

[illegible]

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size / ditch size / pipe i.d. as applicable.

See attached portion of 7.5' Quad map with diversion, filler ditch and reservoir located. The filler ditch capacity is in excess of 100 cfs. The place of use is shown on the attached photo background with PLS overlay that was prepared as part of the SRBA. The place of use for this new license is limited to the 43.4 acres owned by the State of Idaho and leased to Mr. Little and the Van Deusen Ranch, Inc.

Scale: 1" = _____.

X Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

X Aerial Photo Attached (required for irrigation of 10+ acres)

X 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

*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
Rating table for reservoir, attached.						

2. Measurements: 102 cfs

E. NARRATIVE / REMARKS / COMMENTS

This water right is for use on lands owned by the State of Idaho and leased to Mr. Little and the Van Deusen Ranch, Inc. This right and the companion right, 65-22827, were filed to make up for a portion of 65-2953 that was transferred to a point of diversion on Corral Creek that was inadvertently missed in the Payette River basin adjudication. These filings do not represent a change in the historical operation of the irrigation system for the Van Deusen Ranch, Inc. but were necessary to make a complete record of the water use for the ranch.

The diversion rate from Bissel Creek through the filler ditch was determined by the change in stage of the reservoir at a time no water was being released from the reservoir. The stage - capacity table for the reservoir is attached. At 4:45 p.m. on February 17, 2004 the stage was 13' 2" below the top of the outlet gate well. The capacity at that stage is about 610 acre-feet. At 7:50 a.m. on February 18, 2004 the stage was 11' 2" below the top of the outlet gate well. The capacity at that stage is about 737 acre-feet. The time between the observations was 15 hours and 5 minutes resulting in an average rate of diversion of about 102 cfs. The capacity of the diversion works is in excess of the diversion rate of the water rights from Bissel Creek and Corral Creek combined.

Bissel Creek is located within Water District 65 but is not a stream actively regulated by the Watermaster. During the time water is available for storage, there has never been a need for the Watermaster to make regulation on Bissel Creek.

Water is diverted into the filler ditch by a check structure in Bissel Creek (see attached photo). The filler ditch carries water to the reservoir for storage under this water right. Water from the reservoir is applied through sprinklers that are gravity pressurized. The water from this right and the remaining rights for these Van Deusen Ranch, Inc. lands is commingled in the reservoir and through the pipeline and sprinkler system on the ranch. Irrigation runoff returns to Bissel Creek and is recaptured by a second dam on Bissel Creek, water right number 65-12382, near the lower edge of the property.

Have conditions of permit approval been met? X yes ___ no

F. **FLOW CALCULATIONS** X Additional Computation Sheets Attached
Measured Method: Reservoir stage change.

G. **VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: The volume on the permit is limited to 3.3 acre-feet per year for 43.4 acres.

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____

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

2. Volume Calculations for Other Uses:

H. **RECOMMENDATIONS**

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Diversion to storage	12/1	9/1	0.03	3.3
Irrigation storage	1/1	12/31		3.3
Irrigation from storage	3/1	11/15		3.3
Totals:			0.03	3.3

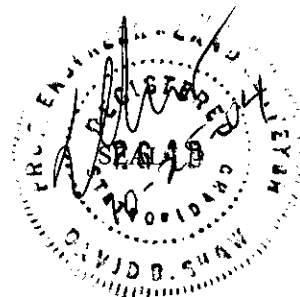
2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above X None
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. **AUTHENTICATION**

Field Examiner's Name David B Shaw Date 10/22/04

Reviewer _____ Date _____



VAN DUESEL RANCH - MAIN DAM CAPACITY

Measure Down from top of Outlet Gate Well.

0 Foot - Top of Outlet Gate is Elevation 1027.2 = 1,738 Ac. Ft.

1 Foot - 1,628	21 Feet - 246.5
2 - 1,522	22 - 212.4
3 - 1,420 (Spillway Boards)	23 - 181.6
4 - 1,322	24 - 153.7
5 - 1,228 (Spillway Crest)	25 - 128.7
6 - 1,138	26 - 106.4
7 - 1,052	27 - 86.7
8 - 970	28 - 69.0
9 - 892	29 - 53.5
10 - 818	30 - 40.6
11 - 748	31 - 30.2
12 - 682	32 - 22.4
13 - 620	33 - 16.6
14 - 562	34 - 11.9
15 - 507.8	35 - 8.1
16 - 457.4	36 - 5.0
17 - 409.8	37 - 2.5
18 - 365.2	38 - 0 (Outlet Pipe Invert)
19 - 322.3	
20 - 283.6	

