

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 92-10220

Exam Date: 5/21/2013

1. Current Owner: MICHELLA DAVENPORT
56 CASSANDRA HILLS
SAINT MARIES ID 83861
(208) 245-4505

And/Or

TERRY DAVENPORT
56 CASSANDRA HILLS
SAINT MARIES ID 83861
(208) 245-4505

2. Accompanied by:

Phone No:

Address:

Relationship to Permit Holder:

3. SOURCE

SPRING

TRIBUTARY

ST MARIES RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use:
2. Other water rights with the same point of diversion:

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

SPRING SE1/4SE1/4SE1/4 Sec. 8, Twp 46N, Rge 02W, B.M.
BENEWAH County

Method of Determination:

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
46N	02W	8																	.4
																			.4

Total Acres: 0.4

Method of Determination: Visual Inspection and GIS

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

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
Pond Pump	Emerson	1	C55CXKBE-4901	EMERSON	1 INCH DISCHARGE PIPE

*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

2. Measurements: System was not operating at the time of the exam. A theoretical calculation was performed on the pump.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method:

Measurement = 0.06 cfs
Permit allowed = 0.03 cfs

License recommend for 0.03 cfs.

F. VOLUME CALCULATIONS – Volume Isn't Needed – Surface Water Right

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Water for this permit is diverted from a spring that has been dug out to create a channel into a small pond. From the pond, the water is diverted by a 1 Hp pump to 2 garden hoses. The garden hoses are used to sprinkle a garden and yard area. There is an overflow channel on the pond that flows back into the unnamed stream the spring originally supplied. The entire area developed appears to be part of the spring area.

Water right 91-7002 overlaps this place of use, but it belongs to land that is currently owned by the Coeur d' Alene Tribe with a place of use in the tax lot south of Highway 3. The right has been renumbered and is no longer at the original location. Therefore, this overlapping water right is of no consequence to this water right.

Condition R66 was changed to X31 per current standards for irrigation uses under 1 acre. The spring is very close to the property boundary, so I couldn't tell for sure if it was on the owner's property, so it carried forward to licensing.

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>
IRRIGATION	03/15 to 10/31	0.030 CFS	
<u>Totals:</u>		0.030 CFS	

