

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22950

Exam Date: 1/4/2012

1. Current Owner: GEORGE E COLWELL 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: None. Other water rights that show up in some of the same QQs are: 65-72 Washoe Irrigation; C/C LLC and George Colwell water rights from the Snake River for irrigation and stockwater, **and other Unnamed Drain water rights are for different drains, using different "check structures" that act as the PODs).**
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED DRAIN	SW1/4SE1/4	Sec. 29,	Twp 09N,	Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN	NW1/4NE1/4	Sec. 32,	Twp 09N,	Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN	SW1/4NE1/4	Sec. 32,	Twp 09N,	Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN	NW1/4NE1/4	Sec. 32,	Twp 09N,	Rge 05W, B.M.	PAYETTE County
UNNAMED DRAIN L2 (SW1/4NE1/4)	Sec. 29,	Twp 09N,	Rge 05W, B.M.	PAYETTE County	

Method of Determination: Garmin GPS Map 76S, 2009, 2011 ArcMap, and maps drawn by George Colwell at the time of the B/U field examination.

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		
					L 2														
09N	05W	32		X	X											X			

Method of Determination: Garmin GPS Map 76S, 2009, 2011 ArcMap, and maps drawn by George Colwell at the time of the B/U field examination.

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.

<u>Well or Diversion</u> <u>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</u> <u>Size</u>
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Unnamed Drain with (5) "check structures," which 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 (4 FT) being fully submerged by high water from the Snake River; ice in the drain at "Check Structure" #3 and 4 (4 FT), and #2 (30 inch); a measurement was taken at #5, which more than exceeds the amount permitted, but will be averaged for the 5 locations to show that even if averaged, this capacity of water exceeded the permitted amount, and should be recommended as permitted:

POD #5 "Check Structure" (4 ft X 18 inch weir to a 24 inch steel culvert, continuing down the unnamed drain):
Information obtained from U of I Water Measurement = 14.35 cfs
14.35/5 check structures = 2.87 cfs average for each check

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, AND NO ACTUAL WATER DIVERTED, ONLY WHAT THE CATTLE CONSUME)

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 5 PODs that are different in size, but are all built to be a check structure 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, additional check structures allows the POD 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 field examination, there was one structure under water from high flows in the Snake River (check structure #1), and for this reason, no pictures could be taken of the actual POD. The drains are at full capacity during the summer time. No water is diverted from the drain, since the 500 head cattle drink directly from the unnamed drain. The unnamed drain is the POU. Some of the PODs could not be measured adequately, due to ice, so for this reason, since there was such an abundance of flow, an average was taken to show that the rate that naturally flows down the unnamed ditch exceeds 0.12 cfs, which will be recommended. Check Structures 1, 3 and 4 are each 4 ft checks. Check #1 is covered by high water from the Snake River, and Checks 3 and 4 have 1 ft of water in them, but show that historically they are full. Check 2 is a 30 inch that was 13 inches full. Check #5 is where there is a 4 ft weir that was running at 18 inches high (14.35 cfs) then through a 24 inch culvert and continues down unnamed drain. An average: $14.35/5 \text{ check structures} = 2.87 \text{ cfs/check}$. For this reason, even the winter seepage capacity exceeds the 0.12 cfs water right 65-22950 will be recommended for licensing.

