

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-9417

Exam Date: 3/4/2016

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? ☒ Yes ☐ No
- a. Irrigation of 5 acres or less
- b. Storage of up to 14.6 AF for stockwater purposes only
- c. ☒ Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
- d. Other < >

2. Current Owner: Name: Kenneth and Wendy Gabriel
- Owner-of-Record Correct? ☒ Yes ☐ No
- Address-of-Record Correct? ☒ Yes ☐ No
- If No: <Address>

The tax lot records show that the Gabriel's are the owner of the property.

3. Beneficial Use Fees have been paid: ☒ Yes * ☐ No Receipt No: C101499
- \$50 check was submitted and will be returned as the permit was for .04 cfs from groundwater.

4. SOURCE**TRIBUTARY**

Ground Water

Method of Determination: Previous field examiner's phone conversation in field exam 94-9418 who have a shared well agreement with the permit holders. Aerial photos and tax lot information was also used to confirm.

Change in Source: ☐ Yes ☒ No

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Overlap? ☒ Yes ☐ No

Water Right No.	Source	Purpose of Use	Basis

Comments: Water right 94-4237 is a statutory claim for 20 acres of irrigation with in the 100 acres in the same QQ as this permit, however, the name does match tax lot information inside of the QQ. I am assuming that 94-94237 is for a field south of the place of use for this permit, since it is the only area in the 40 acre tract that appears to have been irrigated. License 94-9418 was recently issued for domestic use for the lot directly to the east of this permit. There is also a recommendation (94-9000) for domestic use for the second lot to the east of the permit and a recommendation (94-8342) for domestic and stockwater to the south of this permit.

2. Other water rights with the same point of diversion: Overlap? ☒ Yes ☐ No

Water Right No.	Source	Purpose of Use	Basis
94-9418	Groundwater	Domestic	License
94-9000	Groundwater	Domestic	Recommendation

Comments: The map submitted with the original application for permit showing easement states the well used for this permit is also used for tracts #13 (License 94-9418) and #14 (Recommendation 94-9000). A telephone conversation with Clark Schmidt in Lot 13 during the licensing of 94-9418 confirmed that the well is shared between the three neighbors.

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

Source	Govt. Lot	¼	¼	¼	Sec.	TWP	RGE		County
Ground Water			NW	SE	17	50N	04E	B.M	SHOSHONE

Method of Determination: The legal description in the permit is validated by PLS data and aerial photography. The POD is located west of the permit and is not on the permit holders property. See narrative for more information regarding access to the POD.

Change in POD? ☐ Yes ☒ No

Amendment Required? ☐ Yes ☒ No

2. LOCATION OF PLACE(S) OF USE: Use: Domestic

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	04E	24														X			

Method of Determination: The legal description in the permit is validated by PLS data and aerial photography.

Change in POU? ☐ Yes ☒ No

Amendment Required? ☐ Yes ☒ No

3.

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

The pipe size is unknown. The permit holder stated they utilize a spigot on the property that is being supplied from the well.

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

☐ 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
Hand dug well					

*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: In-office field exam. No measurements taken

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

The pump horsepower isn't known for this system. Department staff created an estimated Theoretical calculation based on a 1.5 Hp pump when licensing 94-9418. This estimation suggests that a 1.5 Hp pump could supply adequate water for this permit and license 94-9418. It is not unreasonable to assume that they have a larger pump in this system, which could easily supply the amount of water allowed for water rights 94-9417, 94-9418 and 94-9000.

Pump Calculation = 0.08 cfs

Standard = 0.04 cfs

Permit allowed = 0.04 cfs

License recommended for 0.04 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

Volume Calculations for Other Uses: Domestic – In house only

According to processing memo #22, when irrigation is separated from the domestic use, one household can have up to 0.6AF. **I am recommending 1.2 AF for this license for the two cabins described in the permit.**

G. PURPOSE OF USEIrrigation ☐ Yes ☒ No # Stock _____ Domestic # of Homes 2 trailers or cabins

Other: < >

Change in Purpose of Use? ☐ Yes ☒ No

Method of Determination: Information in the water right file is consistent with aerial photography of the property.

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

H. NARRATIVE/REMARKS/COMMENTS

Permit 94-9417 authorized a diversion from ground water from a shallow hand dug well for domestic purposes at one home. Based on the small permitted diversion rates, this permit qualifies for an in-office field exam. The permit is in the Minimum Stream flows of the Coeur D'alene River (94-7341) however this is a ground water domestic use permit. During the permitting process, the US Forest Service requested to clarify and use the legal description of HES 188 when describing the lot as to avoid any confusion with the National Forest Service Land that is in the NWSE outside of HES 188. This information was on the permit and should be carried over to licensing.

