

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

A. GENERAL INFORMATION

Permit No: 75-14518

Exam Date: 9/30/2014

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

2. Current Owner: Name: Robert & Carly Neuway, Christy Merritt
 Owner of Record Correct? ☒ Yes ☐ No
 Address of Record Correct? ☒ Yes ☐ No
 If No: Address

3. Beneficial Use Fees have been paid: ☐ Yes ☒ No Receipt No:

4. **SOURCE** **TRIBUTARY**

Groundwater

Method of Determination: Applicant submitted an aerial photo map that outlined POD & POU.

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
75-7294B	Groundwater	Domestic & Fire Protection	Decreed

Comments: 75-7294B is a domestic and fire protection water right for 35 homes in the subdivision. This includes the Neuway home.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no other water rights that share POD.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Well	2		NE	NE	28	18N	21E		Lemhi

Method of Determination: Permit and application referenced a QQ and section 21 which is directly north of section 28. This was an error made by the applicant since they copied incorrect descriptions from the well drillers report and requires an amendment.

Change in POD? ☒ Yes ☐ NoAmendment Required? ☒ Yes ☐ No

2. **PLACE 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	
18N	28E	28	X																
			L2																

Method of Determination: Map of property submitted by land owner identifies POU clearly. Use has been changed from Irrigation to Domestic.

Change in POU? ☒ Yes ☐ No

Amendment Required? ☒ Yes ☐ No

☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

☒ 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
Well – D0048895	Unk	Unk	Unk	Unk	Unk

*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 so flow measurements not applicable.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

See the theoretical calculation sheet with a number of scenarios providing a calculated average flow rate of 0.08 cfs.

Measurement = 0.08 cfs

Permit allowed = 0.04 cfs

License recommend for 0.04 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:

Administrator memo #22 recommends a volume of 1.2 af per household.

G. PURPOSE OF USEIrrigation ☒ Yes ☐ No # Stock 0 Domestic # of Homes 0

Other: < >

Change in Purpose of Use? ☒ Yes ☐ No

Method of Determination: There has not been adequate evidence to suggest that the Neuway property is being irrigated as described in the application. It would be most beneficial to the applicant to change the use to domestic since the domestic water right includes up to half an acre of irrigation.

If Yes: From Use Irrigation To Use Domestic Amount 0.04 CFS 1.2 AFA**H. NARRATIVE/REMARKS/COMMENTS**

Permit 75-14518 authorized the use of 0.04 cfs from a well for irrigation water purposes. Based on the permitted diversion rate and small POU, this qualifies for an in-office field exam. The exam was completed by WRA Patrick Kelly from June to September, 2014.

There was an error in the legal description when attempting to locate the Neuway property. Both the POD and POU were described in the wrong section and QQ. The actual location of the property was directly south of the described QQ. The error was made during the application by the applicant and it was permitted as such. This wrong information came from the well drillers report which is what the applicant used to describe the location. I put together a map describing this. The Neuway's completed an application for amendment and submitted the \$100 fee. I then sent them a licensing amendment form that the Department prefers to use over what was submitted.

It was difficult to tell from aerial photography what exactly was being irrigated. Little differences in the satellite imagery could be distinguished between what was irrigated and what was not, so a request to provide additional information was sent to the property owner for photos of the water system and its application. These photos were returned with the amendment and included photos of the well with the metal tag ID, the spigot that was installed, as well as the place of use where they water the land across the home.

After collecting the latest satellite imagery available from Google, it appeared that little to no irrigation water was being used on the property across the street from the Neuway home. Sandy Theil made a trip to the region during the second week of September 2014. The photos that were taken during the visit are included in this report and show land indistinguishable of any development. At this time, it was brought to the attention of Shelley Keen and the recommendation was made to change the use from irrigation to domestic. This will benefit the property owner since at the time of licensing, I was only able to measure 0.4 acres for POU around the home. Under the domestic use, the property owner will have the ability to irrigate up to half an acre within the POU. For the use that I was able to establish today, this is most beneficial to them.

