

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33357
Exam Date: 9/22/2016

1. Current Owner:
BRAD PINTLER 12744 DEER FLAT RD NAMPA ID 83686 (208)465-5390
STACY PINTLER 12744 DEER FLAT RD NAMPA ID 83686 (208)465-5390
2. Accompanied by: BRAD PINTLER
Phone No: (208)465-5390
Address: 12744 DEER FLAT RD NAMPA ID 83686
Relationship to Permit Holder: Owner

3. SOURCE:

GROUND WATER

TRIBUTARY:**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: None

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

GROUND WATER SE¼SW¼ Sec. 13, Twp 02N, Rge 03W, B.M. CANYON County

Method of Determination:

Field exam and PLS data was used to verify the WR permit legal descriptions.

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	
02N	03W	13												1.4					1.4

Total Acres: 1.4

Method of Determination:

Field exam and PLS data was used to verify the WR permit legal descriptions.

3.

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

☒ Indicate weir size/pipe as applicable.
☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
☒ Aerial Photo Attached (required for irrigation of 10+ acres).☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well ID # 392083	Unknown	10	Unknown	Unknown	Unknown

*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:

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

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

Efficiency = 0.70

Depth to water = 320 – 380 ft.

psi = 40

hp = 10

See attached theoretical sheet.

Theoretical = 0.14 cfs

Permit 0.18 cfs

B.U. Standard Allowance 0.04 cfs

B. U. Proof Fee \$50 → 0 – 0.20

½ miner's inch per yard hydrant 0.07 cfs

Measurement or Theoretical Rate 0.14 cfs

License Recommendation 0.04 cfs
F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.4 \text{ acres} \times 4.5 = 6.3 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 20.6 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = V_{IR} = 6.3 \text{ af}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

The field exam was conducted on September 22, 2016 by agents Patrick Kelly and Aaron Skinner. They were accompanied by the property owner, Brad Pintler, at the well location.

Ownership of the WR permit and Taxlot data for irrigation is in the name of Brad Pintler. Groundwater is received from the well that was drilled in May of 2005. The initial well was drilled for domestic use only, but a receipt in the backfile confirms that \$125 was paid for a well upgrade to irrigation (receipt ID W038895 on 12/14/2010). Well driller's log for WR 63-33357 was obtained and has a static water level of 285 feet and completed depth of 400 feet. At the time of the field exam, pump information was not visible, but the owner indicated a 10 hp motor was in place providing water to the irrigation system. During the exam, the beneficial use area was walked and seven (7) yard hydrants were noted. Currently, the owner drags garden hose around the BU area to irrigate. Water was running out of each hydrant, but a flow measurement was not completed. The POU was changed from the permitted 9.0 acres to 1.4 acres per Google Earth imagery and areas that are actually getting irrigated. Attached is a map from 2012 that shows the POU (plowed field and irrigated yard). The proof of BU form was submitted to the department in 2012.

Theoretical measurements were calculated for the irrigation system using the 10 hp pump as a standard for each scenario. The known static level for the well was recorded at 285 feet in the well log. Two pockets described in the well log were also used to establish estimated pumping elevations. The three scenarios estimated the pumping levels to be 320, 350, and 380 feet deep. Theoretical calculations used 40 psi for each scenario as the yard hydrants are very similar to domestic use parameters. Attached are the three calculated rate of flows. The average rate of flow totaled 0.14 cfs.

It is difficult to recommend 0.14 cfs, or 1 miner's inch per hydrant for a system of water hoses. A miner's inch per acre is a standard used for flood irrigation. Because the field exam exposed the fact that the BU area was limited to the grass and garden area around the house, total acres were used to determine rate and volume calculations. Therefore, 0.04 cfs and 6.3 af/y are recommended for licensing.

Overlap review indicated that there are no overlapping water rights associated to the POD and POU for permit 65-33357. Permitted conditions 1 (26A, 2 (046), and 4 (004) were removed for licensing. Condition 6 (121) was changed to 103 and forwarded to licensing. Condition 5 (930) was removed and not forwarded to licensing as the WR is in a non-restrictive area.