Jim Little - Big Reservoir

2-17-04 4:45p 13' 2"

2-18-04 7:50a 11' 2"

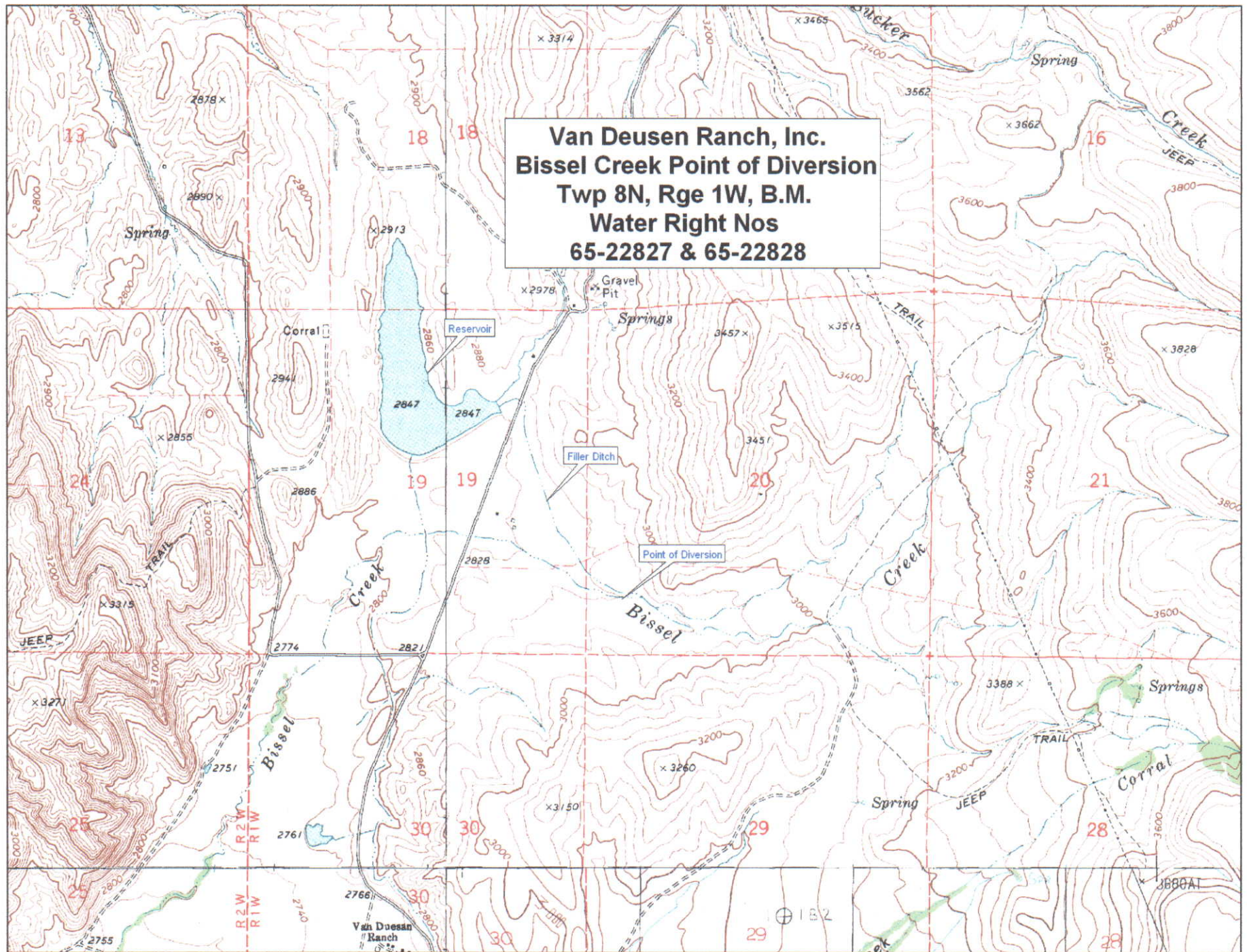
$$13.167' = 620 - ((620 - 562) * 0.167) = 610 \text{ ac-ft}$$

$$11.167' = 748 - ((748 - 682) * 0.167) = 737 \text{ ac-ft}$$

$$\Delta S = 737 - 610 = 127 \text{ ac-ft}$$

$$2-17-04 \text{ 4:45p} \rightarrow 2-18-04 \text{ 7:50a} = 15 \text{ hr } 5 \text{ min} = 905 \text{ min}$$

