

RECEIVED

MAR 06 2007

Permit No: 65-13344A

Page 1

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

DEPARTMENT OF WATER RESOURCES

A. GENERAL INFORMATION

Permit No: 65-13344A

Exam Date: 7/23/1999

1. Current Owner: JACK D WARD
15 LOWMAN RD
GARDEN VALLEY ID 83622
(208)462-3486

2. Accompanied by: DAVE AND DOUG WARD

Phone No: SAME AS ABOVE

Address: SAME AS ABOVE

Relationship to Permit Holder: CO-OWNER OF GREENHOUSE OPERATION

3. SOURCE

TRIBUTARY

SOUTH FORK PAYETTE RIVER

PAYETTE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: SEE ATTACHED OVERLAP MEMO

2. Other water rights with the same point of diversion: SEE ATTACHED OVERLAP MEMO

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

SOUTH FORK PAYETTE RIVER
BOISE County

L2 SE1/4SW1/4NE1/4

Sec. 10, Twp 08N, Rge 05E, B.M.

Method of Determination: Visual inspection and use of 2004 aerial photography in ArcVies

2.

PLACE OF USE: COMMERCIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
08N	05E	9	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
						X													

Method of Determination: Visual inspection and use of 2004 aerial photography in ArcVies

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

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

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

YES 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
WEST PUMP STATION COLD WATER PUMP	BALDOR	20 Hp	494C	BERKLEY	B51633KITB3TPM

*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>
N/A						

Measurements: A measurement was performed on this permit, but the system was not operating at capacity. Therefore, I performed a theoretical calculation to determine the maximum capacity of the system. Please see narrative and measurement notes for more information.

E. FLOW CALCULATIONSYES Additional Computation Sheets Attached

Measured Method:

I calculated the flow rate of this system at 0.87 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

I calculated the annual volume using the owner's measurement device at 16.3 afa. Please attached volume calculation sheet for more information.

G. NARRATIVE/REMARKS/COMMENTS

The water for this permit is diverted directly from the South Fork of the Payette River at the West Pump Station in the SWNE Lt 2. The water is pumped through a mainline by a 20 Hp in-line pump that diverts the water into a mainline that travels due north up the hill to the highway. The mainline runs parallel to the highway to the green house. At the greenhouse the water is diverted into a mixing basin that is used for irrigation, dust abatement, and temperature regulation of the hot water also used in the greenhouse.

There is a measurement device on the mainline, and I performed a measurement and calibration of the measurement device at this location. The flow meter was working at the time of my visit, but a multiplier of 1.15 was needed to attain an accurate reading of the volume of water. The owner's had meter readings from 1998, but the meter broke after 7 months of use. Fortunately, these readings were during the summer months, or the highest usage months. I calculated an average daily usage from these readings, and multiplied that amount by 365 days, since that is the time frame that is used. Using this method, I calculated an average yearly volume of 16.3 afa.

The system was not operating at full capacity during my visit. As you can see, a few feet of water levels in the river can cause a variation of 200 gpm on this pump. Therefore, I performed a theoretical calculation; using the information I found on the sight and calculated a maximum diversion rate of 0.87 cfs. This should be the diversion rate allowed for this permit.

Overlap for this permit should not be an issue. There are several water rights used to supply this greenhouse, but this is the only right that diverts directly out the South Fork of the Payette River. Please see my overlap memo for more information.

The owner is required to purchase rental water and maintain a measurement device in order to divert this right, and those remarks should become conditions on the license. Other than bringing the remarks listed on the water right into conditions, I feel that should cover all the needs for this license. A condition will be needed showing the place of use in the HES 494. There are no government lots for this right.

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>
COMMERCIAL	01/01 to 12/31	0.870 CFS	16.30 AF
<u>Totals:</u>		0.870 CFS	16.30 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

DANIEL A. NELSON – SENIOR AGENT

Field Examiner's Name *Daniel A. Nelson* Date 2-12-06.

Reviewer _____ Date _____

T8N R5E S9

T8NR5E S10

Green House

Homes

GOVT
LOT 2

Grimes
Pass

West Pump Station
2 - 15 Hp hot water pumps
1 - 20 Hp Payette River water pumps

Creek

Schoolhouse
Creek

Sweet
Creek

Creek

Thinks

Spring
(Hot)

T8N R5E S9

T8NR5E S10

HES 494

Green House

Homes

SENE

SWNW

GOV'T
LOT 2

SWNE

SENW

SENE

NESE

NWSW

NWSE

West Pump Station
2 - 15 Hp hot water pumps
1 - 20 Hp Payette River water pumps

T8N R5E S9

T8NR5E S10

HES 494

Green House

Homes

GOV'T
LOT 2

West Pump Station
2 - 15 Hp hot water pumps
1 - 20 Hp Payette River water pumps



SWNW

SESW

SWNE

SENE

NESE

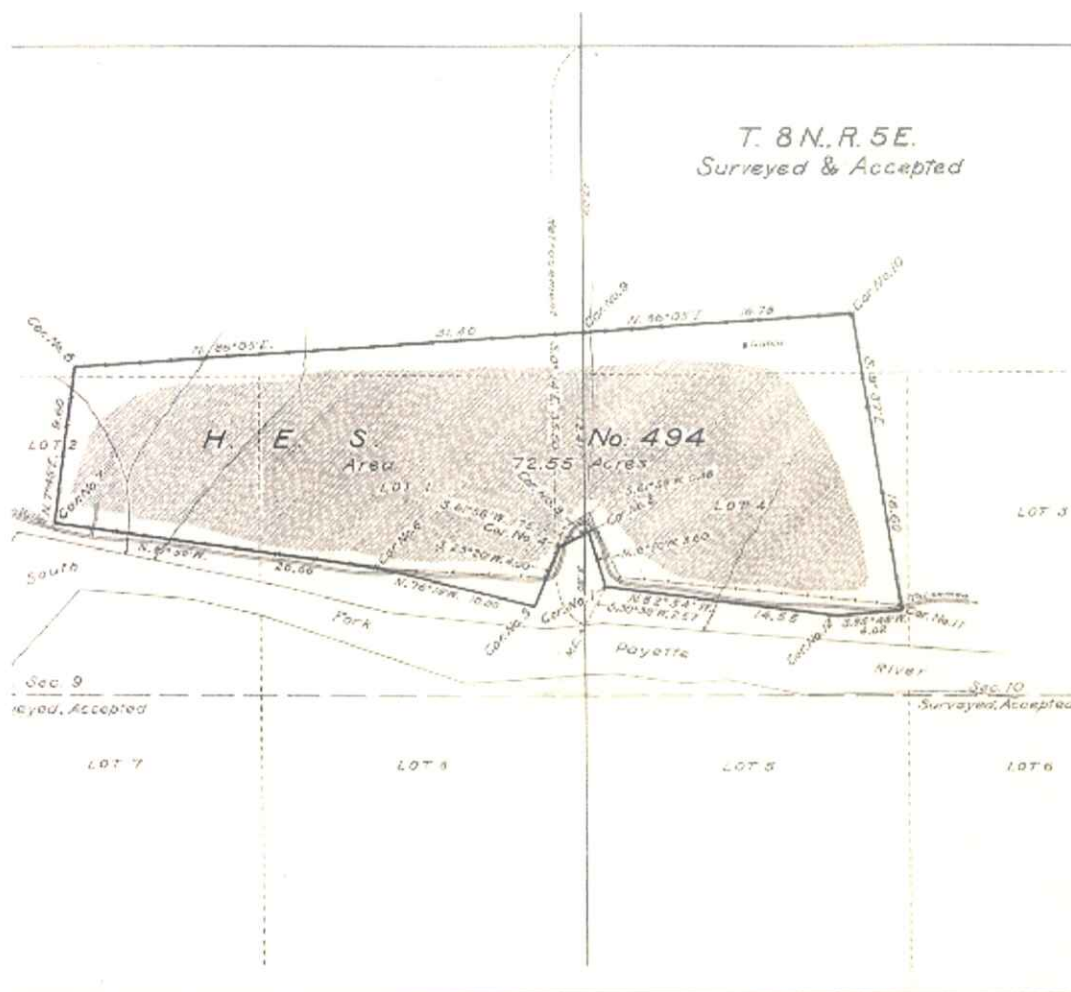
NWSW

NWSE

Plat of
HOMEST
ENTRY SURVEY
No. 494
 in the
PAYETT
NATIONAL FOREST
 in
 Section 9 surveyed T. 8 N., R. 5 E.
 Section 10, surveyed T. 8 N., R. 5 E.
 of the
BOISE BASE AND MERIDIAN
IDAHO

This plat of Homestead
 No. 494 State of Idaho
 strictly conformable to the
 record on file in this
 have been examined and
 U.S. Surveyor General
 Boise, Idaho Apr.