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

H. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE
IRRIGATION

PERIOD OF USE
03/01 to 11/15

DIVERSION RATE
0.04 CFS

ANNUAL VOLUME
6.3 AF

Totals:

0.04 CFS

6.3 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 ☒ None

I. AUTHENTICATION

Field Examiner's Name Aaron Skinner Date 10/27/2016

Reviewer _____ Date _____

System Diagram for WR Permit 63-33357



Legend

- ⊗ Point of Diversion
- ✦ Yard Hydrant
- 3" PVC Pipe
- Place of Use



0 125 250 500 Feet

2012 Beneficial Use Map

Irrigation use shown during the development use period.

Legend

 12744 Deer Flat Rd

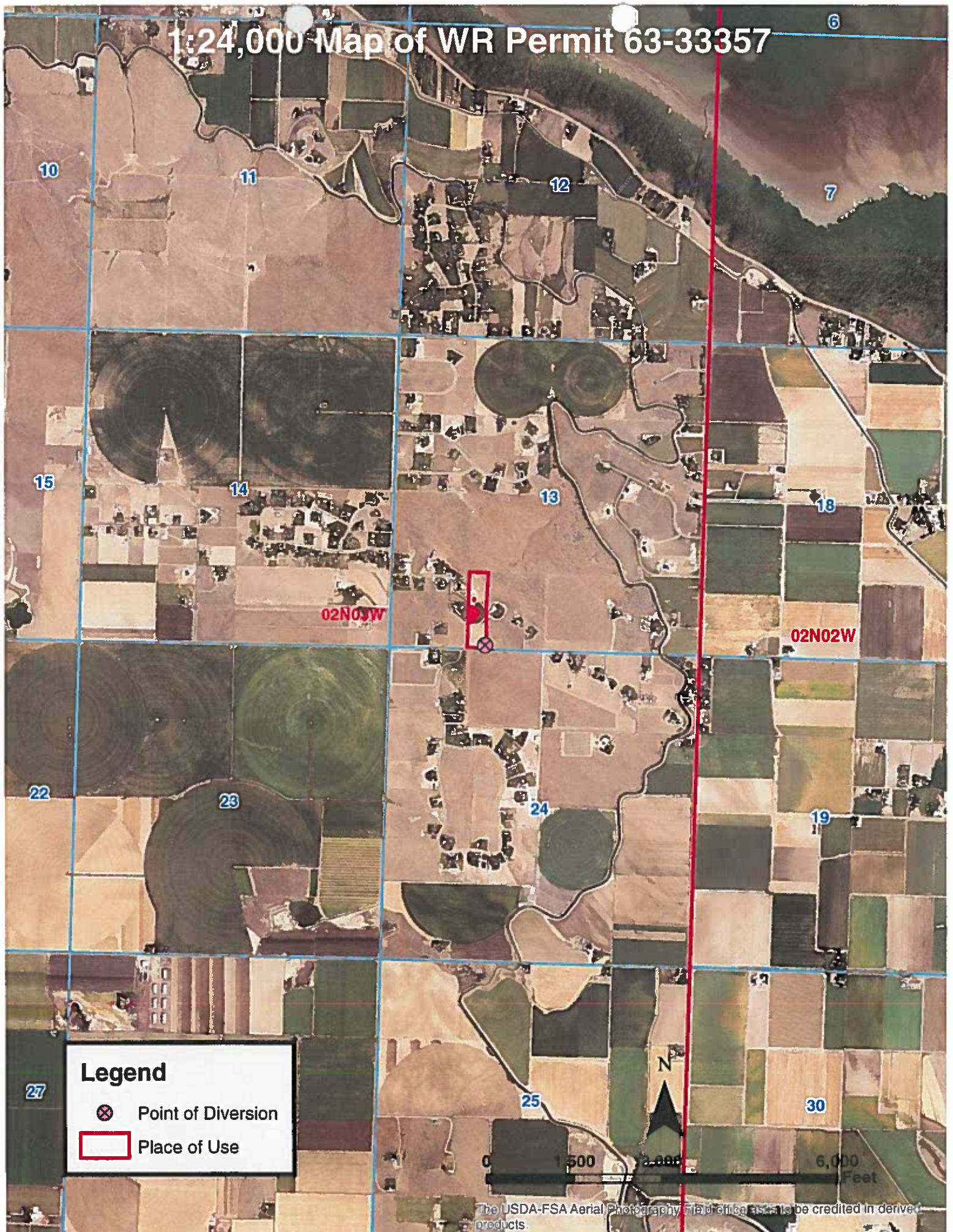
 12744 Deer Flat Rd

Google earth

N

500 ft Deer Flat Rd

1:24,000 Map of WR Permit 63-33357



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 63-33357
 Reviewer: Aaron Skinner
 Date of Review: 9/22/2016

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	10	10	10
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	320	350	380
DISCHARGE PRESSURE	40	40	40
RATE OF FLOW (cfs)	0.15	0.14	0.13 0.14

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 10 hp pump was observed on well tag D0031649. A range of static water levels is assumed given the well log. Well log shows a static level of 285 feet, no noted perforations, and a max depth of 400 feet. A minimum pressure of 40 psi is considered for this type of system as yard hydrants are similar to domestic systems. The average theoretical flow rate calculates to 0.14 cfs.

