

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22949

Exam Date: 1/4/2012

1. Current Owner: GEORGE E COLWELL
3990 HWY 52
PAYETTE ID 83661
(208)278-3448

And/Or

CHERYL F COLWELL
3990 HWY 52
PAYETTE ID 83661
(208)278-3448

2. Accompanied by: George Colwell
Phone No: (208)278-3448 and (541) 898-2863
Address: same as above
Relationship to Permit Holder: self

3. SOURCE

UNNAMED DRAIN

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 65-72 Washoe Irrigation; The following water rights are all owned by the same owner/same address: 65-13091 irrigation (C/C LLC), 3-10192 stockwater (George Colwell, Snake River source 3/1-11/15, for 0.05 cfs, decreed 12/12/2007), and 3-4008A irrigation (C/C LLC, Snake River).

2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

UNNAMED DRAIN L2 SW1/4NE1/4	Sec. 29, Twp 09N, Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN NE1/4SE1/4	Sec. 29, Twp 09N, Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN SW1/4SE1/4	Sec. 29, Twp 09N, Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN NE1/4SE1/4	Sec. 29, Twp 09N, Rge 05W, B.M.	PAYETTE County

Method of Determination: Garmin GPS Map 76S, 2009 and 2011 ArcMap ***

2.

PLACE OF USE: STOCKWATER

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09N 05W 29													X	X	X		
														X			
															L2		
09N 05W 32		X	X														

Method of Determination: Garmin GPS Map 76S, 2009 and 2011 ArcMap ***

***The legal was changed in the POD and POU from Sec 29 SWNE L2, as shown on ArcMap, to Sec 29 NWSE L2 to match the govt lot designation if the QQ lines were extended completely down.

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

Unnamed Drain with (4) 30 inch check structures, to act as a point of diversion (a board can be placed within the check to alter the level of the water in the drain but not enough to cause storage within the drain). The system is entirely gravity flow.

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

D. FLOW MEASUREMENTS

1. Measurements:

Due to "Check Structure" #1 and #2 (both 30 inch) being fully submerged by high water from the Snake River, and "Check Structure" #3 (30 inch) being full but having iced over so no physical measurement could be obtained (flow beneath the ice could be detected), therefore the only physical measurement obtained was from "Check Structure" #4. For this reason, an average was taken to indicate that there would be the capacity even at each POD, especially with POD #4 being the last POD/Check Structure on the unnamed drain:

POD #4 "Check Structure": 30 inch

$$\begin{array}{l}
 \text{Diagram: } \overline{\text{D}} \begin{array}{l} \updownarrow 30'' \\ \updownarrow 14'' \text{ F} \\ \updownarrow 1/2'' \text{ L} \end{array} \\
 \text{Calculation: } F/D = 14/30 = .46 \times 100 = 46\% \\
 46\% \text{ factor} = .564 \\
 \text{GPM} = (\text{Factor}) \times D^2 \times L \\
 .564 \times 30^2 \times .5 = 253.8 \times .00223 = .58 \text{ cfs} \\
 \text{4 checks} \quad \text{average} = .15 \text{ cfs}
 \end{array}$$

Administrative Memo #3 recommends for 401 – 500 head cattle: 0.12 cfs

RECOMMEND: 0.12 cfs as permitted

E. VOLUME CALCULATIONS (BASED ON NUMBER HEAD OF CATTLE, SINCE THERE IS NO STORAGE)

1. Volume Calculations for Stockwater:

$$V_{I.R.} = (500 \text{ head} \times 12 \text{ gpd} \times 365 \text{ days}) / 325,850 = 6.7 \text{ af}$$

$$V_{D.R.} = [0.12 \text{ cfs}] \times (365 \text{ Days}) \times 1.9835 = 86.9 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 6.7 \text{ af}$$

Administrative Memo #3 recommends for 401 – 500 head cattle: 6.7 af

RECOMMEND: 6.7 af

F. NARRATIVE/REMARKS/COMMENTS

There are (4)-30 inch "check structures" in the unnamed drain to moderately check up flow. This does not rise to the level to be considered pond storage. Although water will not be diverted out of the ditch nor stored in each ditch, addition of "check structures" allows the Point of Diversion to be the "check structures," and the Place of Use to be the ditches upstream from each "check structure." The flow in the ditch during the irrigation season is higher due to additional flow from Washoe Irrigation. At the time of the field examination, flow in the ditch is made up from seepage (since the ditches were originally dug for drawing off water from the fields), waste water, and some back flow off the Snake River. At the time of the exam, there were 2 "check structures" (#1 and #2) which were submerged with high water from the Snake River; check #3 was full, but was frozen so physical measurement could be obtained (there was an active flow of water beneath the ice); a physical measurement was taken from check structure #4 and averaged with the 4 check structures, which still exceeded the required rate. No water is diverted from the drain, since the 500 head cattle drink directly from the unnamed drain. The unnamed drain is the POU.

