Form 219 07/11

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DEPARTMENT OF
WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATION

Permit No. 63-34765

1. Owner Kip Losey and/or Christine Losey Phone No. 208-859-0981
   Current address 16 Trails End Way, Boise, ID 83716-3192
2. Examiner's name Terry Scanlan, CWRE 129 EXAM DATE April 9, 2020
3. Accompanied by Christine Losey Email christinelosey@gmail.com
   Address 16 Trails End Way, Boise, ID 83716-3192
   Relationship to permit holder same Phone No. 208-426-8195
4. Source spring tributary to sinks

B. OVERLAP REVIEW

1. Other water rights with the same place of use none
2. Other water rights with the same source and point of diversion none

C. DIVERSION AND DELIVERY SYSTEM

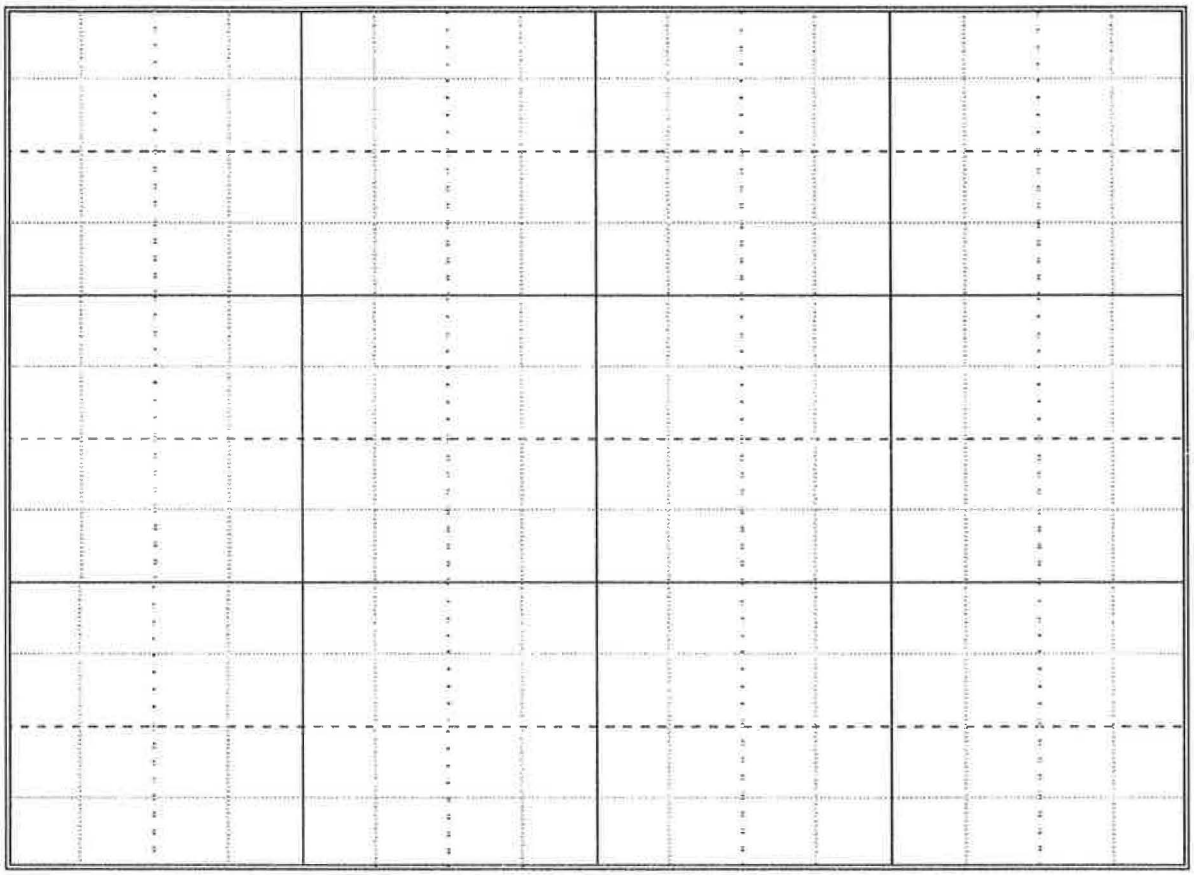
1. **Point(s) of Diversion:**

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
		SW	NW	SW	1	4N	4E	Boise	GIS, field exam