Aerial photos show three possible structures that could be cabins. Two of the structures are right next to each other, so they could be one building. Tax lot information states no home has been built on the property. A review of the current Shoshone County Parcel Information System shows no improvements including out buildings. Therefore, these structures could be portable residences or recreational vehicles.

The Point of Diversion for this permit is located on property owned by Arthur and Joan Hosteletler from a shallow 8' deep hand dug well. The owner of water right 94-9418 informed Department staff that the well is shared by a few of the neighbors. License 94-9418 and the recommendation (94-9000) both reflect the same point of diversion on their mapping. A map submitted with the application for permit shows an easement to the approximate location of the well.

Conditions 1 (004), 5 (X60) and 6 (no code) will be carried forward to licensing. Condition 2 (046) will be removed as is standard. Condition 3 (X04) will be changed to WB5 to exclude the irrigation use, and condition 5 (187) will be removed, since there is no irrigation use. Condition X59 will be added to describe the lot for the well location. Condition F06 will be added to show that water rights 94-9418 and 94-9000 are diverted out of the same well.

Have conditions of permit approval been met? ☒ Yes ☐ No

I. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Domestic	01/01 to 12/31	0.04 cfs	1.2 AF
	Total Diversion	0.04 cfs	1.2 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

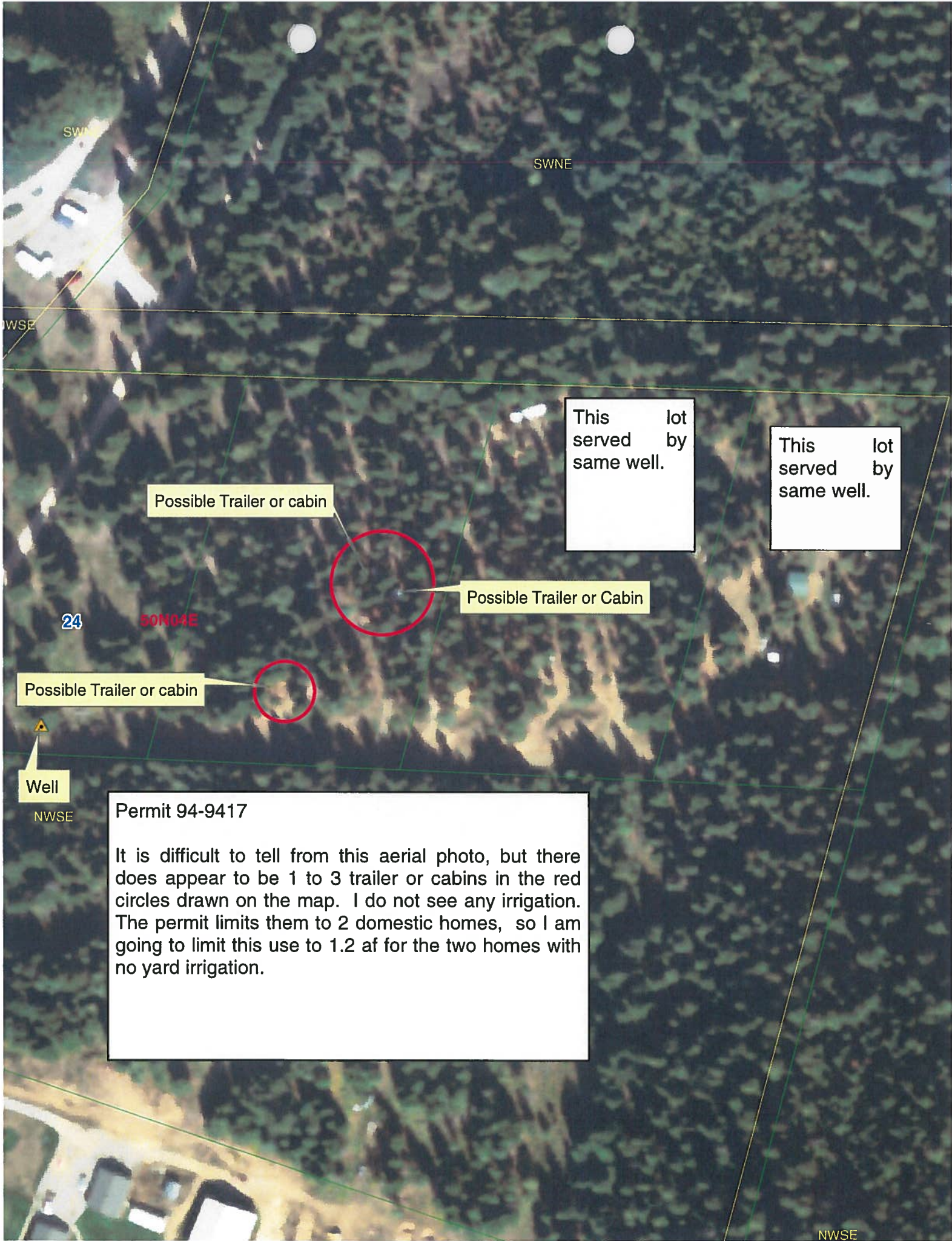
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