E. W. ...



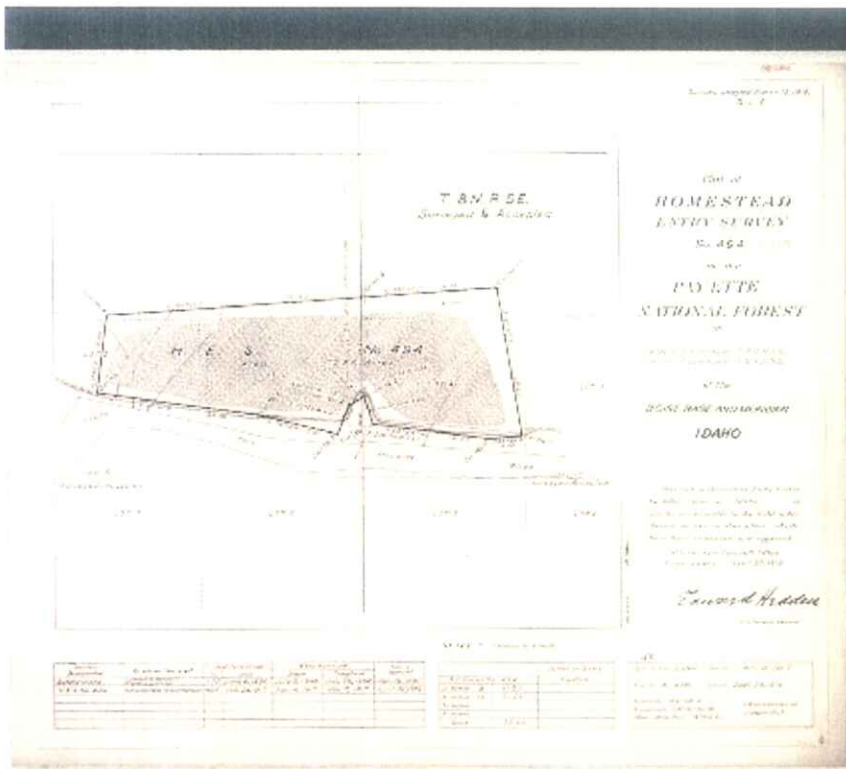
SCALE 1 inch = 400 feet

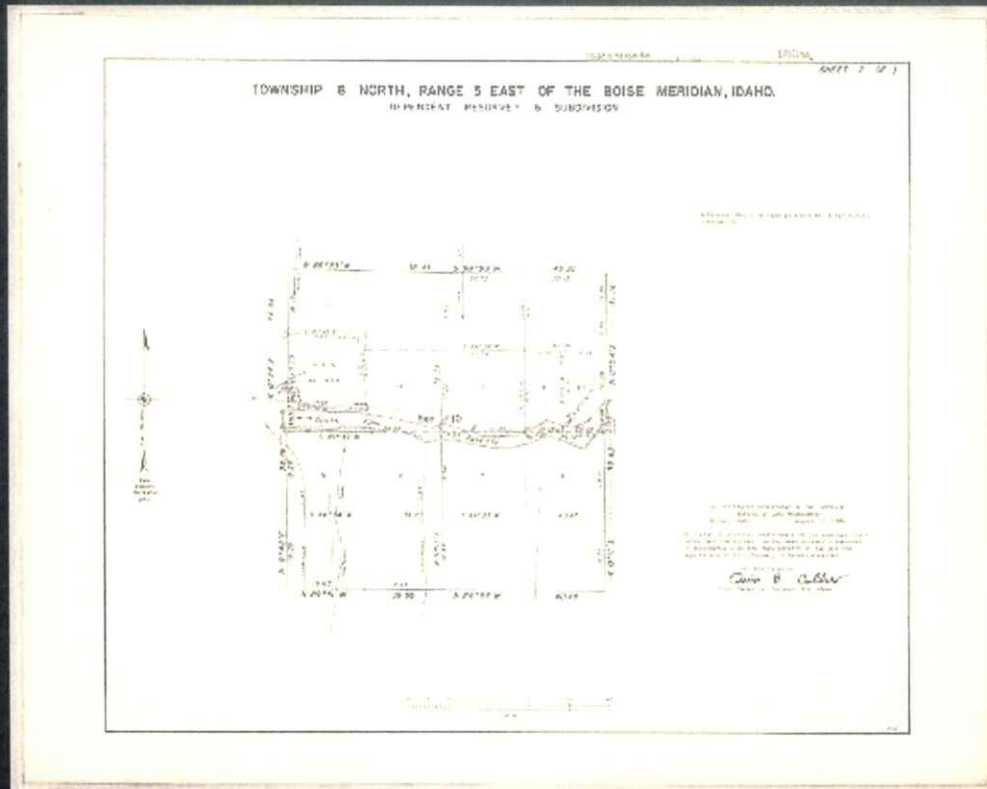
Surveyors signatures	By whom Surveyed	First Coast Group		When Surveyed		Date of Approval
		No.	Date	By whom	Completed	
SECTION	LYMAN B. HARRISON	775	June 6, 1896	July 8, 1896	July 29, 1896	Jan. 16, 1897
	FRANK J. HARRISON					

Areas in Acres	
B. E. Survey No. 494	Conflicts

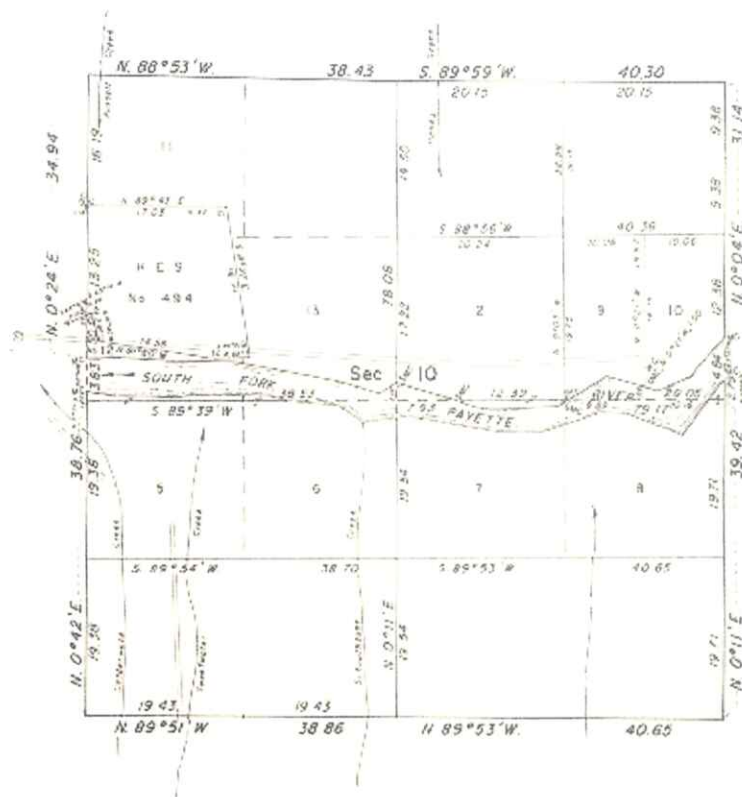
Act of June 16, 1906	Act of	M
Act No. 4-5775	Dated	Jan 16, 1897

Hes 494
 1918.