2. **Place(s) of Use:** Method of determination GIS, field exam

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
4N	4E	1										X							

3. **Delivery System Diagram**: Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.



Scale: 1" = _____

☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
☒ 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

****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
Measuring cup	plastic				pint	

2. **Measurements:** The overlfow rate from the cistern to the pond was measured by timing the filling of a one 2 cup (16 oz) measuring cup. Fill rate was 16 oz per 5 second, which is equal to 1.5 gpm or 0.003 cfs.

E. NARRATIVE/REMARKS/COMMENTS

A developed spring is piped to one home for various domestic uses, including indoor use, limited landscape irrigation, stockwatering, and a constructed pond. The home is located at 16 Trails End Way, Boise, ID 83716. The parcel number is RP04N04E015601.

The spring was developed by excavating and installing a french drain as described in Attachment B. Pipe from the spring extends east approximately 50 feet to a 1500-gallon buried concrete storage tank. A pipe extends north from the tank to a booster pump outside the house. Flow is by gravity with approximately 50 feet of fall in 550 feet. The booster pump system supplies pressurized water to the home and five yard hydrants.

The booster pump is a 1.5 hp end suction-style. Assuming 50 percent pump efficiency, the pump will provide 32 gpm at 40 psi boost. Static pressure at the pump is estimated to be 20 psi. Therefore, the pump should be able to produce peak flows of 32 gpm at 60 psi.

Overflow from the storage tank is to an aesthetic pond and a small watering hole created for wildlife. There are actually two overflow pipes, one to the pond and a second to the watering hole. The pond is lined with bentonite clay to minimize seepage loss and has a total area of 0.1 acres. Total pond volume is less than 1 acre foot. Water is pumped from the pond to a buried piping system for irrigation and fire protection. Irrigation is primarily by drip to trees and shrubs that are widely distributed within the property.

Three horses were on the property utilizing the water for stockwatering purposes.

Flow rate at the time of the exam was estimated based on the overflow from the tank to the pond. It was assumed that there were no inside uses at the time. Flow to the wildlife waterhole was not measured but is assumed to be minimal because there was no overflow.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS

☐ Additional computation sheets attached

Measured Method:

Measuring cup and stop watch - 16 oz in 5 seconds = 0.003 cfs. Round to 0.01 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R}$ = (Acres Irrigated) x (Irrigation Requirement) = _____

$V_{D.R}$ = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = _____

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

2. Volume Calculations for Other Uses:

One home with landscape irrigation = 1.2 af

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From	Period of Use To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
domestic	1/1	12/31	0.01 cfs	1.2 afa
		Totals:	0.01 cfs	1.2 afa

