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MAR 06 2007

DEPARTMENT OF WATER RESOURCES

Permit No: 65-22903
Exam Date: 10/31/2006

- | 3. <u>SOURCE</u> | <u>TRIBUTARY</u> |
|---------------------------|------------------|
| MIDDLE FORK PAYETTE RIVER | PAYETTE RIVER |

1. Other water rights with the same place of use: 65-23016
2. Other water rights with the same point of diversion: 65-23016 (see narrative)

1. LOCATION OF POINT(S) OF DIVERSION:

Method of Determination: Exam

PLACE OF USE: IRRIGATION

Total Acres: 1.2

PLACE OF USE: STOCKWATER

[illegible]

Method of Determination: Exam

3. Y 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>	<u>Pump Serial No. or Discharge Size</u>
	Century	2	CA10-05	Red Lion	4905
	Briggs & Stratton	8	Code 961203YE Model 190432	Monarch	0297

*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>
Theoretical						
Nozzle Discharge Estimate						

2. Measurements: No actual measurements made due to ice and weather constraints on the system

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Measured Method: Theoretical

$$\frac{8 \text{ hp} \times .7 \times 8.8}{50' \text{ lift} + 20 \text{ psi} \times 2.31} = .51 \text{ cfs}$$

$$\frac{2 \text{ hp} \times .7 \times 8.8}{50' \text{ lift} + 20 \text{ psi} \times 2.31} = .13 \text{ cfs}$$

$$8 \text{ hp @ } 30 \text{ psi} = .41 \text{ cfs}$$

$$2 \text{ hp @ } 30 \text{ psi} = .10 \text{ cfs}$$

$$8 \text{ hp @ } 40 \text{ psi} = .35 \text{ cfs}$$

$$2 \text{ hp @ } 40 \text{ psi} = .09 \text{ cfs}$$

Lift based on topo map

Manager stated that during operation, 12 nozzles run at an estimated operating pressure of 20 psi. The nozzles were mixed in size.

Flow rate estimate: 3 gpm/nozzle at 20 psi = .08 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.2 \times 3.5 = 4.2$$

$$V_{O.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .02 \times 231 \times 1.9835 = 9.2$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{O.R.} = 4.2$$

2. Volume Calculations for Other Uses:

$$5 \text{ horses and 5 range cattle: } 10 \times .0134 = .1$$

G. NARRATIVE/REMARKS/COMMENTS

Either a 2 hp electric pump or an 8 hp gas pump is used to irrigate 1.2 acres via hand line sprinklers. Stock are watered with a spicket and hose off the 3 inch main. The 8 hp portable gas pump is also shared with right 65-22904 located across the river. The pump acts as a back-up to both systems when the power is out. As indicated by the above theoreticals, either pump has the capacity to provide .02 cfs.

The permit holder owns six acres total. Three of those acres are covered by right 65-23016, which was decreed from the same source at less than one inch/acre. The intent of permit 65-22903 was to cover all six acres at an inch/acre. Only 1.2 acres were found irrigated. The shape file for decree 65-23016 indicates about .75 acre of overlap. This right, when combined with 65-23016, is limited to one inch/acre. Please note that .03 cfs/acre could have been recommended for licensing since less than 5 acres were found irrigated, however, condition R63 was listed on the permit.

The permit holder requested removal of condition 01H and replaced with condition 01R. Watermaster Ron Shurtleff verified in a telecom 11/29/2006 that the permit holder had contacted him and because her diversion was low impact and involved portable pumps, she could have a temporary waiver regarding the installation of a measuring device. If deemed necessary, a lockable device may be required in the future, which the permit holder stated she would install upon request.

Have conditions of permit approval been met? ____Yes ____X____No (see narrative)

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 to 10/31	0.020 CFS	4.20 AF
STOCKWATER	01/01 to 12/31	0.020 CFS	0.10 AF
<u>Totals:</u>		0.040 CFS	4.30 AF

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

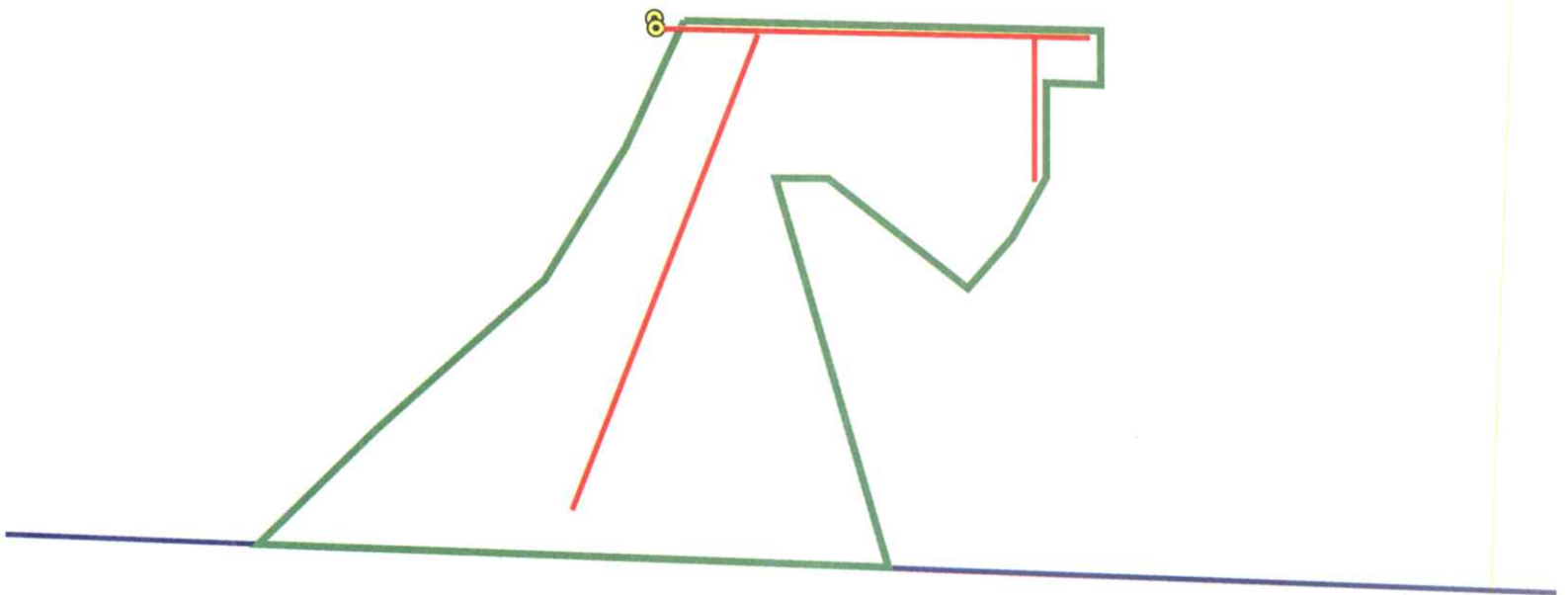
I. AUTHENTICATION

Field Examiner's Name Lon Granger Date 2/7/07

Reviewer _____ Date _____



3 Inch Main Line in Red



65-22903



P/D: Red 2 hp pump and yellow 8 hp pump



P/U: 1.2 acres pasture and orchard irrigated via hand line sprinklers