Changing the use from irrigation to domestic is acceptable in this case since the volume of water that would be recommended for 2.0 acres of land totals 7.0 af at 3.5 af per acre. Volume limitations for domestic use total 1.2 af. The diversion rate of 0.04 cfs is being recommended and is the same rate authorized by the permit. For these reasons, enlargement of the water permit is not a concern.

A theoretical flow was completed and that sheet is attached to this report. Lift was taken from the well drillers report and shows a flow rate of 0.08 cfs over a range of small horsepower pumps. This leads me to believe the requested 0.04 cfs that was permitted is capable of being supplied to the property.

In the overlap review, I found a domestic water right 75-7294B in the name of Salmon River Meadows. This is a domestic water right under the subdivision for 35 homes. There is also Fire Protection under this right. This is what is used by the home and serves as overlap to the 75-14518.

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 – 12/31	0.04 cfs	1.2 af
<u>Totals</u>		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: < >

J. AUTHENTICATION

Field Examiner's Name Pamela M. Long Date 09/30/2014

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Field Exam Map
75-14518

This map depicts the DOMESTIC 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.



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

0 0.0125 0.025 0.05 Miles



Water Permit 75-14518

	Property Boundary
	Township/Range
	Sections
	QQ

 Property Boundary

Township/Range

Sections

QQ

The SESE section where your permit states the Place of Use is located.

SESE

SWSE 4

21

SESE 4

22

SWSW 5

SESE 3

18N21E

The correct Place of Use is within the NENE L2 QuarterQuarter

NENE 2

NWNE

28

NENE

NWNW

27

182 blue heron dr salmon 83467

NENE 1

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 75-14748
 Reviewer: Patrick Kelly
 Date of Review: 6/3/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	0.5	1	1.5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	40	40	40
DISCHARGE PRESSURE	15	15	15
RATE OF FLOW (cfs)	0.04	0.08	0.12 0.08

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:

Pump hp was not given in application or anywhere else in file. Pumping level was taken from drillers report. Used a pressure of 15 for open hose discharge. Average rate of flow is 0.08 cfs. This represents that the permitted 0.04cfs is capable of being supplied to the property.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0048895
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER:

Name Robert Newway (Christy Merritt)
Address 182 Blue Heron Drive
City Salmon State Id Zip 83467

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 18 North ☒ or South ☐
Rge. 21 East ☒ or West ☐
Sec. 21 NW 1/4 SE 1/4 SE 1/4
Gov't Lot _____ County Lemhi
Lat: _____ Long: _____
Address of Well Site 182 Blue Heron Drive
City Salmon

(Give at least name of road - Distance to Road or Landmark)
Lt. 43 Blk. 1 Sub. Name Salmon River Meadows

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bent. overbore	0	30	850#	Poured

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 40 FT
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	18"	40	250	Steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____
Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

18 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____
Removable Well Cap
Dropped off Salmon
IDWR 9/24/07

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

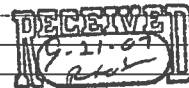
Yield gal./min.	Drawdown	Pumping Level	Time
15 gpm	N/A	40 Ft	3 hrs

Water Temp. cold Bottom hole temp. cold
Water Quality test or comments: NONE

Depth first Water Encounter 18 FT

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water	Y	N
10"	0	2	Topsoil			X
	2	15	Gravel, sand, mx			X
	15	20	Gravel, sand, clay mx		X	
	20	21	clay			X
	21	25	Gravel		X	
	25	29	Gravel		X	
	29	30	Clay			X
6"	30	40	Gravel		X	



RECEIVED

SEP 28 2007

Department of Water Resources
Eastern Region

Completed Depth 40 FT (Measurable)
Date: Started 8/28/07 Completed 8/29/07

14. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name JAFCO Firm No. 504
Principal Driller Jerry Fort Date 9-18-07
and
Driller or Operator Rob Justus Date 9-18-07
Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES



* Photos (2 of 3) submitted by right holder on June 2, 2014

[FRONT]



[BACK]

Everything in Picture
gets water on IT
There are several trees like this
And smaller fruit trees