2. Recommended Amendments

☐ Change P.D. as reflected on page 1 ☐ Add P.D. as reflected on page 1 ☒ None

☐ Change P.U. as reflected on page 1 ☐ Add P.U. as reflected on page 1 ☐ Other

I. AUTHENTICATION

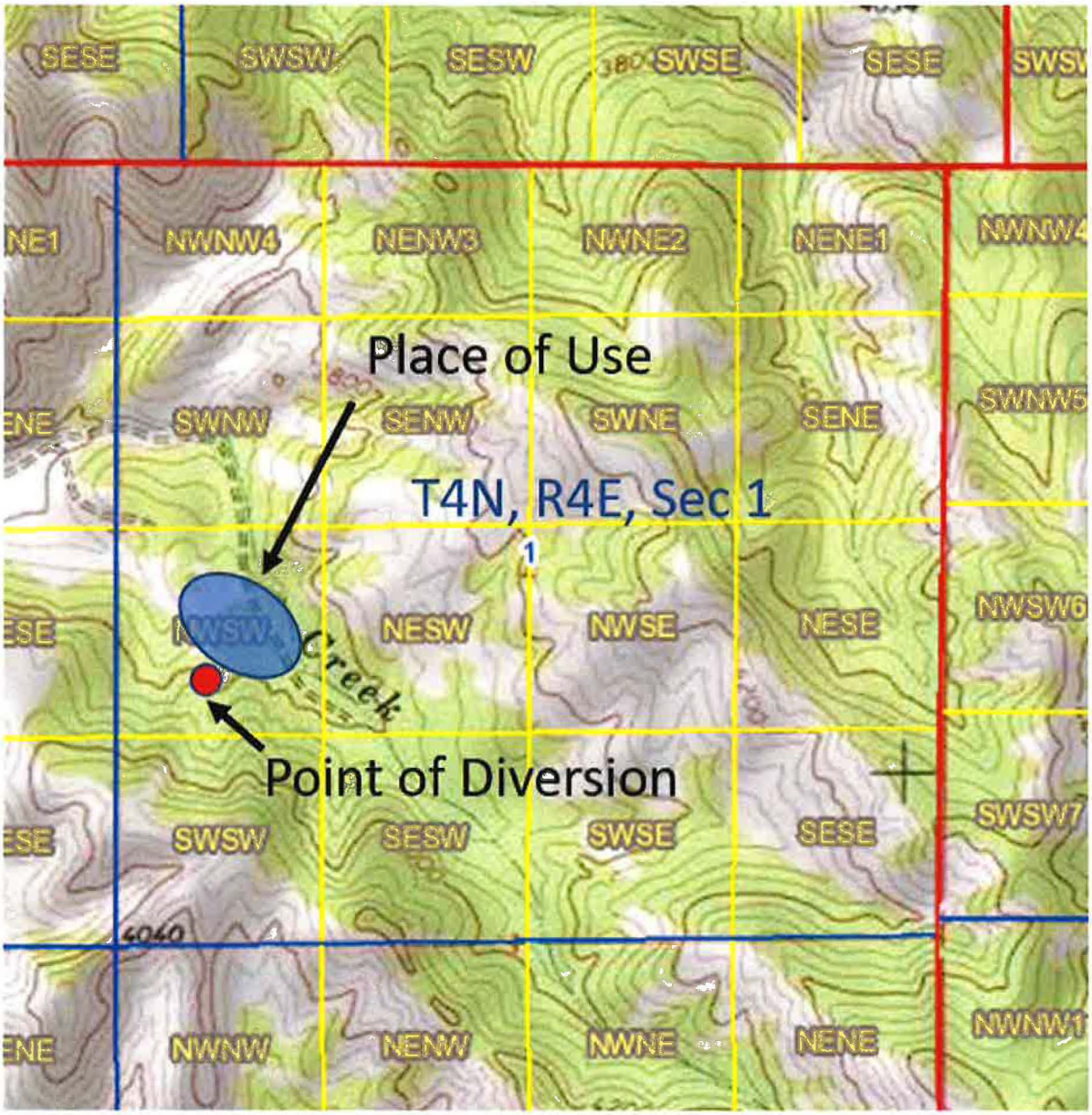
Field Examiner's Signature Terry M Scanlan Date 4/11/2020