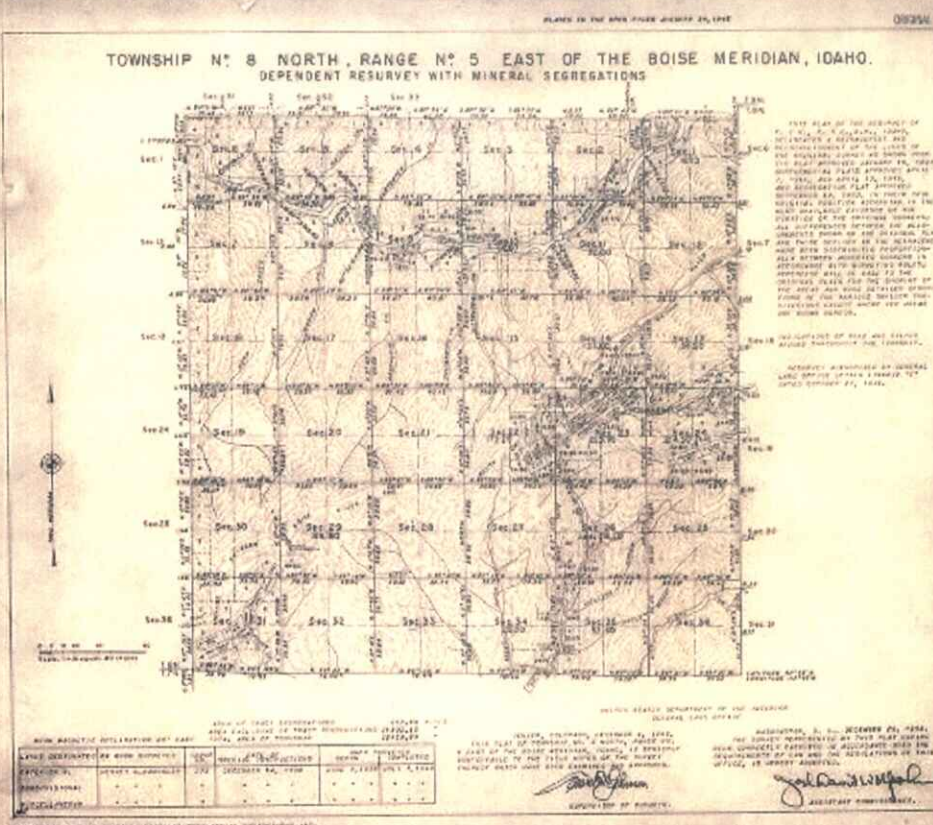
Dependent Reserve
& subdivisions & sections.
1904



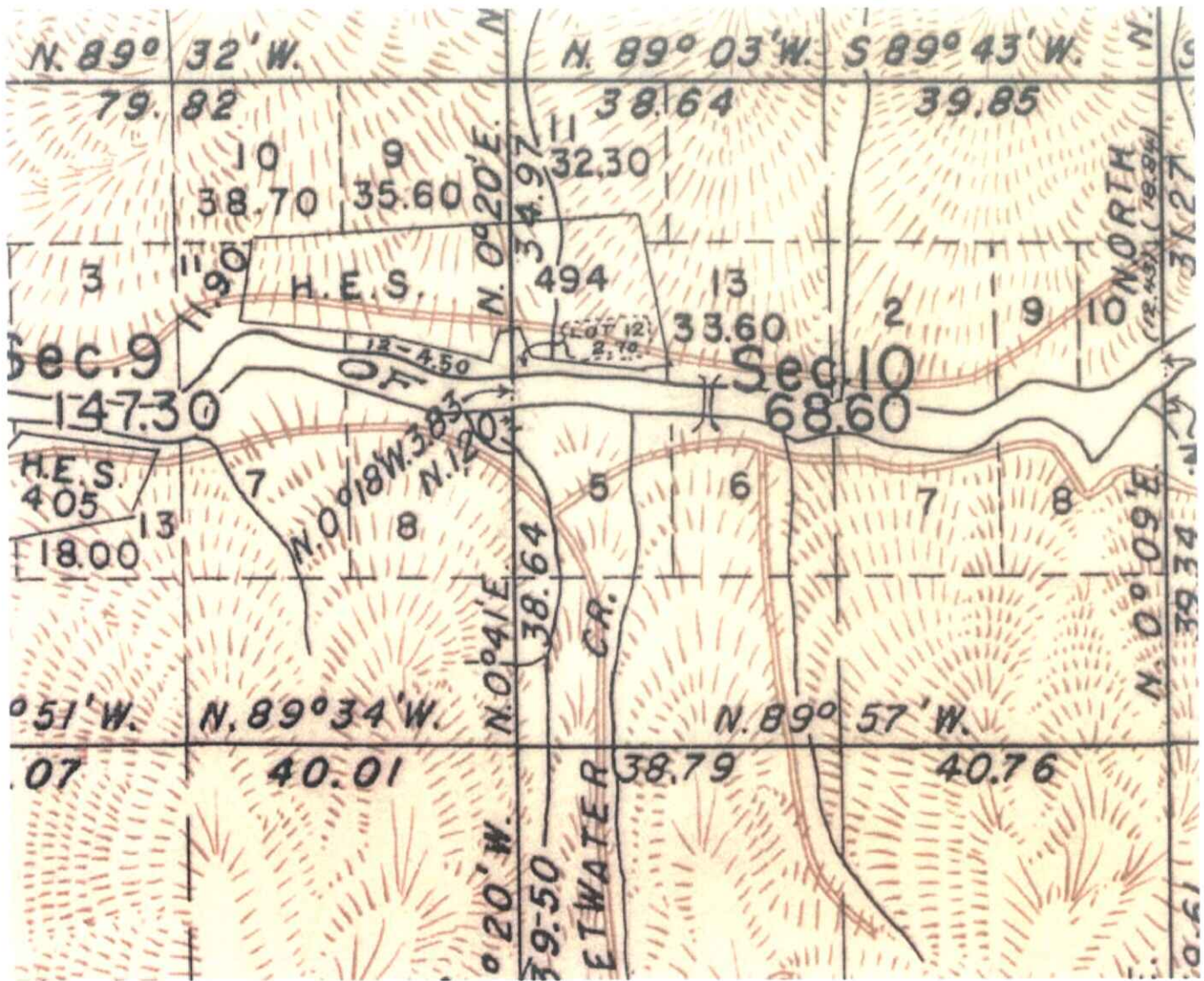
THE UNITED STATES DEPARTMENT OF THE
BUREAU OF LAND MANAGEMENT
Boulder, Colorado August 1

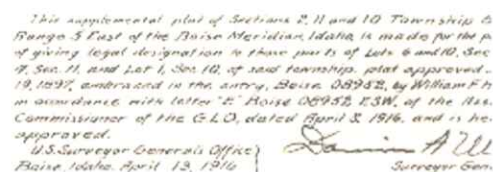
This plan is strictly conformable to the rules, and the survey, having been correct, is sanctioned with the requirements of the regulations of this Bureau, is hereby approved.