* Photos (3 of 3) submitted by right holder on June 2, 2014

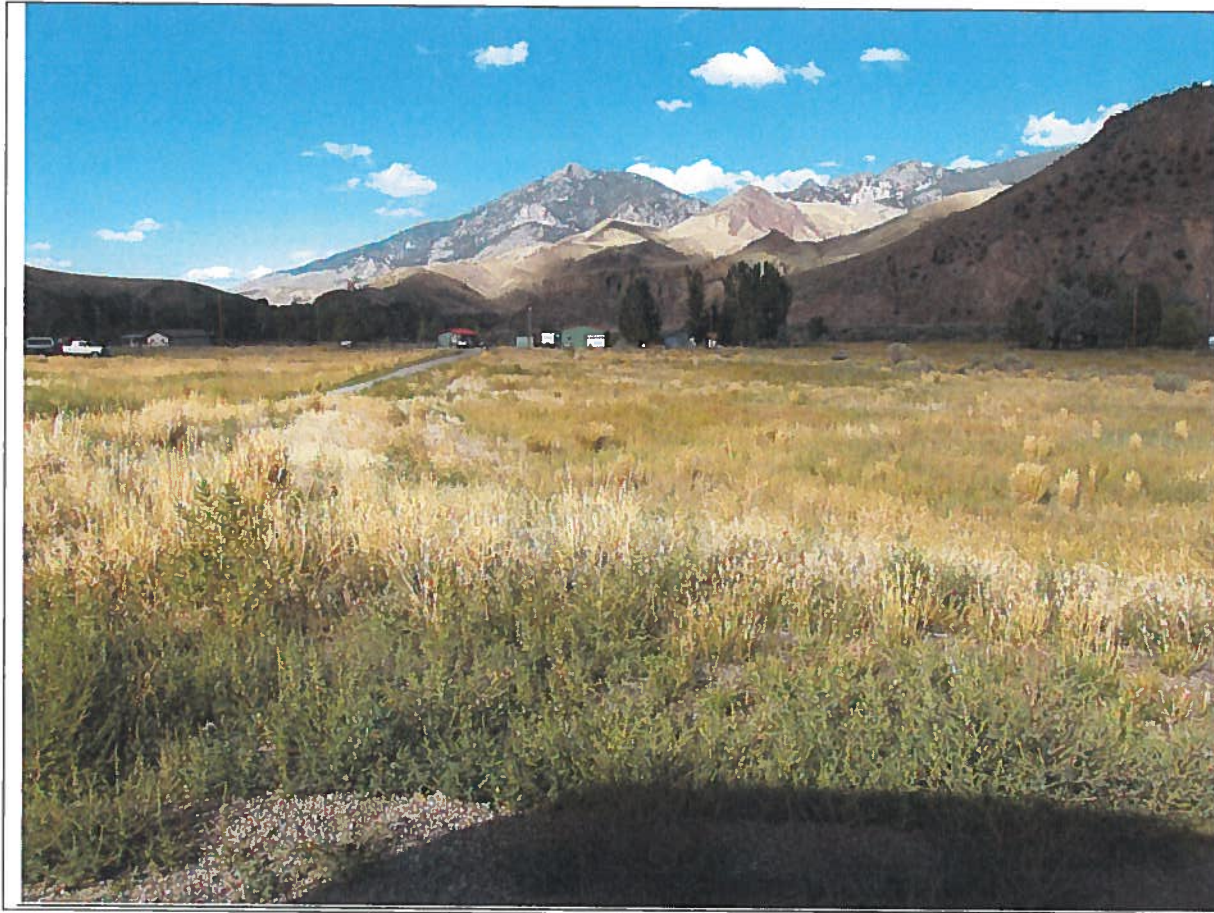
Process	Basin Sequence	Draft	Owner	Source	POD/POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	75-10668	N	MAYBERRY, BARBARA; MAYBERRY, GARY	POISON CREEK	POU																1.3	1.3
Water Right	75-10669	N	MAYBERRY, BARBARA; MAYBERRY, GARY	POISON CREEK	POU																1.3	1.3
Water Right	75-12312	N	UNITED STATES OF AMERICA ACTING	SPRING	POD		X															0
Water Right	75-12312	N	UNITED STATES OF AMERICA ACTING	SPRING	POU		X															0
Water Right	75-13237	N	UNITED STATES OF AMERICA ACTING	CABIN CREEK	POD		X															0
Water Right	75-13237	N	UNITED STATES OF AMERICA ACTING	CABIN CREEK	POU		X			X	X											0
Water Right	75-13300	N	UNITED STATES OF AMERICA ACTING	SALMON RIVER	POD																	0
Water Right	75-13300	N	UNITED STATES OF AMERICA ACTING	SALMON RIVER	POU																	0
Water Permit	75-14088	N	US DEPT OF INTERIOR	CABIN CREEK	POU									X								0
Water Permit	75-14518	N	MERRITT, CHRISTY; NEUWAY, CARLY; NEUWAY, ROBERT	GROUND WATER	POD																X	0
Water Permit	75-14518	N	MERRITT, CHRISTY; NEUWAY, CARLY; NEUWAY, ROBERT	GROUND WATER	POU																2.0	2
Water Right	75-2221	N	UNITED STATES OF AMERICA ACTING	CABIN CREEK SPRING NO 1	POD											X						0
Water Right	75-2221	N	UNITED STATES OF AMERICA ACTING	CABIN CREEK SPRING NO 1	POU											X						0
Water Right	75-7294A	N	SALMON RIVER MEADOWS MUTUAL	GROUND WATER	POD	X			X													0
Water Right	75-7294A	N	SALMON RIVER MEADOWS MUTUAL	GROUND WATER	POU	X			X													0
Water Right	75-7294B	N	SALMON RIVER MEADOWS MUTUAL	GROUND WATER	POD																X	0
Water Right	75-7294B	N	SALMON RIVER MEADOWS MUTUAL	GROUND WATER	POU															X	X	0
Water Right	75-7344	N	LUSI, JOSEPH	CABIN CREEK	POD	X																0
Water Right	75-7344	N	LUSI, JOSEPH	CABIN CREEK	POU	0.8																0.8