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

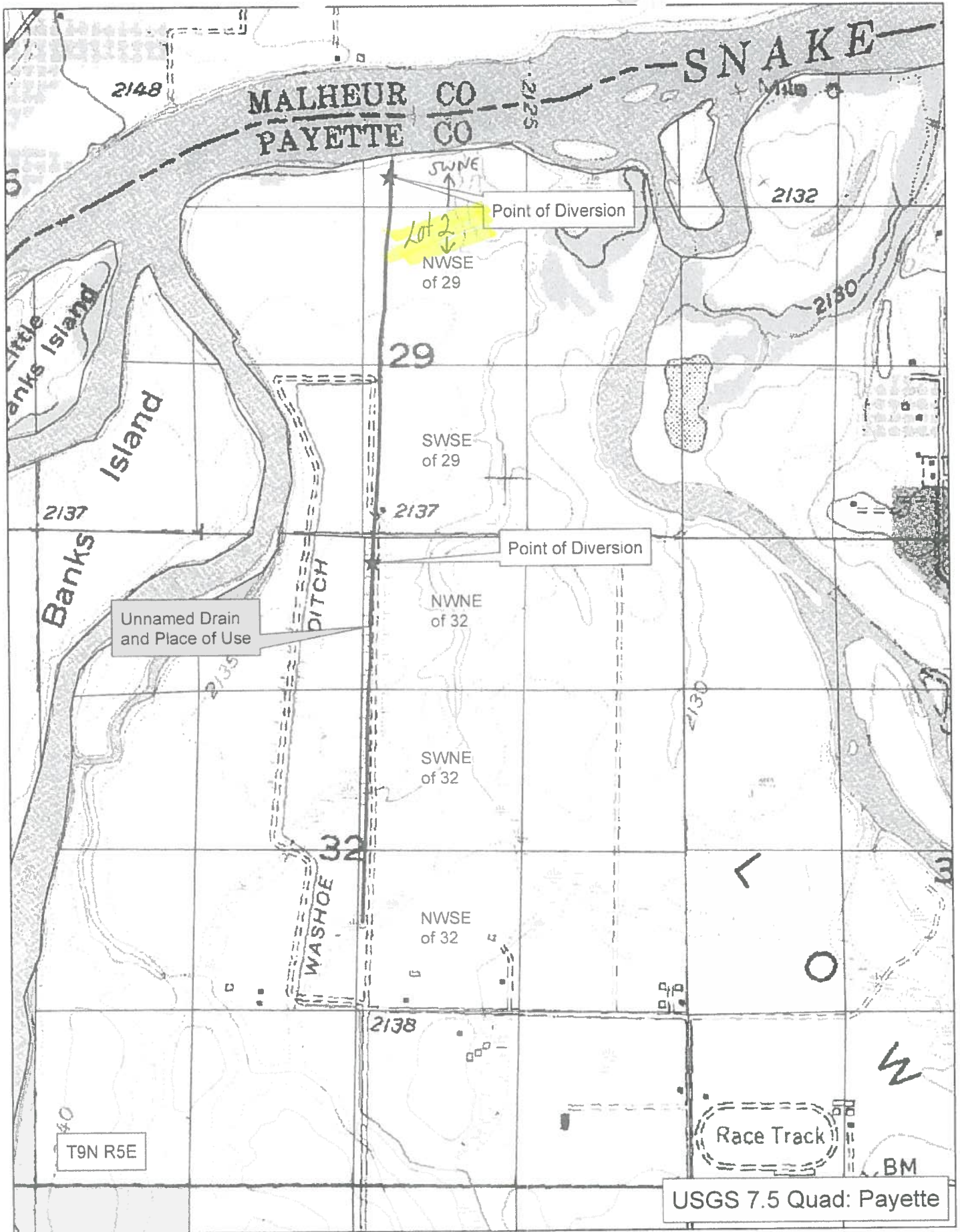
H. AUTHENTICATION

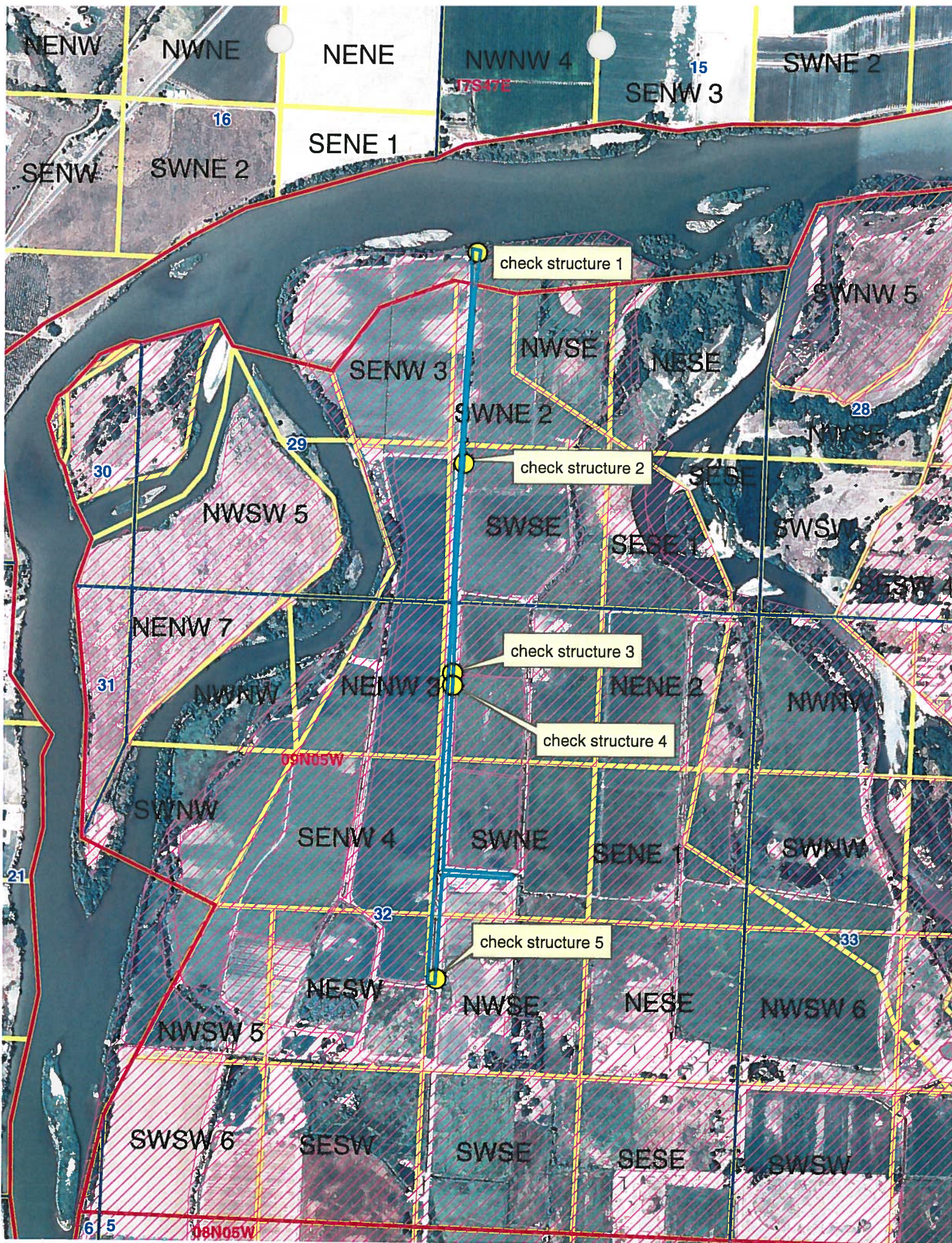
Field Examiner's Name

Gandy Hemenway

Date

1/10/2014





1-5-22950

5-11-2000-10-1



165-1950 Field Map Drawn by G. A. Smith, 1950

6-11-50



POD:
check
#3
(same as
#4)

POD:
check
#4
4'
culvert
1' deep
at time
of field
exam;
full in
the
summer

01/04/2012



POD:
check
#5

44"
steel
spill,
from
a
4'
concrete
weir,
18"
deep

01/04/2012



POD
check
#2
30"
culvert
13" deep
at time
of field
exam;
full
during
storm



drain
ditch
going
to
check
#1
(4'
culvert
which
under
water



65-22950

500 head cattle
that are moved around

S. Hernerway

No pictures for check #1, since it was
under water from the Snake River.