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 – Staff Hydrologist

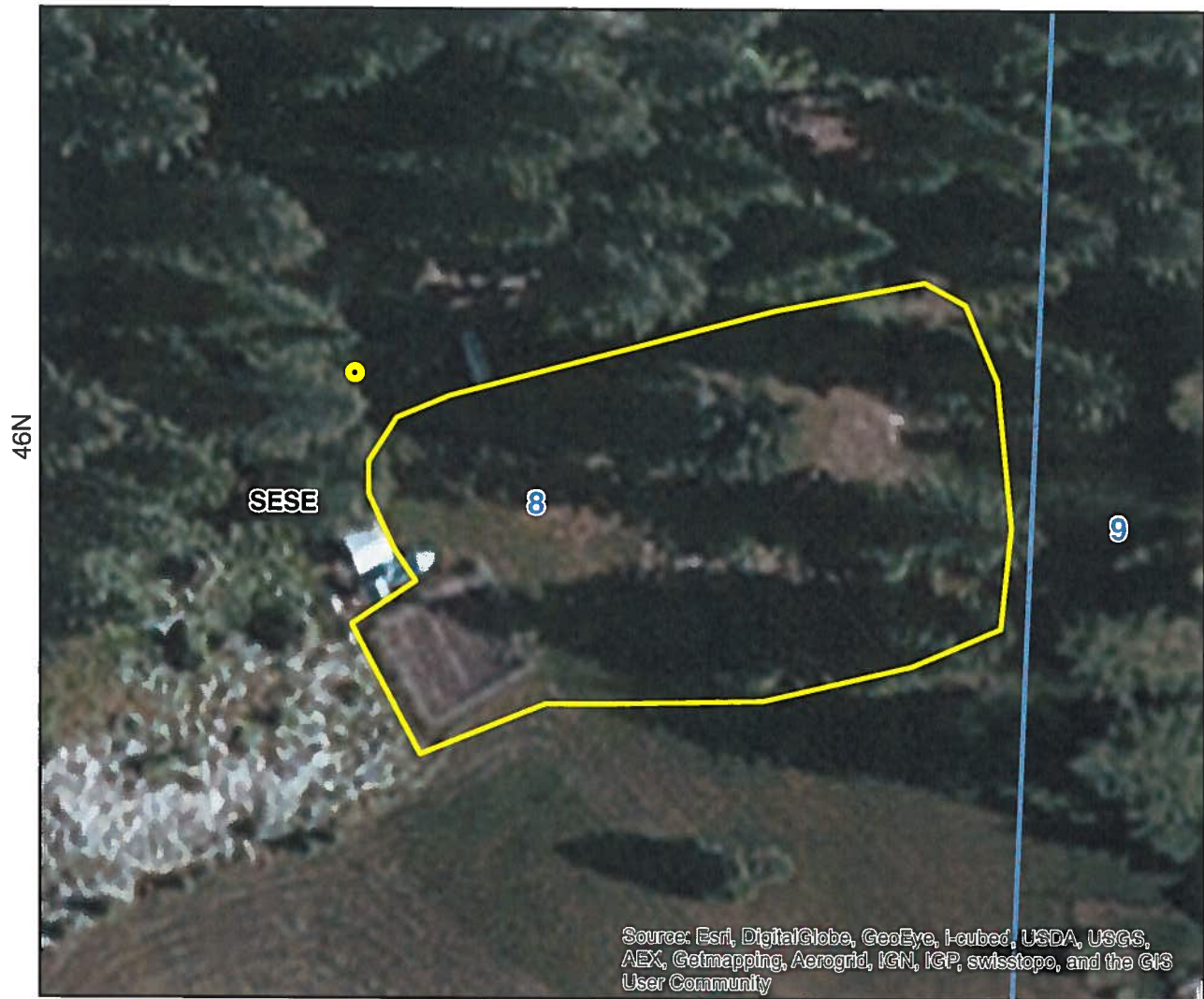
Field Examiner's Name Daniel A. Nelson Date 8-9-2013

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Attachment To Field Exam
92-10220