Other: < >

I. AUTHENTICATION – DANIEL A. NELSON – STAFF HYDROLOGIST

Field Examiner's Name *Daniel A. Nelson* Date 3-4-16

Reviewer _____ Date _____



SWNE

NWSE

This lot served by same well.

This lot served by same well.

Possible Trailer or cabin

Possible Trailer or Cabin

24

50N04E

Possible Trailer or cabin



Well

NWSE

Permit 94-9417

It is difficult to tell from this aerial photo, but there does appear to be 1 to 3 trailer or cabins in the red circles drawn on the map. I do not see any irrigation. The permit limits them to 2 domestic homes, so I am going to limit this use to 1.2 af for the two homes with no yard irrigation.

NWSE

NWSE

Possible Trailer or cabin

Possible Trailer or Cabin

Possible Trailer or cabin

24

50N04E

NWSE

Permit 94-9417

It is difficult to tell from this aerial photo, but there does appear to be 1 to 3 trailer or cabins in the red circles drawn on the map. I do not see any irrigation. The permit limits them to 2 domestic homes, so I am going to limit this use to 1.2 af for the two homes with no yard irrigation.



MAP

MAP TOOLS

ADVANCED TOOLS

GEOPROCESSING TOOLS



SEARCH BY ADDRESS:

Example: 123 1st Ave

69 ea

SEARCH BY NAME:

Example: Betsy Rullman

SEARCH BY PARCEL NUMBER:

Example: A00000353900

Search!



PRINT MAP

SEARCH BY PARCEL # ONLY

QUERY

BOOKMARK

MEASURE

CLEARMAP

LAYERS

UPDATES

HELP VIDEOS

Map Satellite

Parcel Labels

Township and Range Labels

Sign in

COUNTY TAXES

Contact the county treasurer

General Layers

- ☐ Sections
- ☐ Wells
- ☐ Proposed Annexations(Updated Nightly)

- ☐ Celltowers
- ☐ All Registered Towers
- ☐ Wetlands
- ☐ Subdivisions
- ☐ Web Cameras

Taxing Districts

- ☐ Cities
- ☐ Fire Districts
- ☐ Highway Districts
- ☐ Library Districts
- ☐ Hospital Districts
- ☐ School Districts
- ☐ Sewer and Water Districts
- ☐ Sewer
- ☐ Water Districts

Mineral Data

- ☐ Mining Rights

Parcel Information:

Parcel Number: RP50N04E248000
Owner 1: GABRIEL, KENNETH G
Owner 1: GABRIEL, WENDY
Address: 311 MILL AVE
Mail: COEUR D'ALENE
State: ID
Zipcode: 83814
Site Address: 69 EAGLES NEST LANE

Other Information:

Display Description: CHARLES JOHNSON SHORT PLAT SP D83-98:386426 TRACT 12 24-50-4
Finished Stories: 0
Bedrooms: 0
Kitchen(s): 0
Living Rooms(s): 0
Unfinished SqFT: 0
Finished SqFT: 0

Assessment Information:

Land: 46500
Impv: 0
Total: 46500

Planning and Zoning Information:

Zoning Code: NR

Taxing Districts: TCA

Number:05

City: .
County: SHOSHONE COUNTY
Fire: .
Highway: SHOSHONE COUNTY ROAD & BRIDGE
Hospital: EAST SHOSHONE HOSPITAL
Library: .
School: WALLACE SCHOOL #393
Water: .



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THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 94-9418
 Reviewer: Steven Visosky
 Date of Review: 1/14/2016

P/D No.:

PUMP HORSEPOWER
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs)

Well #1
1.5
0
8
40
0.09
41

Well #2
1.5
0
8
50
0.07
34

Well #3
1.5
0
8
60
0.06
28

0.08
34.39

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.
 No Friction

Examiners Notes:

A standard sized pump used for a three home system would most likely be at least a 1.5 HP pump. Assuming pressure ranges of 40-60 psi with a lift of 8', it is reasonable to say that a standard size pump in this application would deliver the 0.04 cfs recommended for this license. If three homes were allocated 3 separate water rights each at 0.04 cfs, the system may be self regulated if all three homes tried to utilize all of their water at the same time with a 1.5 HP pump.