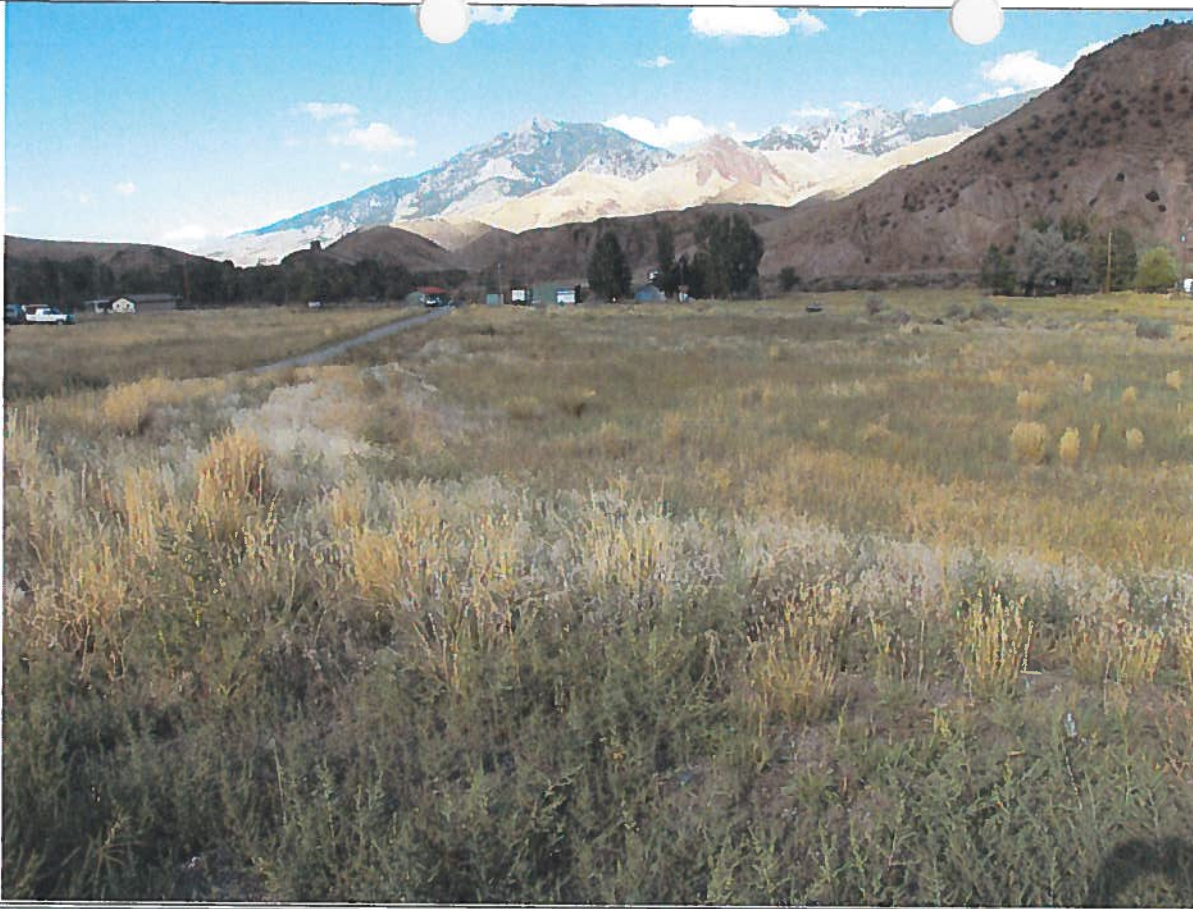
NOT AN OVERLAP.