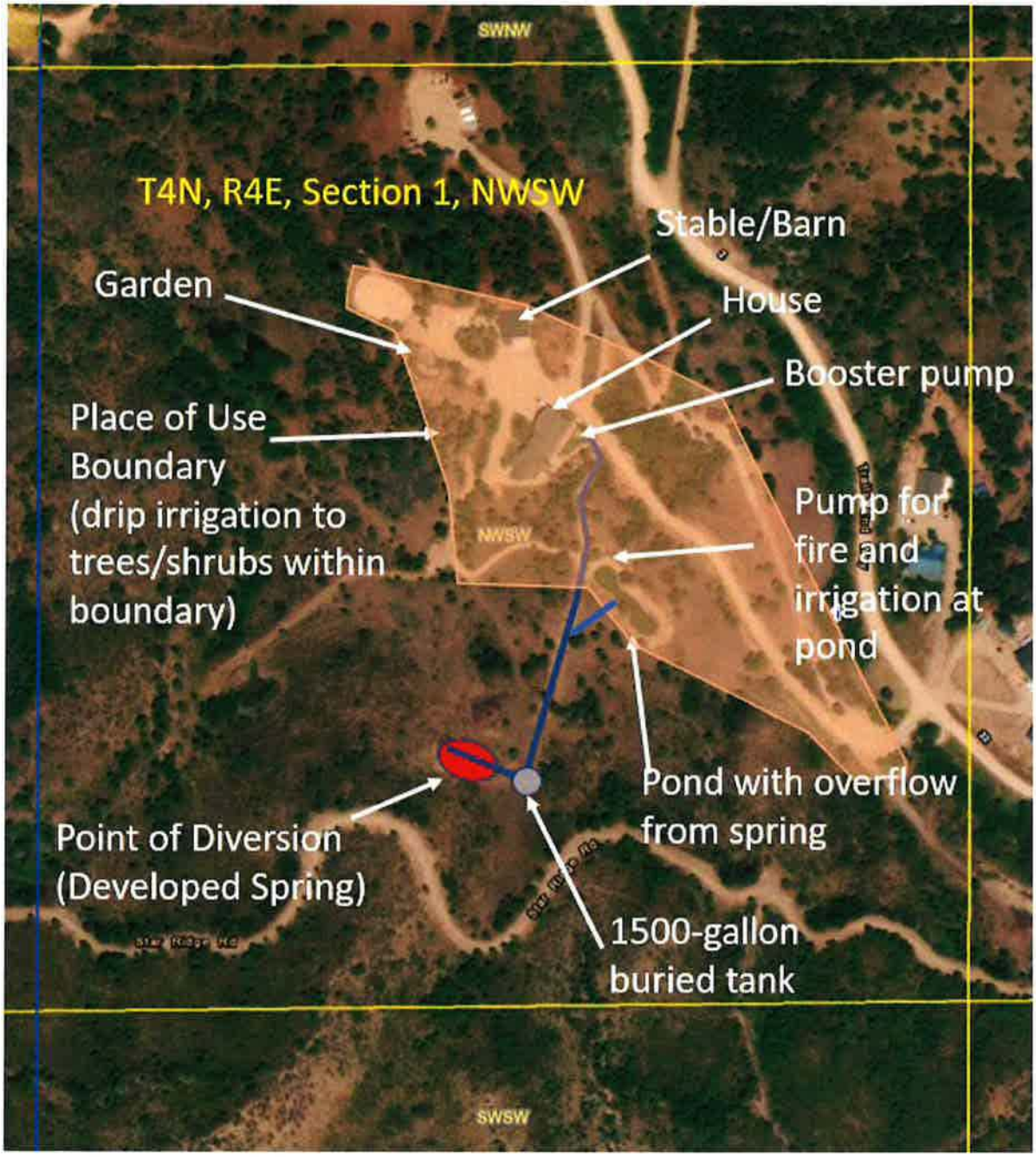
Reviewer _____ Date _____

PROFESSIONAL ENGINEER LICENSED 6266 4-11-20 STATE OF IDAHO TERRY M. SCANLAN

Attachment A

Aerial Photo and Map


SESE
SWSW
SESW
SWSE
SESE
NE1
NWNW4
NENW3
NWNE2
NENE1
Place of Use
SWNW
SENW
SWNE
SENE
T4N, R4E, Sec 1
1
NESW
NWSE
NESE
Creek
Point of Diversion
SWSW
SESW
SWSE
SESE
4040
NWNW
NENW
NWNE
NENE