Overlap Analysis for WR Permit 63-33357 POD

Process	Basin/Sequence	Draft	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWWSW	SWWSW	SESW	NESW	NWSE	SWSE	SESE
Water Right	63-11202	N	BRANK, ED; BRANK, DARYTA	GROUND WATER					X												
Water Right	63-11201	N	GULLION, DALTON E; GULLION, MARY E; GULLION, ROBERT S; SMITH, ARLENE ALICE	GROUND WATER																	
Water Right	63-19752	N	BROWN, DEBORAH R; DRUMHILLER, LILA M; DRUMHILLER, WILLIAM P; JACKSON, ROBERT L	GROUND WATER		X															
Water Right	63-23596	N	MAGLECK, HELEN	GROUND WATER												X					
Water Right	63-23608	N	MAGLECK, FRANCES; MAGLECK, LADISLAV	GROUND WATER													X				
Water Right	63-28005	N	GULLION, WYMONA M	GROUND WATER					X												
Water Right	63-28528	N	GULLION, MARY E	GROUND WATER					X												
Water Right	63-2911	N	BARCOCK, JOHN A; FOOTHILL RANCH HOMEOWNERS ASSOCIATION INC; MAGLECK, LADISLAV	GROUND WATER					X												
Water Right	63-30399	N	LAUER, KATHERINE MAE; LAUER, RONALD E	GROUND WATER																	
Water Right	63-33231	N	CRAGO, MICHAEL G; CRAGO, TYRA M; DANIEL, ANGELA; DANIEL, DAVID; FARM CREDIT BANK OF SPOKANE; HUXLEY FINE GRADING & EXCAVATION INC; LAUER, KATHERINE MAE; LAUER, RONALD E; MEYERS, KATHI L; MEYERS, ROB	GROUND WATER																	X
Water Right	63-33357	Y	PINTLER, BRAD; PINTLER, STACY	GROUND WATER																	X
Water Right	63-35328	N	HOWARD, JOHN P; HOWARD, RUTH E; HULME, DON A; LGO VENTURES LLC; STECK, WESLEY J	GROUND WATER					X												