For the Director
Oscar B. Cobb
Chief Industrial Surveyor for Idaho



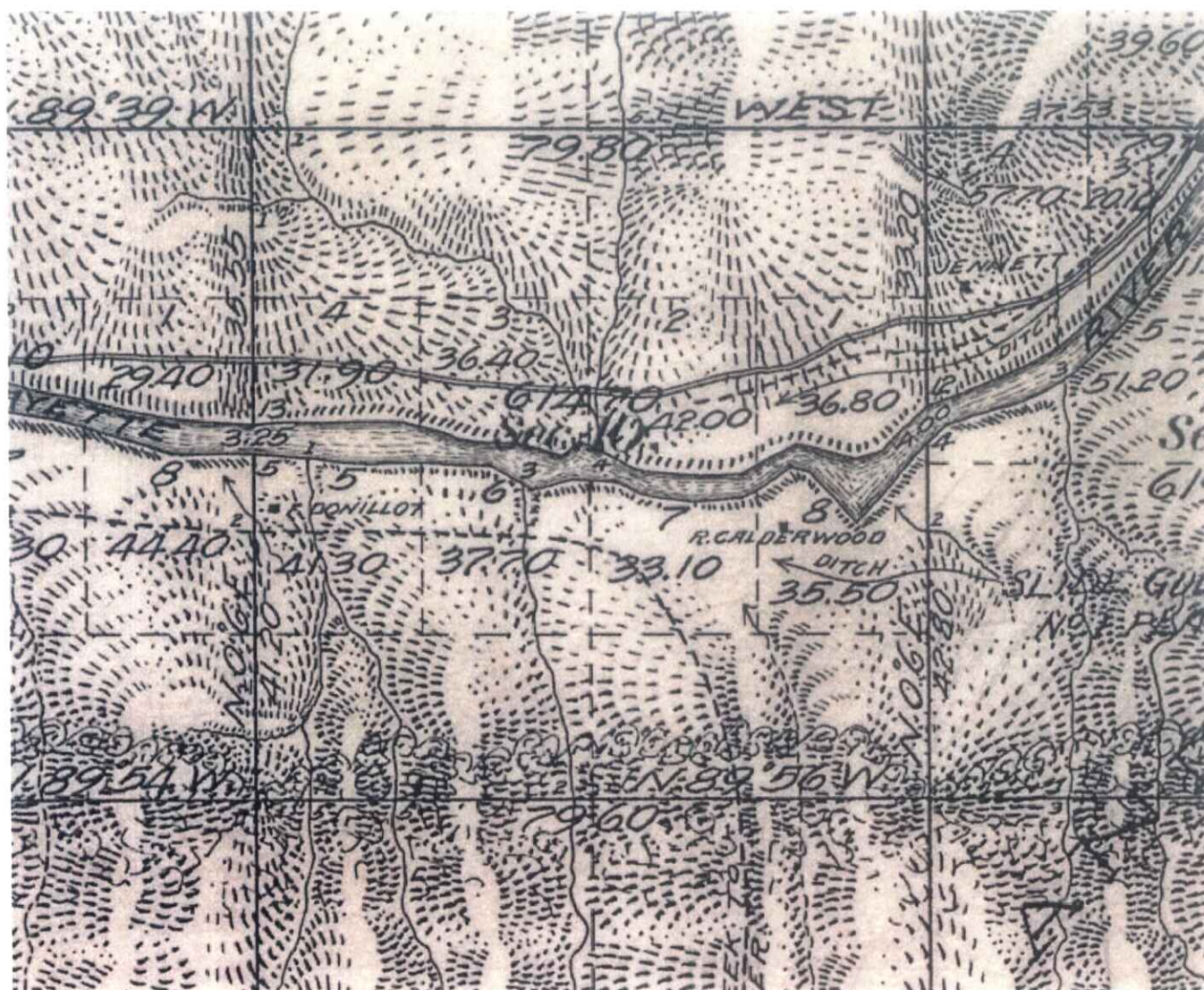
Dependent Reserves
1943



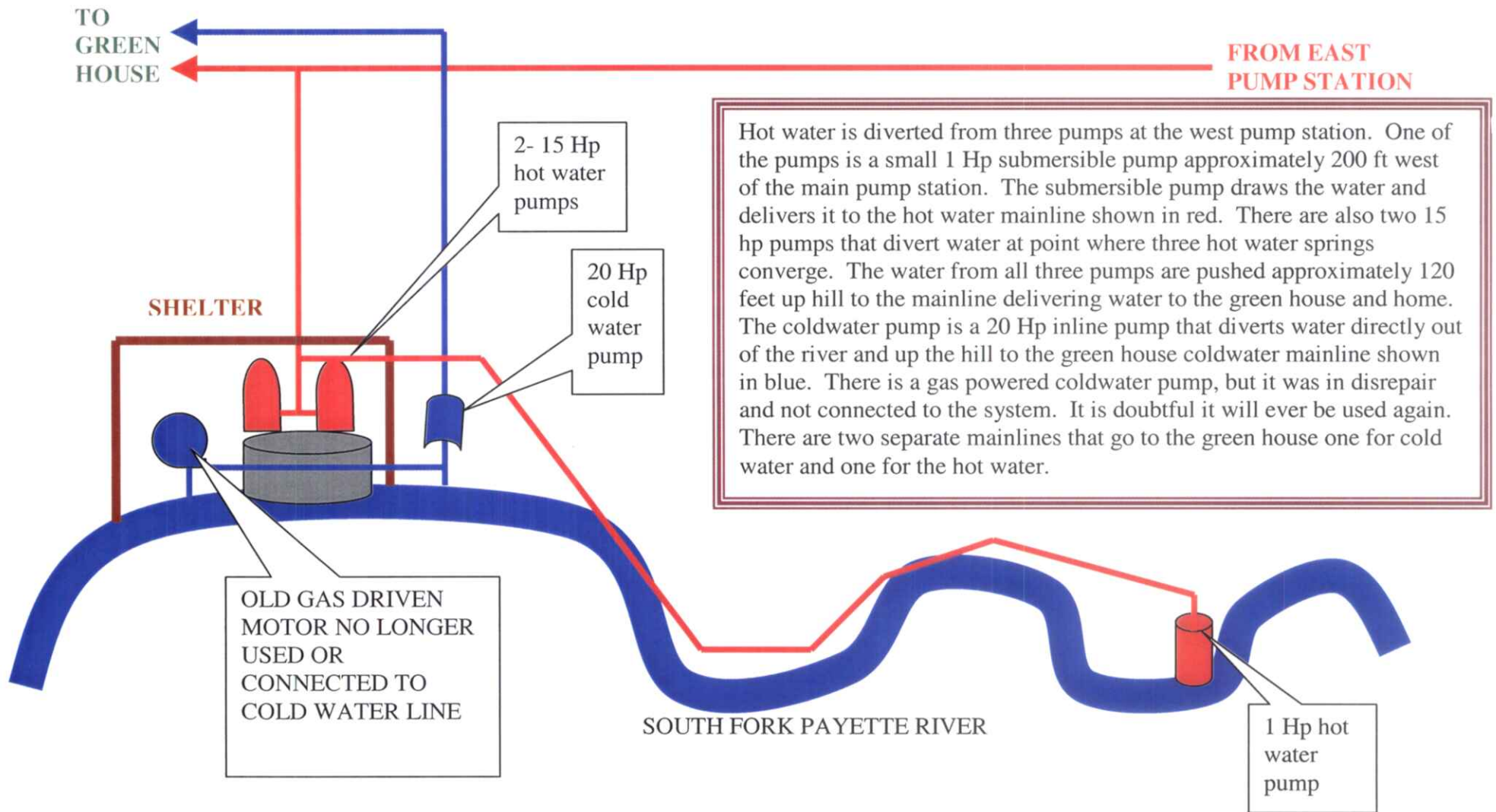


SUPPLEMENTA 1
PLAT 1916

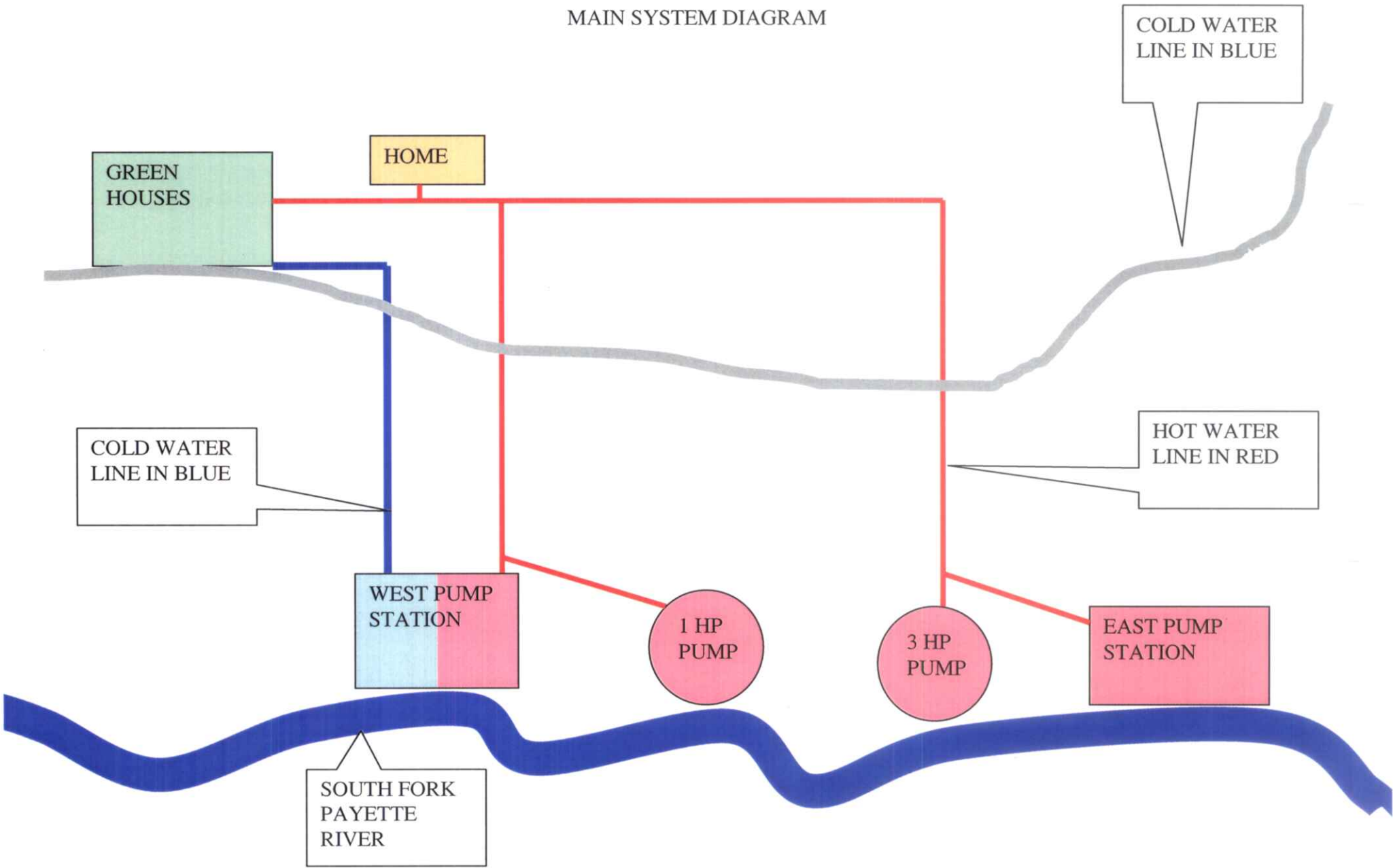
<http://www.glorerecords.blm.gov/lizardtech/iserv/getimage?cat=Plat&item=\ID\08\0080N005...> 2/8/2007



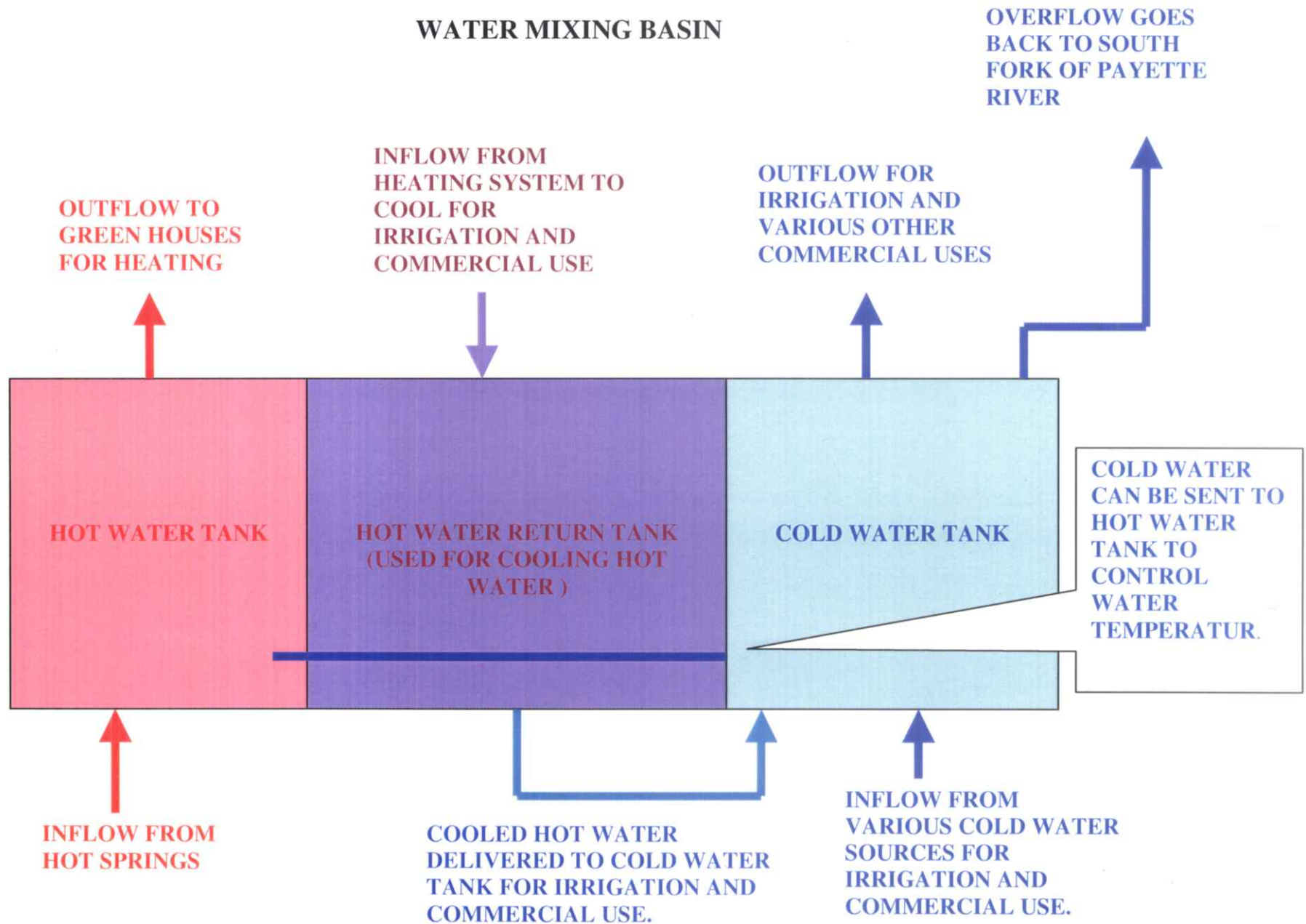
WEST PUMP STATION



MAIN SYSTEM DIAGRAM



WATER MIXING BASIN



OVERLAPPING WATER RIGHTS FOR 65-13588

This facility has several water rights from several different sources. Most of these sources are water rights for coldwater sources. All of the water rights that come from a spring source are heating or commercial water rights heating of the green house, except for the one right out of Rane Spring. Rane Spring is a coldwater spring used for in-house use for the homes. This right is the only source taken from the South Fork of the Payetter River. Below is a table of all the water rights that overlap the place of use.