SWNW
T4N, R4E, Section 1, NWSW
Stable/Barn
Garden
House
Booster pump
Place of Use Boundary (drip irrigation to trees/shrubs within boundary)
NWSW
Pump for fire and irrigation at pond
Pond with overflow from spring
Point of Diversion (Developed Spring)
1500-gallon buried tank
SWSW

Attachment B

Description of Spring Development

Gmail

Christine Losey <christinelosey@gmail.com>

Spring Notes

1 message

Kip Losey <klosey@frescamex.com>
To: "christinelosey@gmail.com" <christinelosey@gmail.com>

Thu, Apr 9, 2020 at 11:43 AM

Spring put in 4/2011

Spring is made up of Black Visqueen with 2" of drain rock on top of the plastic and then a 8 perforated pipes with the holes upward and all tied together as a manifold going into a single pipe that is 3 or 4" in diameter. There is another 2" of drain rock on top of the pipe and the Visqueen is then folded to make a burrito that is sealed and dirt was put on top of that to bring the area back to grade.

This pipe flows into the 1,500 gallon cement vault. 3 feet before the water gets to the tank is where the overflow is cut into the main pipe and goes to the pond. You will notice that we have two overflow pipes. I had to put in a second one because the first one would vapor lock backing water back up to the spring which could have been disastrous.

The water flows out of the vault and there is a main turnoff about 5 feet past the vault in the pipe with a top coming out of the ground.

The water then flows underground at 4' deep to the house.

Before the house there is a large inground pipe 3 or 4' round and 4' deep that houses the pressure tank, booster pump and other valves that allow you to turn the water off to the house or flow water without going through the pressure tank (gravity flow)

The water then goes to the house, barn and garden.

The underground pipe is PVC 3 or 4" and the overflow pipe is black plastic 1.5" I believe.

The overflow goes into the pond and is used for irrigation around the house and in the horse pasture.

The pond fills every winter and drains dry every summer or almost dry.

We irrigate from May to early July and then there is not enough water to irrigate any more.

We also have a fire hose outlet in front of the house at the spicket that can be used incase of a fire and we have water in the pond.

That is about it for the spring.

Kip Losey

Vice President

Business Development

Fresca Mexican Foods LLC.

Phone. (208) 376-6922

Cell. (208) 859-0981

KLosey@Frescamex.com

Attachment C

Exam Photos

Spring Location. Developed spring is located beneath disturbed soil area in center of image.

Sealed lid over 1500-gallon concrete storage tank. Spring area in background behind trees.

Access for isolation valve on left. Access to storage tank on right.

Booster pump system with pump and hydropneumatics tank adjacent to house/garage.

1.5-hp booster pump motor

Booster pump location near east corner of house/garage.

Spring overflow to pond.

Pond. Spring overflow pipe in shade of trees.

Wildlife waterhole looking southeast

Wildlife waterhole looking northwest.

Irrigation and fire pump with 1.5-hp discharge on north side of pond.

