R = (\text{diameter}/12) / 2 \left(\frac{\text{dia}}{12} \right) \div 2$$

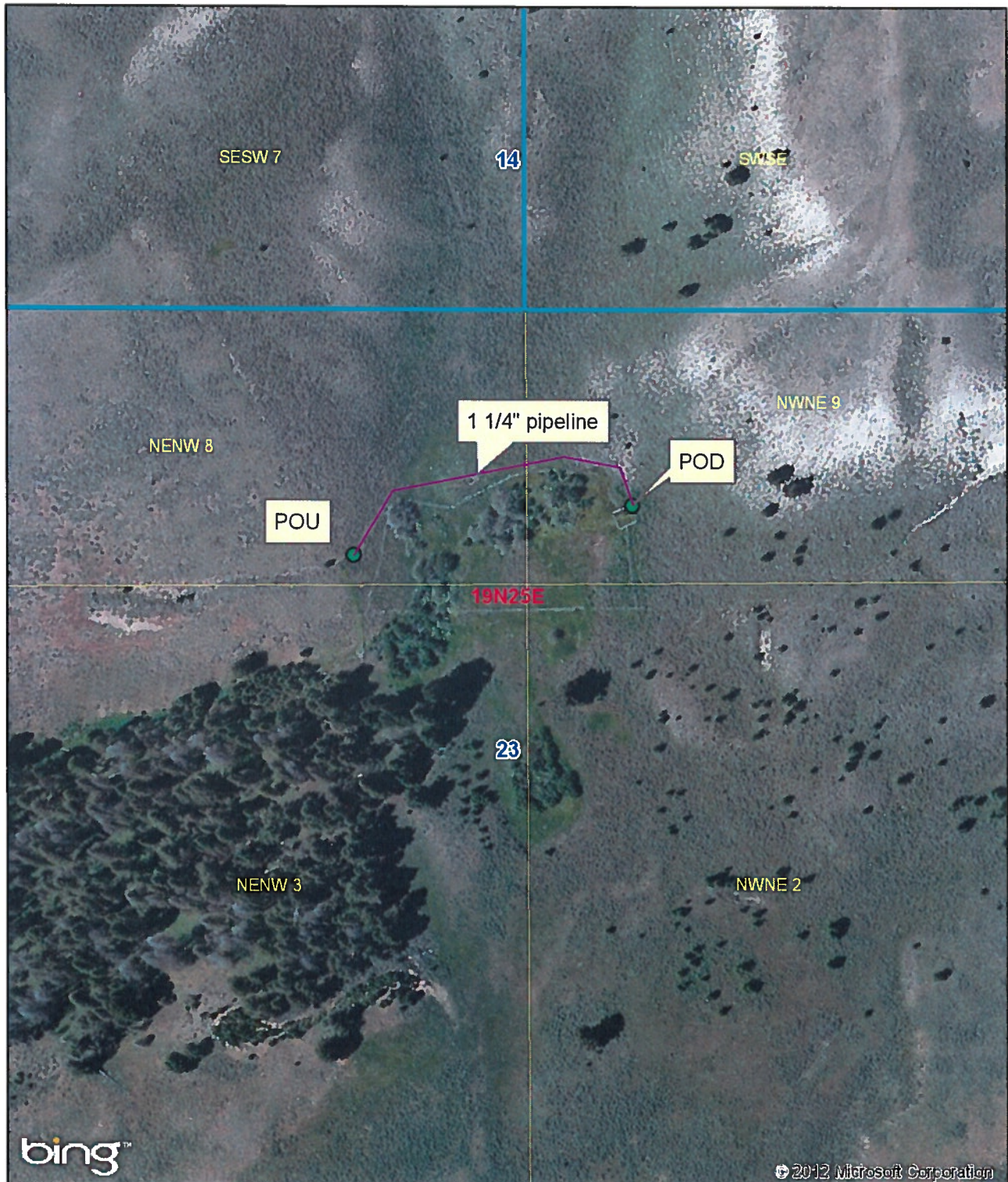
$$\pi = 3.1416$$

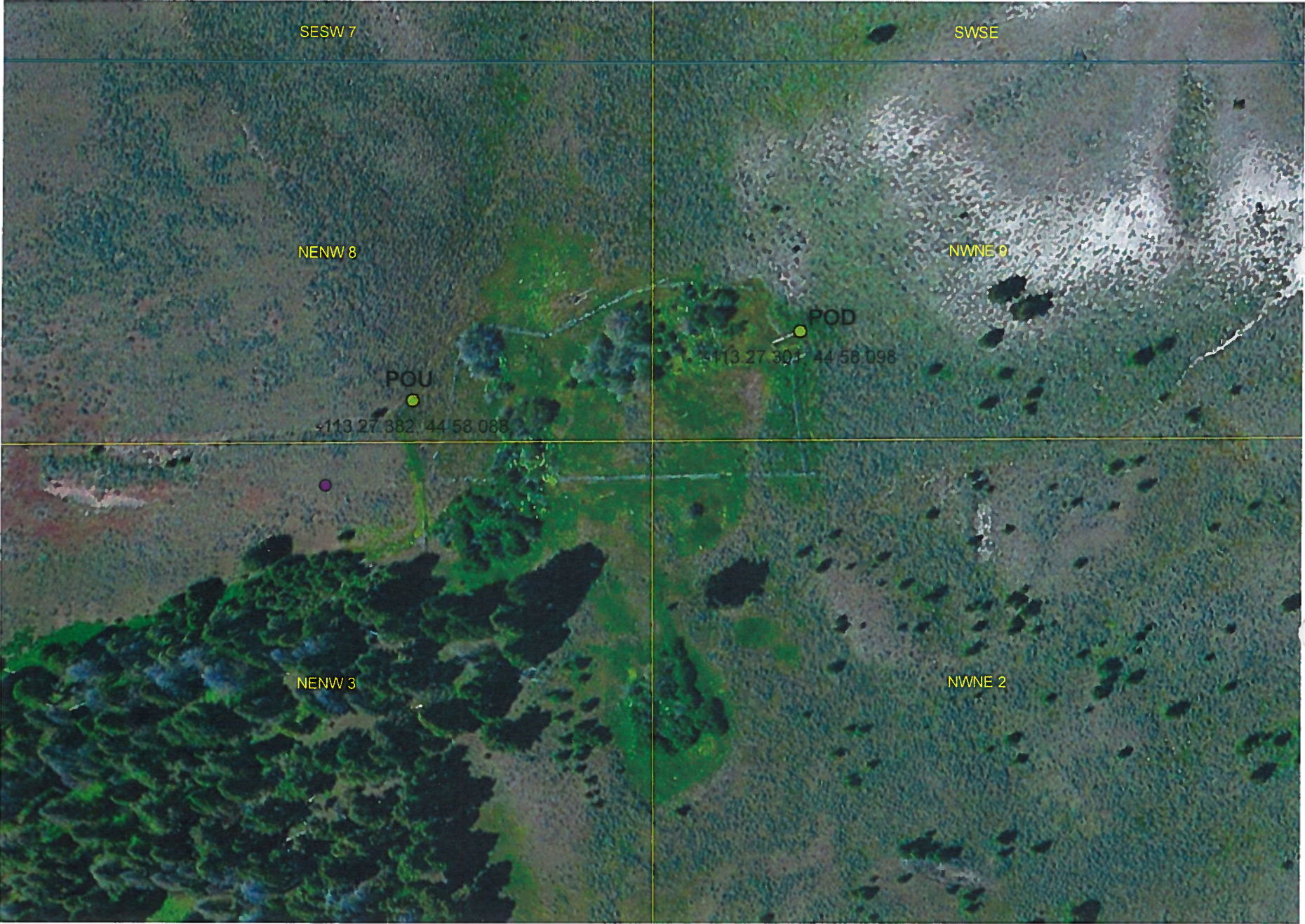
<u>PIPE DIAMETER(")</u>	<u>CFS (1/100)</u>	^(1/10) <u>MINER INCH</u>	^(1/10) <u>GALLONS/ MINUTE</u>
1	.03	1.5	13.5
2	.11	5.5	49.4
3	.25	12.5	112.2
4	.44	22.0	197.5
6	.98	49.0	439.8
8	1.74	87.0	780.9
10	2.73	136.5	1225.2
12	3.93	196.5	1763.8
14	5.34	267.0	2396.6
16	6.98	349.0	3132.6
18	8.83	441.5	3962.9
20	10.90	545.0	4891.9
22	13.19	659.5	5919.7
24	15.70	785.0	7046.2

THEORETICAL PSI's

Internal domestic	- 20 psi
Internal/external domestic	- 30 psi
Domestic w/ 5-10 acres	- 40 psi
Medium systems (up to 50 acres)	- 40 psi
Large pivots	- 60 psi

System Design 73-7368





PODÉ POU
Looking South

P/D
X

X P/M







pon

Whitney, Rob

From: Bonner, Mark D [mbonner@blm.gov]
Sent: Friday, September 21, 2012 10:06 AM
To: Whitney, Rob
Subject: RE: Boundary Spring

Rob, after being to the development site with you, I agree the POD and POU are correct as shown on the map...

From: Whitney, Rob [<mailto:Rob.Whitney@idwr.idaho.gov>]
Sent: Thursday, September 20, 2012 12:45 PM
To: Bonner, Mark D
Cc: Price, Fredric W; Whitney, Rob
Subject: Boundary Spring

Mark,