Tax Lot information which was updated on 11/1/2010 shows: Smoke Ranch LP and George Colwell as the current owner, both with the same address, for property where the POU and POD are located.

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

G. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	01/01 to 12/31	0.120 CFS	6.70 AF
	<u>Totals:</u>	0.120 CFS	6.70 AF

2. Recommended Amendments

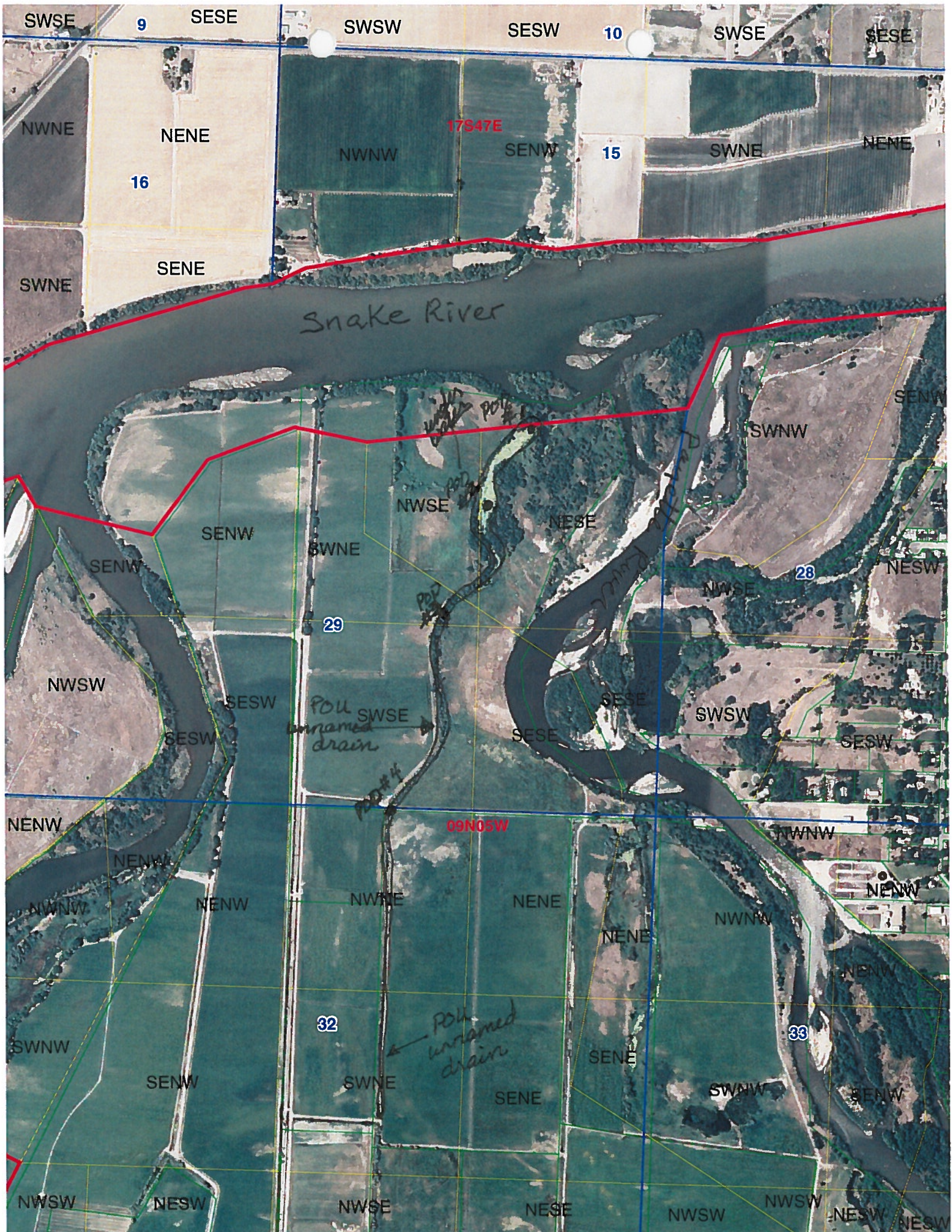
☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

H. AUTHENTICATION

Field Examiner's Name

Sandy Hemminger Date 3/6/2012





POD
#3
full +
frozen
(possib
water
main
under
the ice
30"
check
structu



POD
#1 + 2
were
under
water;
both
30"
check
struct

LS-22949 Colwell

1/4/2012

S. Hernandez



POD
#4
36"
check
structu



Unname
Drain

65-22949 Colwell

11/4/2012

S. Hemerican



500
head
range
cattle

65-22949 Colwell

1/4/2012

S. Hemenway