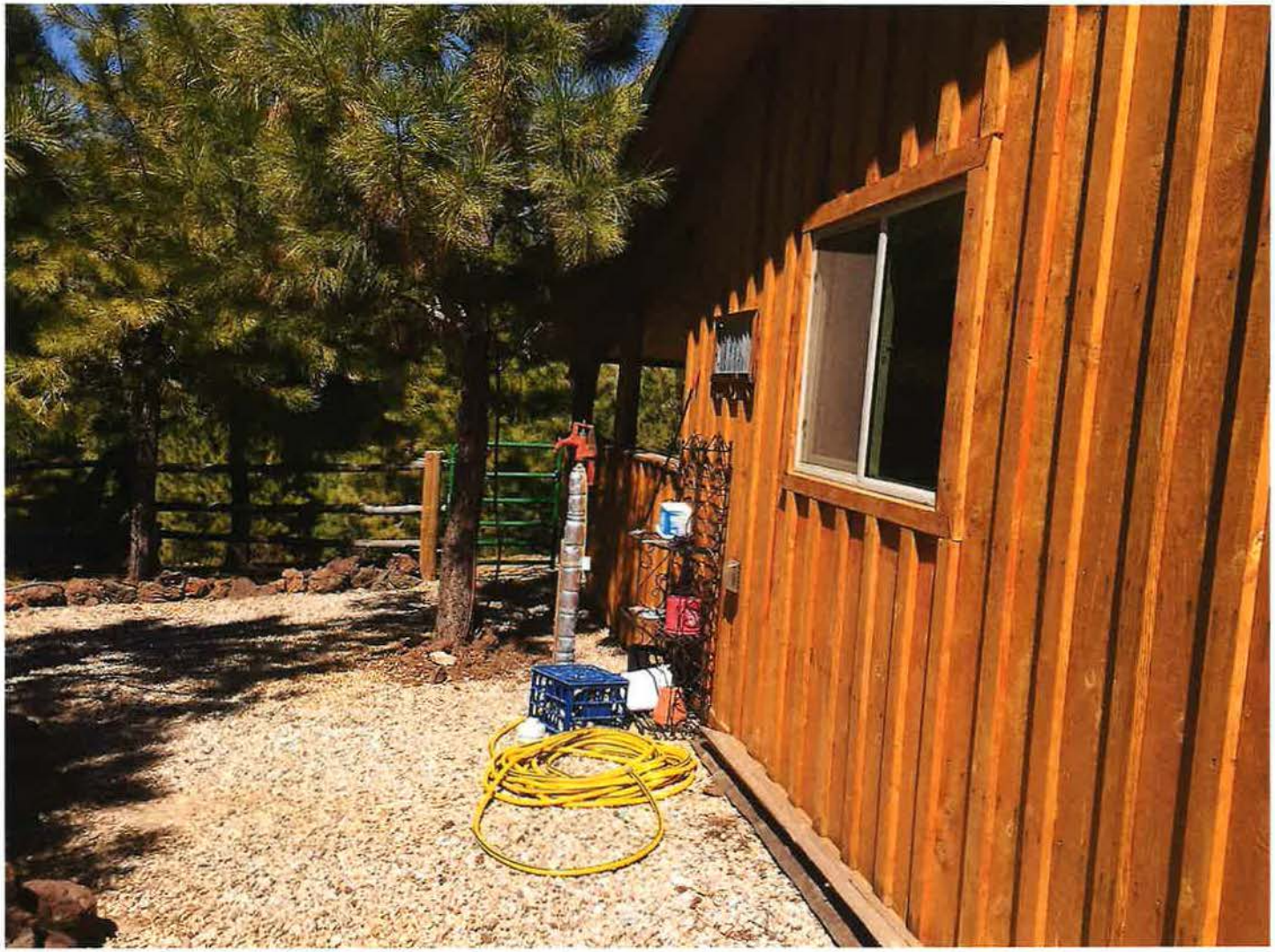
Northwest side of home and garage. Landscape behind elk fence (typical).

Drip irrigated landscape on west side of house.