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

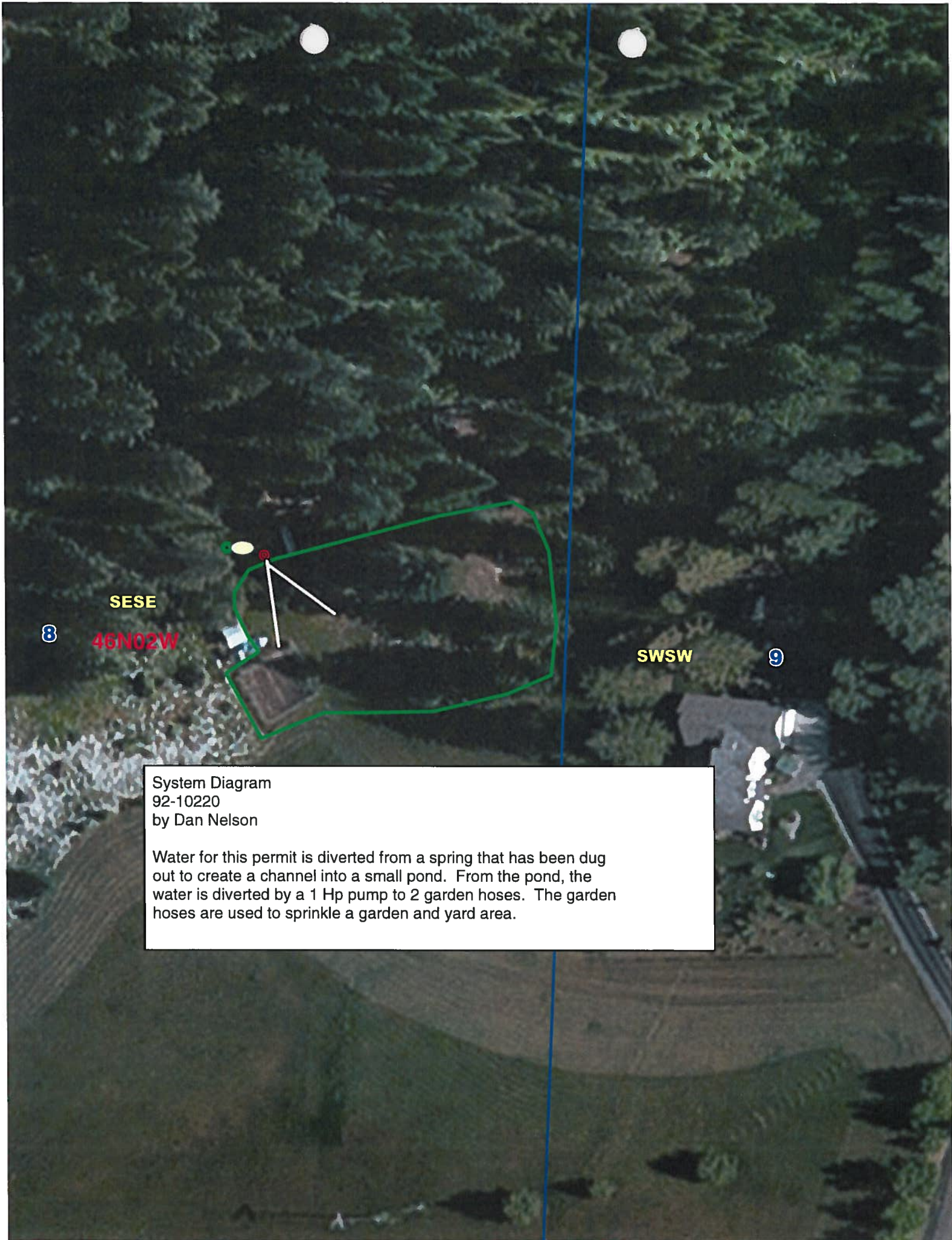
02W



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.005 0.01 0.02 Miles

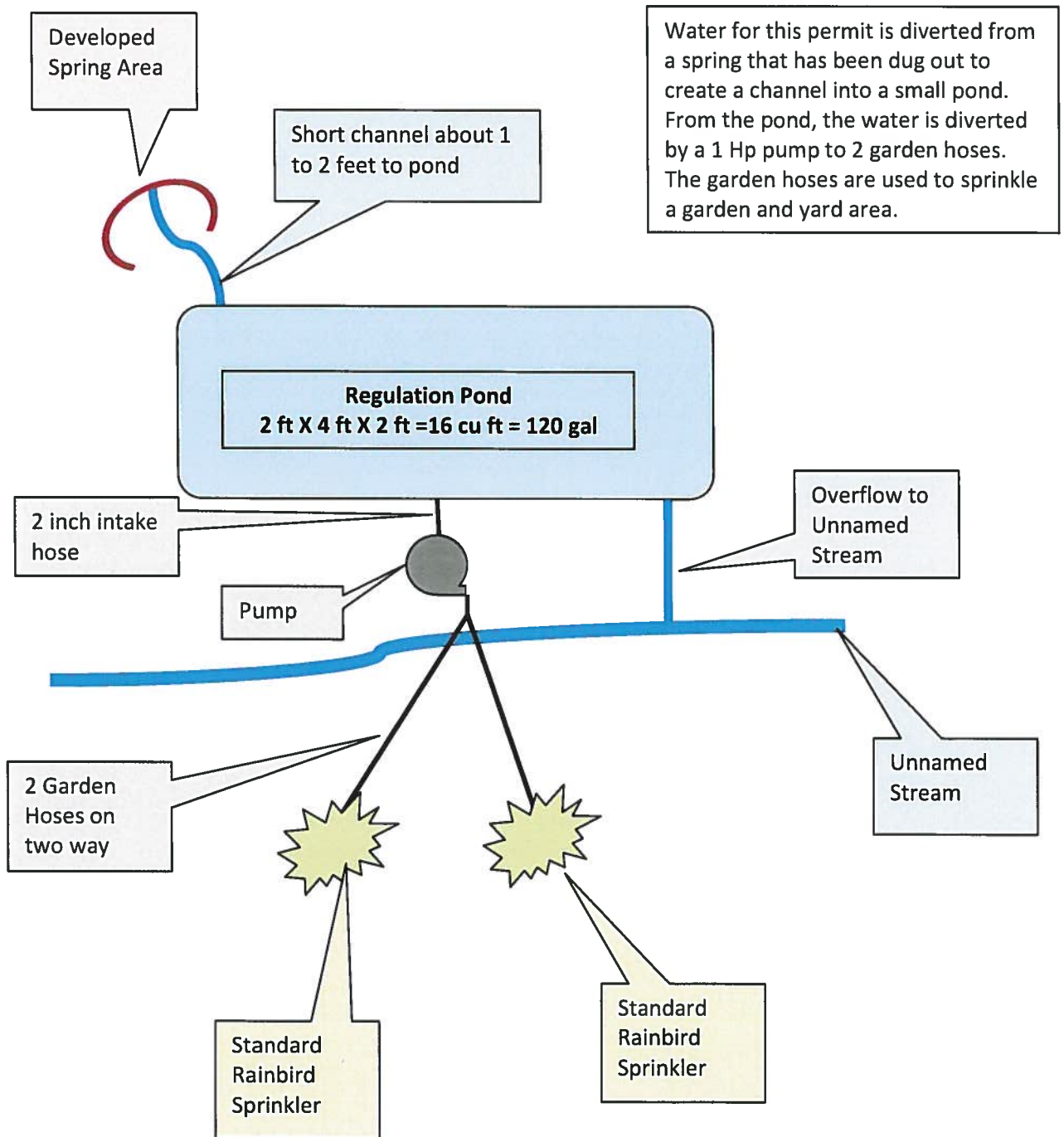




System Diagram
92-10220
by Dan Nelson

Water for this permit is diverted from a spring that has been dug out to create a channel into a small pond. From the pond, the water is diverted by a 1 Hp pump to 2 garden hoses. The garden hoses are used to sprinkle a garden and yard area.

System Diagram
92-10220
By Dan Nelson



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

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Water Right No.: 92-10220
 Examiner: Dan Nelson
 Date of Field Exam: 5/21/2013

P/D No.:	Option 1	OPTION 2	OPTION 3	
PUMP HORSEPOWER	1	1	1	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	0	0	0	
DISCHARGE PRESSURE	40	45	50	
FRICTION	0	0	0	
RATE OF FLOW (cfs)	0.07	0.06	0.05	AVE
(gpm)	29.9	26.6	23.9	0.06 26.8

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.