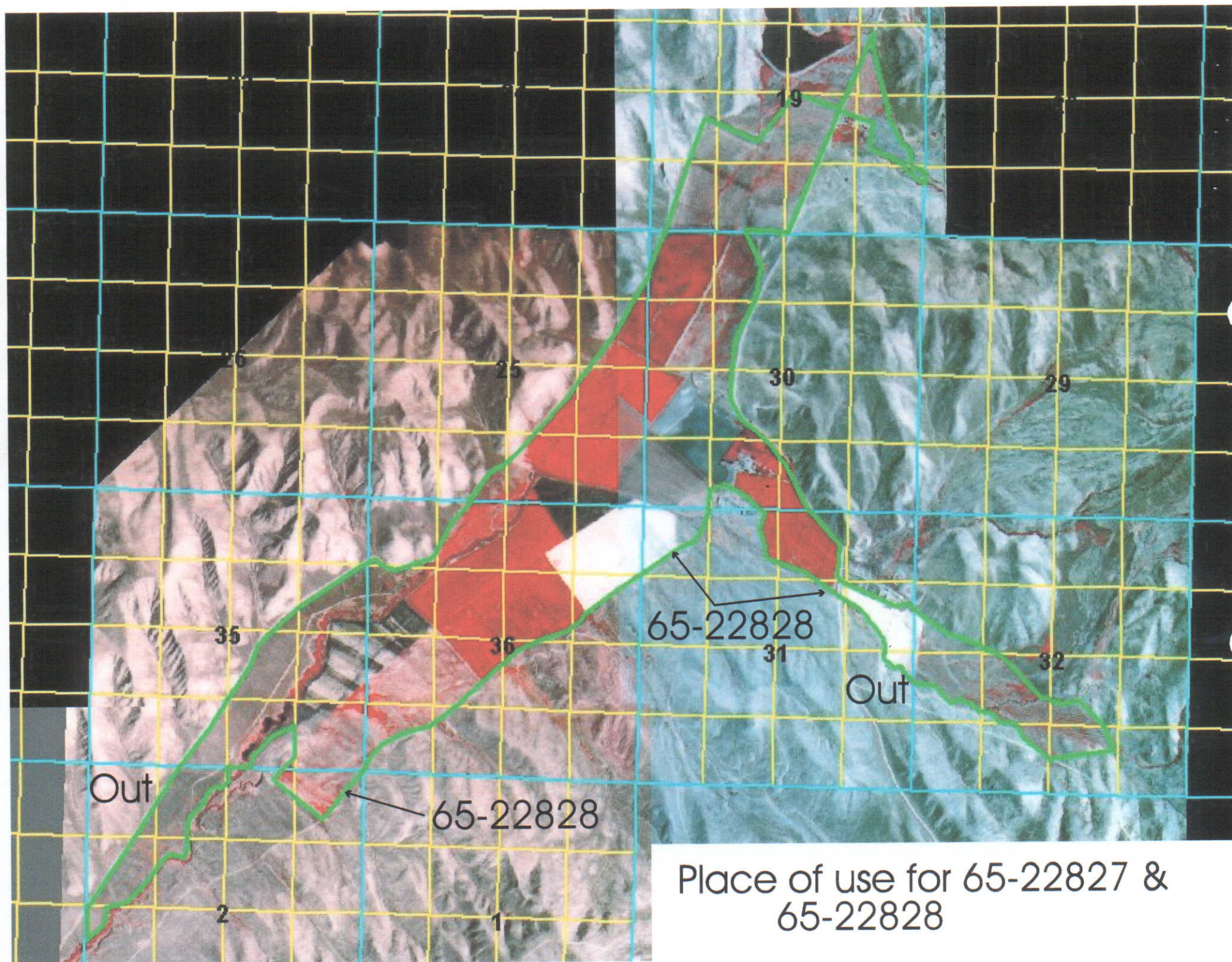
$$Q = (127)(43560) / (905)(60) = 102 \text{ cfs}$$



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Scale: 1 : 24,000 Zoom Level: 13-1 Datum: NAD27 Map Rotation: 0° Magnetic Declination: 15.9°E

1,000 ft



Place of use for 65-22827 &
65-22828

Diversion for 65-22827 & 65-22828

Bissel Creek

Filler Ditch



Diversion Structure