WATER RIGHT	SOURCE	USE	RATE (CFS)	VOLUME (AFA)
65-503	HANKS CREEK	IRRIGATION	0.04	
65-509	SPRING	INDUSTRIAL	0.21	
65-5638	RUSSELL CREEK	IRRIGATION	0.24	
65-5639	RANE SPRING	DOMESTIC	0.02	1.2
65-5640	UNNAMED STREAM	IRRIGATION DOMESTIC	0.04	1.2
65-7167	SPRING	COMMERCIAL HEATING	0.12	4.2
65-7903	SPRING	COMMERCIAL HEATING	1.00	5.3
65-7904	HANKS CREEK	COMMERCIAL	0.08	16.7
65-13588	SPRINGS	COMMERCIAL	1.16	(PERMIT NO VOLUME YET-RECOMMENDED FOR 0.63 CFS & 457.2 AFA)

PLEASE NOTE: In the table above, the water rights that use hot water for commercial or heating are highlighted in red. The rights highlighted in blue are for commercial use using coldwater sources. The water rights in green are for irrigation only, and the water right highlighted in brown is for domestic use only.

All of the above rights except for 65-5639 directly overlap the place of use. None of the above water rights share the same source as this permit, so overlap shouldn't be an issue. Please note, that the cold water for this permit is diverted at the same location as one of the points of diversion listed in 65-13588. 65-13588 diverts water from the springs coming out of the riverbank, and this permit diverts directly from the river.

GROUNDWATER THEORETICAL ANALYSIS

Cold water
River pump.

FILE: 65-13344B

DATE: 7-23-1999

BY: DAN NELSON

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times (HP) \times (EFF.))}{TDH}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

$$Q = \frac{(8.8) \times (20 HP) \times (0.70)}{[(10) + (57 \times 2.31)]} = \frac{123.2}{141.67} = 0.87 \text{ CFS}$$

390 gpm

LIFT FROM:

Measurement ()

Owner ()

Area estimate (✓)

Well Logs ()

PSI FROM:

Measurement ()

Owner ()

Estimate (✓)

Owner Gage ()

Booster (Y) (N)

NOTES ON PUMP:

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS: The cold water pump was NOT operating at full capacity during the field exam. They were not irrigating and the river was down, so the maximum flow could not be measured. I measured the flow at 235 gpm or 0.52 CFS. I estimated the lift at 10 FT, since this was approximately where the high water line was on the pipe. The actual water level at the time of the exam was 25-35 FT. I estimated that it would take 52 psi or 120 FT to push the water up out of the canyon. I added an additional 5 psi for open discharge for a total of 57 psi against pump at optimal condition. The pump curve for this pump shows that a variation of 40 FT of total dynamic head can vary the discharge rate from 200 gpm to 400 gpm. I believe that the 0.87 CFS or 390 gpm is a reasonable maximum capacity for this pump.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Water Measurement Program

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing 7-23-1999Person performing test Daniel A. Nelson

Name: _____	
Water Right No: _____	
Legal Description: T _____ R _____ Sec. _____	_____ 1/4 _____ 1/4 _____ 1/4
Site Tag No: _____	
Diversion Name: _____	

Current Owner

Name WARD, Jack D Phone (208) 462-3846
Last, First, MI
Address 1722 Banks Lowman RD City Garden Valley State ID Zip 83622

Operator (if leased or operated by someone else)

Name _____ Phone _____
Last, First, MI

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

NO GPS WAS DONE
PID IN A CANYON & COULD NOT
GET SATELLITES

Data Collection Filename _____ Offset _____

IDWR Site Tag Identification No. _____

Site Tag location description: _____

PLS/USGS Locator _____

For Department/District Use Only

Received by _____ Date _____

Reviewed by _____ Date _____

Data Entry by _____ Date _____

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation		Multiplier - Flow rate	X100
Manufacturer	Water Specialist	Multiplier - Totalizer	X1000
Meter Type	Propeller	Location (good, fair, poor)	Excellent
Model		Pipe information	
Serial Number	960075-B	Pipe material	PVC
Size (nominal)		Outside Diameter	8.616
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	.288
Measurement Units	(circle one) CFS GPM Other(specify)	Inside Diameter	
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	20' +
Volume Units	Acre-Feet Yes No Other(specify) GPM	Dist. of Straight pipe downstream from meter	20' +

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

$$\text{Percent Difference} = (M_1 - M_2) \div M_2 \times 100 = \pm \% \quad (\text{Acceptable is within } \pm 10\%) \quad (\text{equation 1})$$

$$\text{Calibration Multiplier} = M_2 \div M_1 \quad (\text{equation 2})$$

Is flowmeter installed according to manufacturer's specifications? Yes / No / Unsure

Describe any apparent problems with installation or operation _____

Flowmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

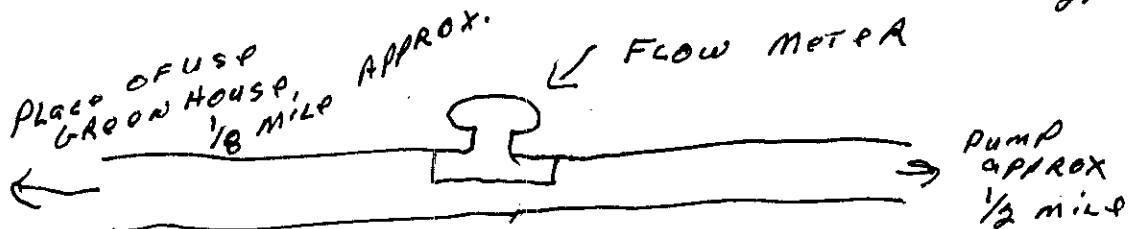
Flowmeter calibration multiplier: _____

Water Level DataDoes the well have access to measure water levels? Yes / NoStatic Water Level _____ ft
Date _____Pumping Water Level _____ ft (at condition # _____)
Date _____**FLOWMETER ACCURACY CALIBRATION TABLE**

Owners meter (totalizer reading)	Time	Total Gallons	Ave. Flow Rate - GPM (M ₁)	Standard total gallons	Average flow rate (M ₂)	Percent diff. (±)	Comments and adjustments
027788	0	—	—				
027789	288	1000	208				
027790	600	1000	192				
027791	878	1000	215				
TOTAL	878	3000	205		235	12.890	multiplied 1.15

Notes, Comments or Calculations: THIS IS A RIVER PUMP
FROM THE WEISER RIVER. THEY
ARE REQUIRED TO HAVE A MEASUREMENT
DEVICE, BUT ARE CURRENTLY NOT REQUIRED
TO REPORT.

PUMP NOT OPERATING AT CAPACITY
RIVER TOO LOW TO RUN MAXIMUM.
 Sketch and or photograph of installation: OWNER SAYS IT NORMALLY RUNS
450 GPM



1408

I certify that the above information is true and correct to the best of my knowledge and ability and the measurements taken and recorded are in accordance with the standards and specifications of the equipment used.

Signature

Donald A. Nelson
 (person performing measurements)

Date

7.23.99

MODE SELECT
INPUT

OUTER DIAMETER
8.6600 IN

PIPE MATERIAL
? PVC

WALL THICKNESS
0.2880 IN

INNER LINING
? NO LING.