Overlap Analysis for WR Permit 63-33357 POU

Process	Basin/Sequence	Draft	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWWSW	SWWSW	SESW	NESW	NWSE	SWSE	SESE	Total Acres
Water Right	63-11202	N	BRANK, ED; BRANK, DARYTA	GROUND WATER	IRRIGATION																	5
Water Right	63-11201	N	GULLION, DALTON E; GULLION, MARY E; GULLION, ROBERT S; SMITH, ARLENE ALICE	GROUND WATER	IRRIGATION				22	10												81
Water Right	63-136	N	BARBER ROSSHOLT & SHAMPSON LLP; BOSE PROJECT BOARD OF CONTROL; GAVENS, RAYMOND E; H S RANDALL ET AL; POMIER DUSE DITCH CO	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-1378	N	BARBER ROSSHOLT & SHAMPSON LLP; BOSE PROJECT BOARD OF CONTROL; GAVENS, RAYMOND E; POMIER DUSE DITCH CO	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-19752	N	BROWN, DEBORAH R; DRUMHILLER, LILA M; DRUMHILLER, WILLIAM P; JACKSON, ROBERT L	GROUND WATER	DOMESTIC																	
Water Right	63-2004	N	BARBER ROSSHOLT & SHAMPSON LLP; BOSE PROJECT BOARD OF CONTROL; GAVENS, RAYMOND E; HANNA MEADOWS BR DIST	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-2106	N	UNITED STATES OF AMERICA ACTING THROUGH	FIVE MILE CREEK	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-23336	N	AMERICAN DITCH CO; BARBER ROSSHOLT & SHAMPSON LLP; BOSE PROJECT BOARD OF CONTROL; GAVENS, RAYMOND E; RANDALL ET AL	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-23596	N	MAGLECK, HELEN	GROUND WATER	DOMESTIC											X						
Water Right	63-23608	N	MAGLECK, FRANCES; MAGLECK, LADISLAV	GROUND WATER	DOMESTIC												X					
Water Right	63-23608	N	MAGLECK, FRANCES; MAGLECK, LADISLAV	GROUND WATER	STOCKWATER																	
Water Right	63-23608	N	UNITED STATES OF AMERICA ACTING THROUGH	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-23926	N	BOSE PROJECT BOARD OF CONTROL	WASTE WATER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-2514	N	UNITED STATES OF AMERICA ACTING THROUGH	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-26671	N	BARBER ROSSHOLT & SHAMPSON LLP; BOSE KUMA IRRIGATION DISTRICT; FREDRICKS, RANDALL E	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-28005	N	GULLION, WYMONA M	GROUND WATER	DOMESTIC																	
Water Right	63-28528	N	GULLION, MARY E	GROUND WATER	DOMESTIC																	
Water Right	63-2911	N	BARCOCK, JOHN A; FOOTHILL RANCH HOMEOWNERS ASSOCIATION INC; MAGLECK, LADISLAV	GROUND WATER	IRRIGATION									40	40							80
Water Right	63-3031A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-3031A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-30399	N	LAUER, KATHERINE MAE; LAUER, RONALD E	GROUND WATER	DOMESTIC																	
Water Right	63-32667	N	BARRON DEVELOPMENT LLC; EVANS, CHRISAL R; EVANS, EDWARD T; FARM CREDIT BANK OF SPOKANE; MEYERS, KATHI L; MEYERS, ROBERT L; MONTERTH JR, HERBERT R; MONTERTH, EDWARD RAY; MONTERTH, ROONEY LEE	GROUND WATER	IRRIGATION																	36
Water Right	63-32668	N	BARRON DEVELOPMENT LLC; EVANS, CHRISAL R; EVANS, EDWARD T; FARM CREDIT BANK OF SPOKANE; MEYERS, KATHI L; MEYERS, ROBERT L; MONTERTH JR, HERBERT R; MONTERTH, EDWARD RAY; MONTERTH, ROONEY LEE	GROUND WATER	IRRIGATION																	36
Water Right	63-33231	N	CRAGO, MICHAEL G; CRAGO, TYRA M; DANIEL, ANGELA; DANIEL, DAVID; FARM CREDIT BANK OF SPOKANE; HUXLEY FINE GRADING & EXCAVATION INC; LAUER, KATHERINE MAE; LAUER, RONALD E; MEYERS, KATHI L; MEYERS, ROB	GROUND WATER	IRRIGATION																	1
Water Right	63-33253	N	BOSE PROJECT BOARD OF CONTROL	TEN MILE CREEK	IRRIGATION	X	X	X	X					X	X				X	X	X	1
Water Right	63-33357	Y	PINTLER, BRAD; PINTLER, STACY	GROUND WATER	IRRIGATION																	0
Water Right	63-35328	N	HOWARD, JOHN P; HOWARD, RUTH E; HULME, DON A; LGO VENTURES LLC; STECK, WESLEY J	GROUND WATER	IRRIGATION					39			38									77
Water Right	63-377	N	BARBER ROSSHOLT & SHAMPSON LLP; BOSE KUMA IRRIGATION DISTRICT; FREDRICKS, RANDALL E; GAVENS, RAYMOND E; NEW YORK IRRIGATION DISTRICT	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	
Water Right	63-373A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOSE RIVER	IRRIGATION	X	X	X	X					X	X				X	X	X	