SUB DIVISION - DOMESTIC AND FIRE PROTECTION

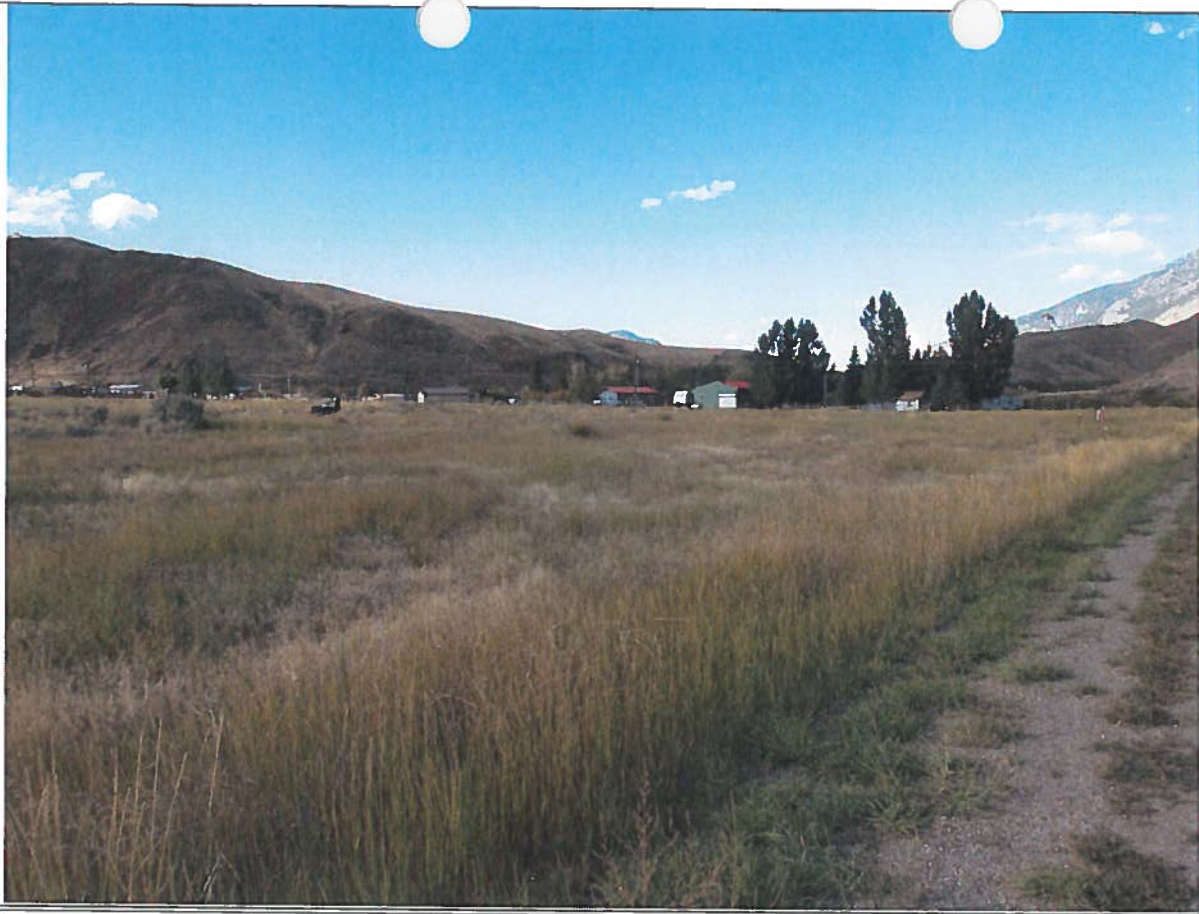
PHOTOGRAPHER ~~XXXXXXXXXX~~