KIND OF FLUID
? WATER

SENSOR MOUNTING
? U

TYPE OF SENSOR
? SMALL

SPACING
6.271 IN U

ZERO MODE
CLEAR

ZERO MODE
AUT ZERO

ZERO MODE
AUT ZERO

07-23 15:5500 *R
+002.90 % AI2

MODE SELECT
T0 CHECK

0306.7 MMSEC
101.53 % T0

16:05+16.114E 0GPM 00R
~~+00000 *10 G 00R~~
~~-00000 *10 G 00R~~

16:06+221.904E 0GPM 00R
~~+00007 *10 G 00R~~
~~-00000 *10 G 00R~~

16:30+235.377E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R

16:31+235.905E 0GPM 00R
+00023 *10 G 00R
-00000 *10 G 00R

16:32+234.848E 0GPM 00R
+00047 *10 G 00R
-00000 *10 G 00R

16:33+235.377E 0GPM 00R
+00069 *10 G 00R
-00000 *10 G 00R

16:34+237.490E 0GPM 00R
+00094 *10 G 00R
-00000 *10 G 00R

16:35+235.905E 0GPM 00R
+00117 *10 G 00R
-00000 *10 G 00R

16:36+235.905E 0GPM 00R
+00141 *10 G 00R
-00000 *10 G 00R

16:37+235.905E 0GPM 00R
+00165 *10 G 00R
-00000 *10 G 00R

16:38+238.019E 0GPM 00R
+00188 *10 G 00R
-00000 *10 G 00R

16:39+235.905E 0GPM 00R
+00212 *10 G 00R
-00000 *10 G 00R

16:40+234.848E 0GPM 00R
+00235 *10 G 00R
-00000 *10 G 00R

Jack Ward

(NOT @ Capacity)

2352PM

INSTRUCTIONS: Permanently installed flowmeters must be checked at the time of installation and at least once every four years or whenever major repairs or maintenance has been performed. **All documentation to support data such as notes, printout tapes, etc., should be attached to this form for submittal.**

Meter certification and calibration is necessary to verify the installation and accuracy of permanently installed flowmeters and to enhance the accuracy of flowmeter measurements. The Department's goal for permanent flowmeters is an installed accuracy of ± 10 percent or better. Inaccuracies exceeding ± 10 percent are not acceptable. If a flowmeter is not accurate to within ± 10 percent, a **calibration multiplier** may be used if the inaccuracy is consistent over the normal range of flows measured by the meter. If a meter is not accurate to within ± 10 percent and the inaccuracy is not consistent, the meter should be repaired, replaced, or relocated in order to alleviate the problem.

The **calibration multiplier** is an adjustment applied to flowmeter readings which should result in a more accurate measurement. Calculate the multiplier by dividing the standard meter reading by the permanent meter reading (see equation 2, page 2). The calibration multiplier will be applied by the Department or District to the meter reading submitted by the owner of the meter.

The following items should be documented on this form:

- 1) Flowmeter accuracy prior to any adjustments.
- 2) Any adjustments made to the flowmeter.
- 3) Final flowmeter accuracy when adjustments or repairs are made
- 4) Flowmeter calibration multiplier when the final accuracy is not within $\pm 10\%$.
- 5) Flowmeter totalizer and rate readings prior to adjustment, and after adjustments are complete.

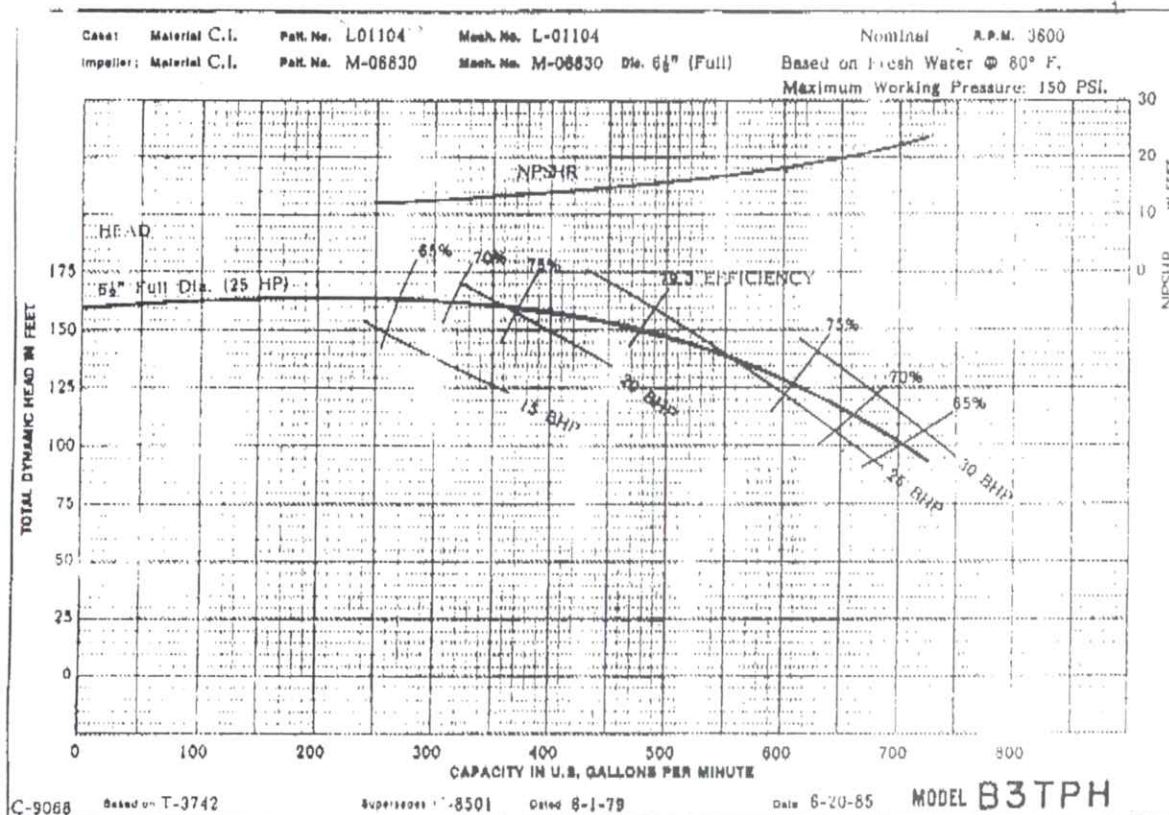
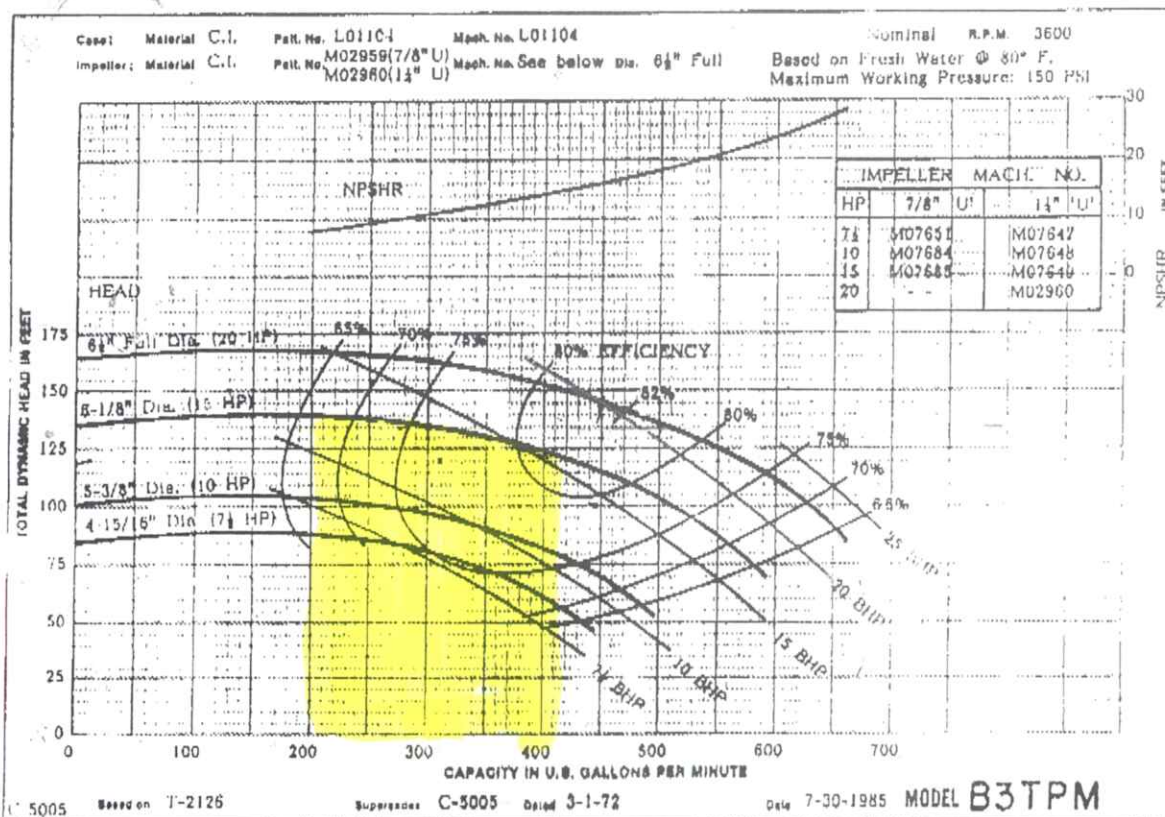
Use the **flowmeter accuracy calibration table** to record totalizer and rate readings from both the permanent and standard flowmeters. Calculate the percent difference between the two meter readings using equation 1 on page 2. Document any adjustments made to the meter.