After our field recon, I looked at our GIS info related to the referenced spring development (74-7368). If you recall, it was the spring east of the Copper Queen Mine, ~~FY~~, the county tax lot info shows that the BLM owns the land where we located the spring (SW NW NE of 23, 19N; 25E). USFS is located to the north where we parked. Attached is air photo with PD(spring) & PU(stock tank) locations (green dots). The purple dot is the spring location from the original permit. Can you confirm that we have identified the correct spring feeding the stock tank? It seems to make sense. Thanks.

ROB WHITNEY
WATER COMPLIANCE BUREAU
208-287-4924
208-859-2003cell
rob.whitney@idwr.idaho.gov

Whitney, Rob

From: Bonner, Mark [mbonner@blm.gov]
Sent: Wednesday, December 19, 2012 9:02 AM
To: Whitney, Rob
Subject: Re: Boundary Spring East of Copper Queen

Rob, the number of cattle on the old Agency Creek permit was 300 cattle. This allotment has been absorbed into the now "Muleshoe" allotment. The permittee has three different herds he places on public land. Lately, on this particular part of the allotment he has been placing 175 - 250 pairs...

On Tue, Dec 18, 2012 at 7:27 AM, Whitney, Rob <Rob.Whitney@idwr.idaho.gov> wrote:

Mark,

Can you tell me the number and type of livestock that use this allotment? Water right # is 74-7368. The water permit was issued for 300 range cows. Thanks for your help.

ROB WHITNEY

WATER COMPLIANCE BUREAU

208-287-4924

208-859-2003cell

rob.whitney@idwr.idaho.gov

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Mark Bonner
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