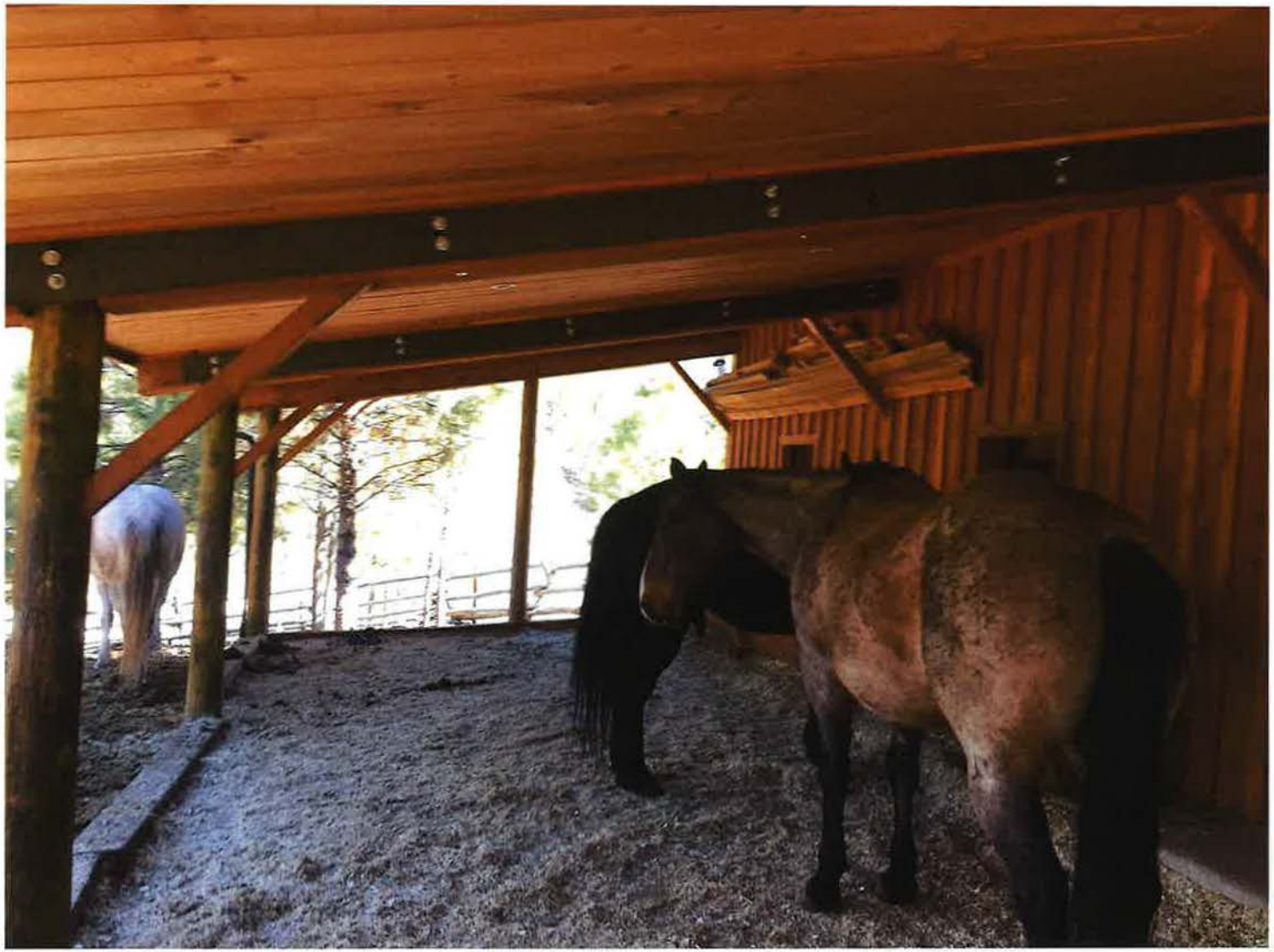
Yard hydrant west of house with adjacent fire flow connection. Drip irrigated landscape behind hoses.

Garden area

Pressurized flow from hose at yard hydrant by garden. Estimated rate 15 gpm.