Flowmeter accuracy is not always consistent; a meter may be accurate at one flow rate, but not at others. Whenever possible, check the meter's accuracy at two or three different flow rates over the range of flows normally measured by the meter (low, high, moderate).



BERKELEY PUMPS TYPE "B" RATING CURVES MOTOR DRIVE

CURVE	4075
DATE	1-2-86
PAGE	402
SUPERSEDES	
All previously issued	
4075 Curves	



METER READINGS FOR COLD WATER LINE

DATE OF READING	READING	GALLONS x 1000 MULTIPLIER	DAYS BETWEEN READINGS	GALLONS PER DAY BETWEEN READINGS	COMMENTS
2/23/1998	87.5				BEGINNING READING
3/5/1998	160.8	73300	10	7330.00	
4/1/1998	439.1	278300	27	10307.41	
6/12/1998	1461.5	1022400	72	14200.00	
7/2/1998	1861.4	399900	21	19042.86	
8/1/1998	2290	428600	30	14286.67	
9/1/1998	2508	218000	31	7032.26	

TOTAL GALLONS USED ==> 2420500

TOTAL DAYS USED ==> 191

AVERAGE GALLONS PER DAY ==> 12673

GALLONS PER DAY X MULTIPLIER ==> 14574

YEARLY USE IN GALLONS ==> 5319397

YEARLY USE IN ACRE FEET ==> 16.3

PLEASE NOTE: The meter broke after only 7 months so there was only 7 months of measurements to attain an annual volume. Fortunately the highest consumable months were during the summer, which were recorded. I believe this is an adequate account of the acre feet used from this source. I also calibrated the flow meter at the time of my exam and discovered that it had a multiplier of 1.15, so the reading needs to be multiplied by this amount.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 7/23/1999

FILE NUMBER 65-13588

**THE PHOTOS ON THIS PAGE
SHOW THE WEST PUMP
STATION.**



The top photo shows inside the pump house. Inside the pump house you can see the two 15 Hp turbine pumps that deliver the hot water. The pipeline for the 1Hp pump connects to the mainline that runs along the wall. The mainline goes up the hill from this point. You can see the old gas fired pump in the corner, but it is not connected to the mainline or intake pipe.



This middle photo shows the 20 Hp in-line pump. This pump diverts water directly from the river, and only diverts cold water.

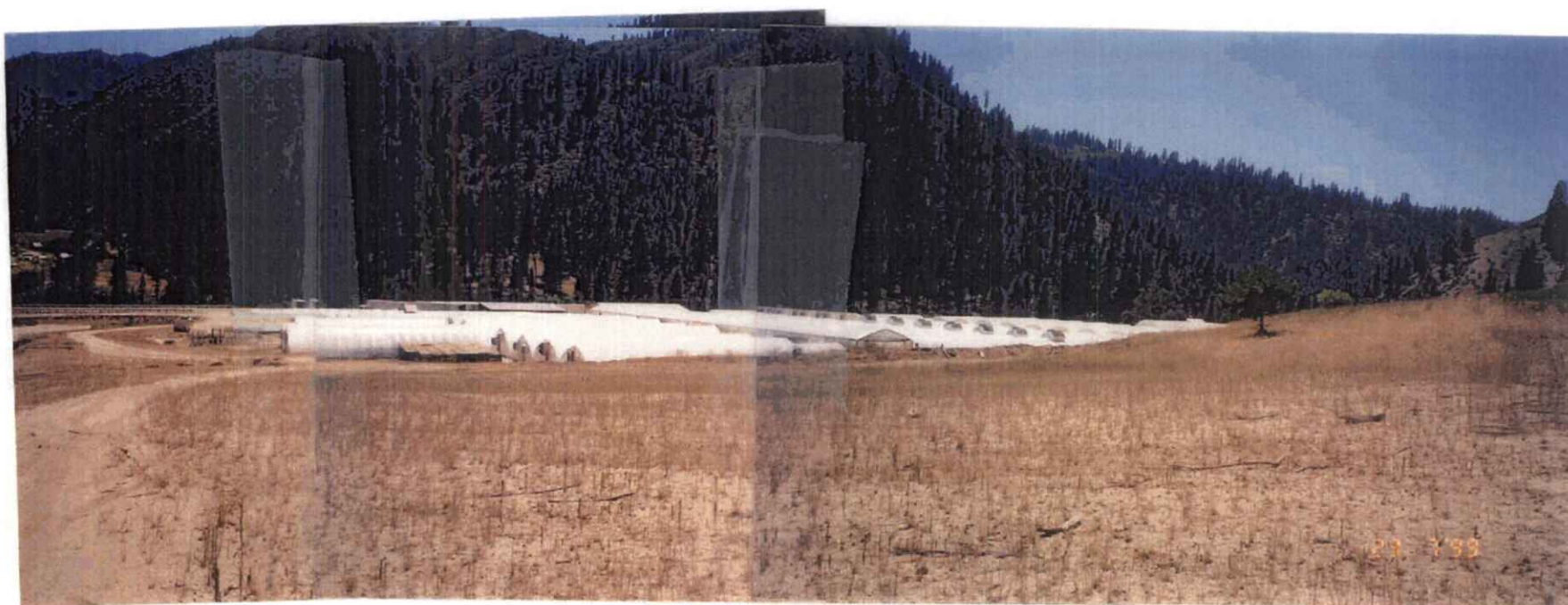


This bottom photo shows the pipeline from the 1Hp pump. The water was high enough and the slopes treacherous enough that it was not safe at the time of the exam to get a photo of the actual pump location. However, you can see the mainline coming from around the corner, and the electric panel in the well house.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 7/23/1999

FILE NUMBER 65-13588

This photo shows the greenhouse facility.



FIELD NOTES

PERMIT NUMBER 65-13344A

Also see 65-13588 for additional information

PLEASE NOTE: These documents are for backup purposes only and are not apart of actual Beneficial Use Field Report.

70

$$\begin{array}{r} 12,675 \text{ gpd} \\ \times 365 \\ \hline 4626518.325 \end{array}$$

$$4626518.325 / 325850 = 14.2 \text{ Fq}$$

$$\begin{array}{r} \times 1.15 \\ \hline 16.39 \text{ Fq} \end{array}$$

METER

Reading

MULTIPLIER 1,000

2-23-	875	73.3	-10 days - 7,330 gpd.
3-5	160.8		
4-1	439.1	278	- 27 days - 10,307 gpd
6-12	1461.5	10224	- 72 days - 14,200
7-2	1861.4	399.9	- 21 days - 19,043
8-1	2290.15	428.7	- 30 days - 14,290
9-1	2508.5	218	- 31 days - 7,045
10-1	2564.4		
11-10	2564		
12-?	2564		
1-7-1999	2564		
2-?	2564		
3-1	2564		
4-?	2564		
5-?	2564		
6-?	2564		
7-?	2760		

METER
BROKE

73.3	10
278	27
10224	72
	21
	30
	31
2421	
<u>x1000</u>	
2421000	
12,675 gpd	191 days

7,330
10,307
14,200
19,043
14,290
7,045

12-9 gpd

12036 gpd.

(91

COLD Pump

MOTOR-BAL DOR

CAT ~~SER~~ JP112514T

20 HP

230 V

3525 RPM

SER 494C

1.15 SF

90 PSI

Pump

BERKLEY

6.5 imp

M 1538 SN

B510 33 KIT

B 3 T P M