

Method of Determination: Field Exam, Aerial Photos

3. N Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

 Y Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

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

 Y Photo of Diversion and System Attached

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u> Submersible	<u>Pump Serial No. or Discharge Size</u>
1990 Well		1.5		Sta-Rite	
Pre-1987 Well		3/4		Submersible	

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Theoreticals						

2. Measurements:

E. FLOW CALCULATIONS

 Additional Computation Sheets Attached

Measured Method: Theoretical

1990 Well: SWNENW

$$1.5 \text{ hp} \times 8.8 \times .7 = .21 \text{ cfs}$$

$$35' + 4.33 \text{ psi} \times 2.31$$

Total dynamic head: Per well log- 44' deep well
 Per owner- pump set at 34'
 pumping level is 24'
 lift to storage tank is 15'

20' dynamic pumping level + 15' lift to storage tank + an additional 10' to account for friction loss in an open discharge ground water system $(4.33 \times 2.31) = 45' \text{ TDH}$

Older Well: SENWNE

$$\frac{3}{4} \text{ hp} \times 8.8 \times .7 = .10 \text{ cfs}$$

$$35' + 4.33 \text{ psi} \times 2.31$$

Per owner: 1990 well and older well are similar in depth and construction. A well log was not recorded for the older well. Same TDH estimates listed for the 1990 well were applied to the older well.

Theoretical system capacity: $.21 \text{ cfs} + .10 \text{ cfs} = .31 \text{ cfs}$

Limited to **.20 cfs** per permit

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A
2. Volume Calculations for Other Uses: See attached daily fresh water requirement spreadsheet

Required: 25.2 afa

Potential: .20 cfs x 365 x 1.9835 = 144.8 afa

G. NARRATIVE/REMARKS/COMMENTS

A field exam was conducted on this dairy facility in 1993. The examiner found an 8-inch well equipped with a 1.5 hp submersible pump supplying water to a 500 cow dairy. The examiner referenced overlapping right 65-6246 served by an older well as abandoned. In a recent telecon, the owner stated that the older well is used as a back-up/supplemental well for the dairy operation. Water right 65-6246 was decreed in the SRBA with a 1920 priority date for 200 range cattle and a home. The owner stated that the range cattle are beef stock and not part of the dairy cow operation. The addition of the older well as a back-up well for the dairy/stockwater operation will require a licensing amendment.

According to the owner, water is open discharged from the wells into a 5000 gallon storage tank for commercial dairy uses. The ground water can bypass the storage tank and be pumped directly into stock troughs upon demand using automatic floats. The wells also provide domestic water to the owners home. As mentioned above, domestic use is listed on decree 65-6246. The owner has been advised that he could file a transfer to add the 1990 well to decree 65-6246 for domestic and stockwater uses since both wells share a common system. For maximum system capacity, the theoretical calculations were based on a non-pressurized open discharge system used to fill the storage tank because the owner stated that there are times when all the ground water is diverted to the storage tank only and none to the home and/or troughs. The owner also verified that both wells could operate at the same time. Theoretical combined system capacity for both wells is .31 cfs. When combined, decreed flow rate for right 65-6246 and recommended flow rate for this permit is .28 cfs, which is below the theoretical system capacity.

A 5 hp pump is used to pump and pressurize water from the storage tank into the dairy system. The examiner took sufficient pictures verifying the commercial/stockwater uses, however left out the details needed to determine water use volumes. The owner provided the attached spreadsheet that indicates what the daily fresh water requirements were for the 500 cow dairy facility in 1993. The recommended p/u depicts the commercial/stockwater area as it existed in 1993. The area was determined by comparing 1987 and 1997 arc view photos available for Payette County. The dairy/stockwater operation is located in the NENW as listed on the permit and also in the SENW. The addition of the SENW will require licensing amendment.

The primary well was drilled in 1990 as a domestic/stockwater well. An upgrade fee for the well was received 11/30/2005 per receipt no. W033639, however, dept. records indicate sufficient fees were received for the 1990 well in 1993 per receipt no. W012632. A refund for the \$125 upgrade fee paid per receipt no. W033639 was requested 12/22/05. The older back-up/supplemental well was drilled before 1987 therefore an upgrade fee is not required. Lands where dairy wastewater can be land applied are covered by surface water rights from Noble Ditch Company, which is why the commercial p/u only describes location of the dairy facilities. No other rights are used.

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	01/01 to 12/31	0.20 CFS	12.60 AF
COMMERCIAL	01/01 to 12/31	0.20 CFS	12.60 AF
<u>Totals:</u>		0.20 CFS	25.20 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

Lon Guamer

Date

1/4/06

Reviewer

Date

DAVID HOLM DAIRY - 1993

DAILY FRESH WATER REQUIREMENT FOR DAIRY FACILITY

MILKING COWS	250	8000	32	2,920,000
DRY COWS	50	800	16	292,000
HEIFERS	200	2400	12	876,000
TOTAL GALLONS			60	4,088,000

GPM PER NOZZLE	NO. OF NOZZLES	TIME PER USE (IN MINUTES)	NUMBER OF USES	GALS / DAY	TOTAL: GALLONS/ YEAR
5.5	32	5	8	7040	2,569,600

ITEM	GALS/OP	X'S / DAY	GALS / DAY	TOTAL: GALLONS/ YEAR
BULK TANK	50	1	50	18,250
COW PREP (IODINE WASH)	1 GAL/ COW	2	500	182,500
BACKFLUSH	0.5	2	250	91,250
PIPELINE	120	2	240	87,600
WASHPEN/ PARLOR	500	2	1000	365,000
USE			2040	744,600