DATE OF PHOTOS ~~XXXXXXXXXX~~

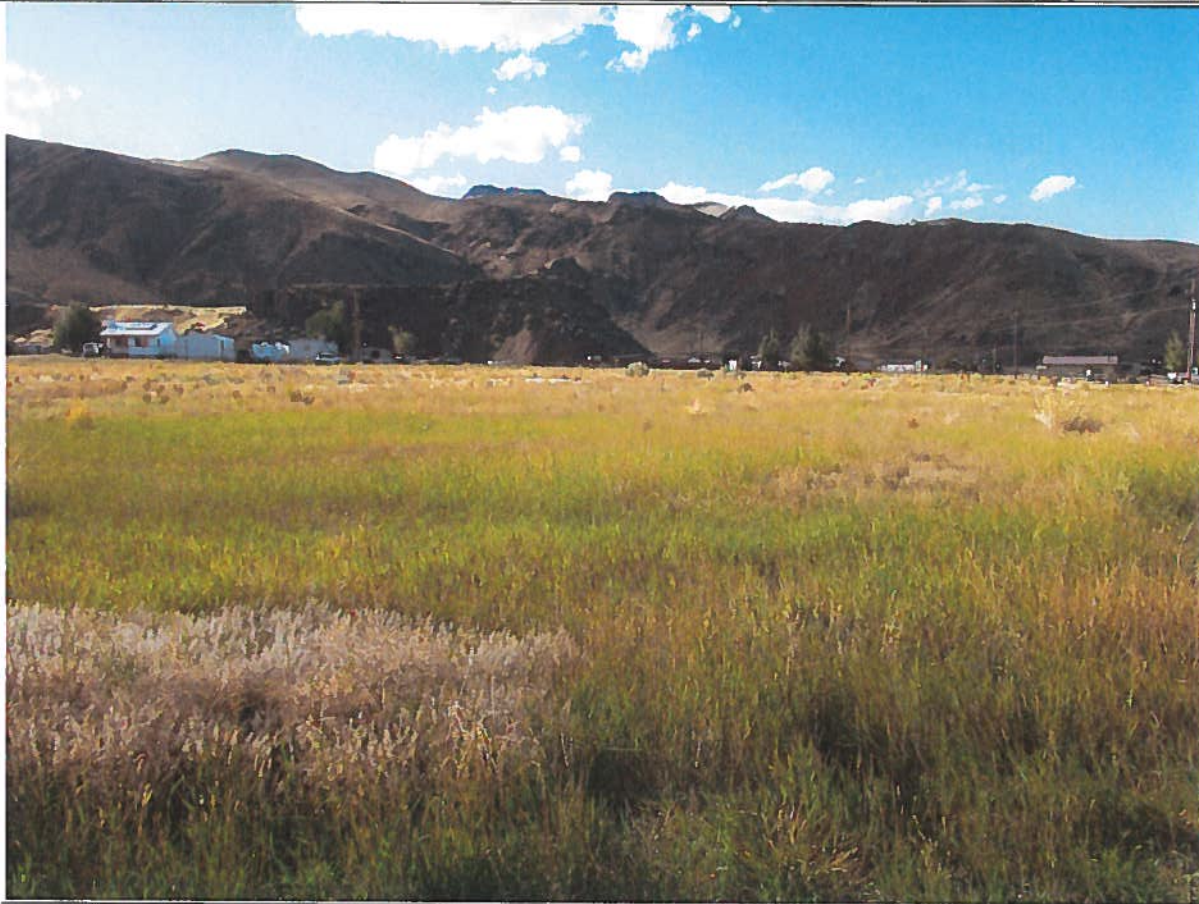
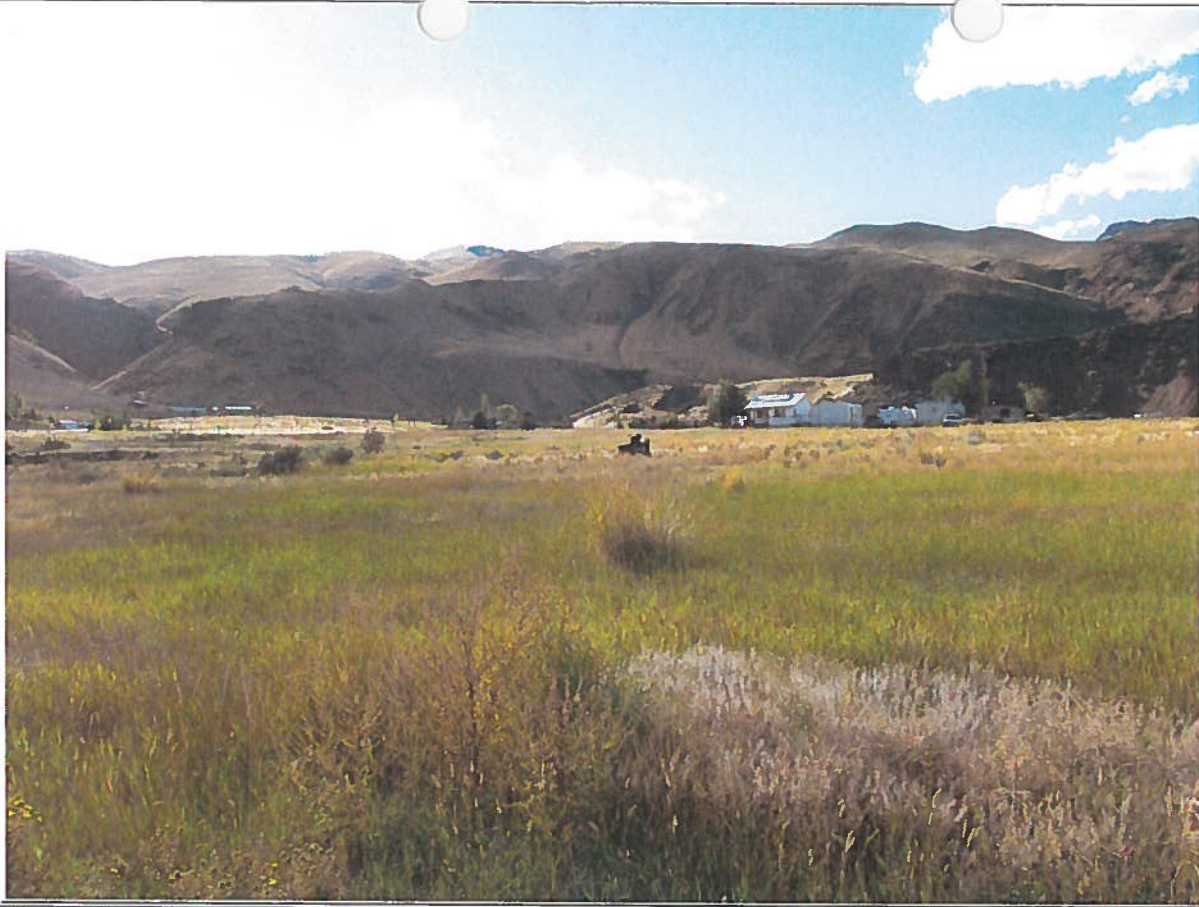
FILE NUMBER 75-14518















Google earth

feet 300
meters 100



SUMMER 2014 PHOTO.