Idaho Department of Water Resources Receipt

Receipt ID: W038895

Payment Amount \$125.00 Date Received 12/14/2010 2:07 PM Region WESTERN

Payment Type Check Check Number 9700

Payer BRAD PINTLER FARMS Brad & Stacy Pinthler

Comments WELL UPGRADE FEE 63-33357 D0031649 Irrigation

Fee Details

Amount	Description	PCA	Fund	Fund Detail	Subsidiary	Object
\$125.00	DRILLING PERMITS	62134	0229	21		1205


Signature Line (Department Representative)

3N 2W 13 SE SW



Well Tag Number D0031649 located on the well head in the southeast corner of the property.



One of the seven (7) yard hydrants located around the property for irrigation.



Image of the
backyard. There are
Three hydrants
around the house
that are used to
irrigate.

FIELD EXAM CHECKLIST

PERMIT # 63-33357 STAFF P. Kelly and A. Skinner DATE 9/22/2016

PREPARE LICENSING FILE (Left side)

- ☒ Copy of permit approval & proof report (place on top)
- ☒ Copy of original application for permit
- ☒ Copy of Proof of Beneficial Use Exam fee required \$ 50 Exam fee paid \$ 50
- N/A Copies of any Amendments/Assignments/Ownership Docs

EXAM PREPERATION (Right side)

- ☒ Blank Beneficial Use Field Report form
- ☒ Aerial photo (system diagram map to be completed with permit owner)
- ☒ Well log (attach to field exam)

Conditions: Measuring device requirements? No Installed? N/A
 Other (supplemental conditions, limits, etc.)? _____

Overlap: POD? None
 POU? None

Ownership

Taxlot / ID SOS match?

If new owner, collect Assignment of Permit form / Ownership Change form in field.

EXAM APPOINTMENT

owner or rep phone #? (208) 250-6950

Owner or rep will be present at exam (someone familiar with system)¹?

Exam date/time/place?

If cannot get from web or other references: directions to site? approx driving time from office?

System on/operating normally during exam (not always required)?

SYSTEM INFOPump Diversion

Approx HP?

Owner can provide pump curve?

Pump set or lift?

Approx operating psi?

Approx mainline pipe diameter?

Approx # sprinklers? Nozzle size?

Gravity Flow

Ditch capacity?

Weirs or Flumes installed?

Special Remarks:**POST FIELD EXAM**

- ☒ Exam date data entered
- ☒ Ad Hoc data entry & license shapes
- ☒ Exam file prepared – see N:\WR Field Exams\LicenseFileOrganization
- N/A Licensing amendments required N/A If so, received?
- ☒ Draft license & WR Layout maps OR N/A Void permit

¹ OK to do exam w/o anyone present if owner agrees in advance, provides info so you can find p/d, how system works, how recognize p/u etc. Usually limited to small systems – spring/creek/well for cabins, few acres irrigation, minor stockwater/wildlife/recreation etc.