ITEM	NUMBER OF USES	GALS / DAY	TOTAL: GALLONS/ YEAR
EQUIPMENT WASH	1	2000	730,000
TOWELS/ LAUNDRY	2	50	36,500
RESTROOM/ SINKS	2	25	18,250
CALF FEEDING EQUIP WASH	2	25	18,250
		2100	803,000

TOTAL	11240	8,206,200
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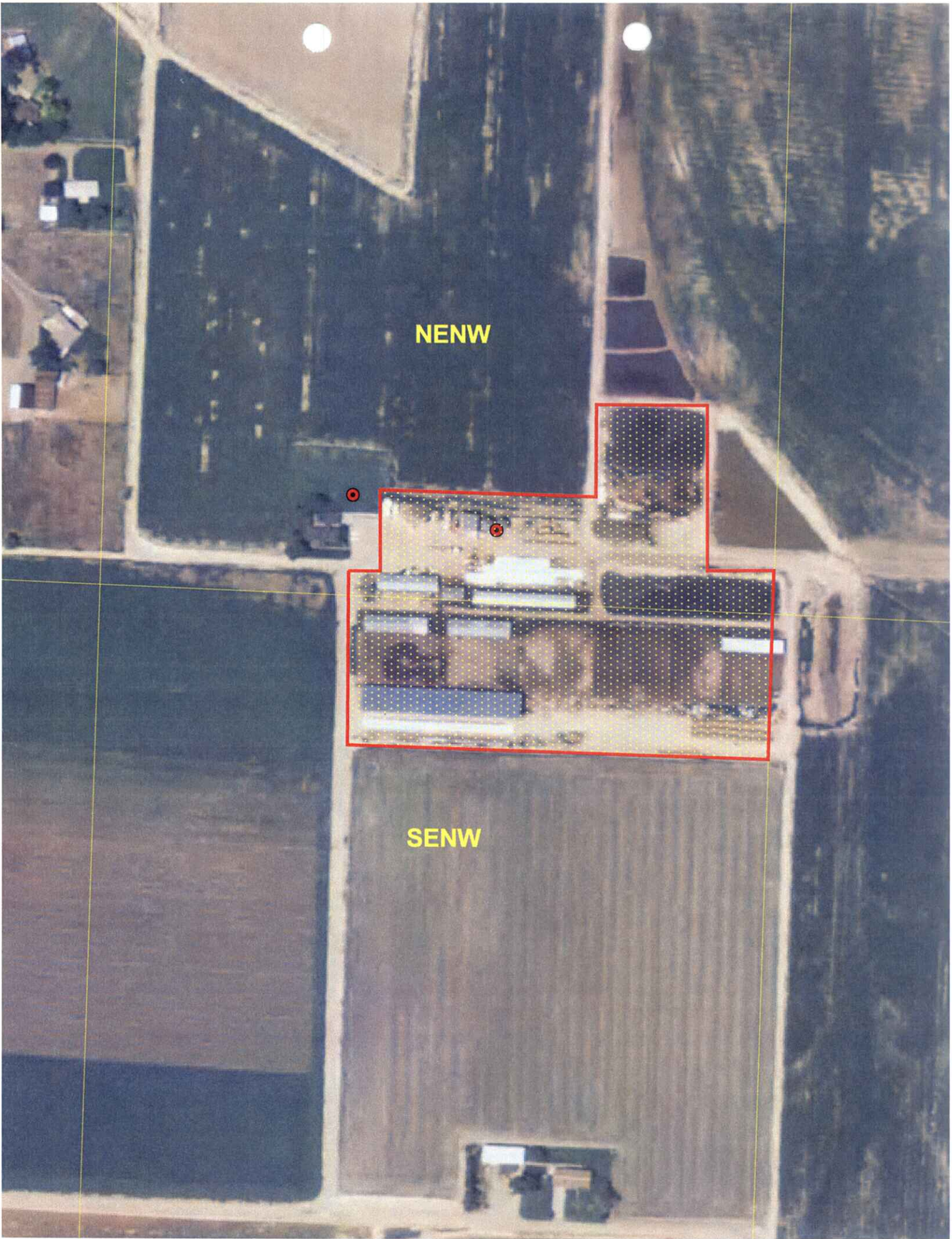
stockwater volume : $4088000 / 325850 = 12.6$ AFA

commercial volume : 2569600

744600

803000

$4117200 / 325850 = 12.6$ AFA



NENW

SENW

Department of Water Resources

WELL INSPECTION FORM

If well is associated with water right, provide WR# 65-13268

Otherwise provide legal description and a sketch map and/or address so that the well can be located easily.

1. Legal Description: TWP 8N, Rge 4W, Sec. 3D, NE 1/4 NW 1/4
or Lot _____.

2. Owner: David W. Holm

Address 3223 N.W. 3rd Ave., City Fruitland, St ID

3. Casing $\geq$ 12 inches above ground: Yes _____ No ☒

4. Access Port:	Yes _____ No ☒	Static Water Level:	<u>12</u>
Pressure Gauge:	Yes _____ No ☒	Casing Diameter:	<u>8"</u>
Flowing:	Yes ☒ No _____	Temperature:	<u>55°F</u>

5. Are there any obvious construction problems that may be a source for contamination or waste of water: Yes _____ No ☒

If answer to Item 5 is Yes, describe in remarks and attach photo.

Remarks: _____

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

[illegible]

USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT



PHOTO ONE- 1990 Well located north of milking building.



PHOTO TWO- Pump house located east of well. 6/13/06
Back-up well located inside pump house per owner



PHOTO THREE-

View easterly of north side of dairy building.
pump house is shown on left side of photo.



PHOTO FOUR-

milking operation. Hoses are used to wash down
equipment and milking area.



PHOTO FIVE- Cleaning equipment in milk holding TANK ROOM.



PHOTO SIX- Sprinkling system in holding area. System is used to clean cattle prior to milking.