Examiners Notes:

The pump was not operating at the time of the exam. The pump sat slightly below the water level of the pond it pumped from. The pressure was estimated at between 40 and 50 psi, which is generally the standard for irrigation systems.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 5/21/2013

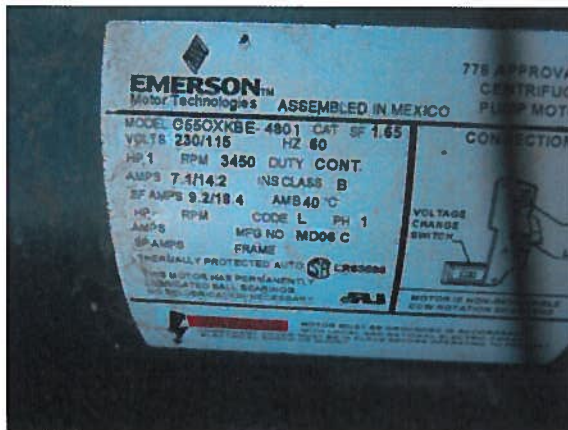
FILE NUMBER 92-10220



This photo shows the spring area that has been dug out and funneled into the small pond.



This photo shows the spring area and the small pond. You can see the overflow from the pond into the creek and the pump used for irrigation.



This photo is of nameplate for the pump.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 5/21/2013

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These photos show the grounds that are being irrigated. The photos above show the lands irrigated south and west of the pumping station. The photos below show the lands south and east of the pumping station.