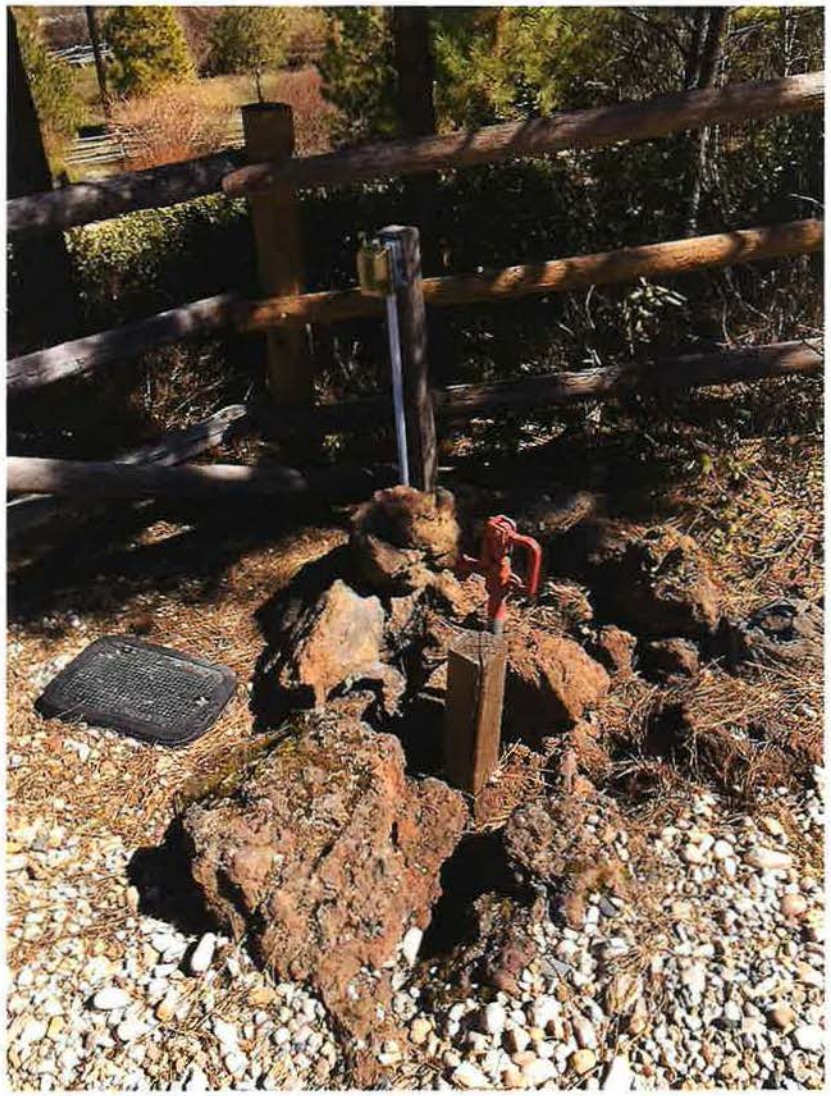


Hydrant on west side of barn.



Horses.

Hydrant on north side of garage.



Hydrant east of garage.

Typical irrigation connection. This one is along the entrance drive.

Drip irrigated shrubs south of barn

Drip irrigated shrubs along entrance drive.

Drip irrigated trees at entrance gate.

SPF WATER ENGINEERING

April 11, 2020

Dan Nelson
Idaho Department of Water Resources
322 East Front Street
Boise, ID 83702-7371

Subject: 63-34765 – Proof of Beneficial and Beneficial Use Field Report

Dear Dan:

Enclosed on behalf of the Christine Losey and Kip Losey is a Statement of Completion for Submitting Proof of Beneficial Use and a Beneficial Use Field Report for permit 63-34765. The proof form is signed by Kip Losey.

I have included hard copies of the proof form and the 4-page field report. I am sending the attachments electronically.

Please contact me with any questions.

Sincerely,

Terry M. Scanlan

Terry M. Scanlan, P.E., P.G.
Principal Engineer/Hydrogeologist

Cc: Kip and Christine Losey

Enclosures

SPF file number: 1502.0010

300 E. Mallard Drive, Suite 350, Boise, Idaho 83706 Tel: 208-383-4140 Fax: 208-383-4156