

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13447
Exam Date: 8/14/2019

1. Current Owner:
HORSESHU VUE RANCH WATER & ROAD ASSOCIATION, INC.

2. Accompanied by:
Robin Findl
23 Horseshu Vue Circle
Horseshoe Bend, ID 83629
markandrobin@gmail.com
208-949-1779
Relationship: President of Assoc.

Mike Morgan
20 Horseshu Vue Circle
Horseshoe Bend, ID 83629
Relationship: Director of Assoc.

Phil Tschida
208-807-0310
Relationship: System Operator

3. SOURCE: GROUNDWATER

Method of Determination: Field Exam, Wells GIS layer

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
65-18050	Cottonwood Creek, Springs	Stockwater	Decreed
65-22622	Groundwater	Domestic, Irrigation	Permit

Comments: Permit 65-22622 is also owned by Horseshu Vue Ranch & Water Association and consists of a separate well with ½ acre of irrigation. No domestic use was listed on the Proof of Beneficial Use. The well is currently capped off, and the actual place of use is unknown and unproven at this time.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: None

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

GROUND WATER NE¼ NW¼, Sec. 10. Twp 06N, Rge 02E BOISE County

Method of Determination: Field Exam

2. PLACE OF USE:
DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06N	02E	3											X	X			X		
06N	02E	10					X	X	X										

IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06N	02E	3											0.5	1.3					1.8
06N	02E	10					2.4	1.9	0.9										5.2

Total Acres: 7.0

Method of Determination: 2004 NAIP, Google Earth 7/21/2004 and 7/31/2005 imagery.

3. SUPPORTING DOCUMENTS:

- ☒ 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. DIVERSION PUMPS

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0019382	Hitachi	7.5	025066E		

D. FLOW MEASUREMENTS

1. Equipment:

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flow Meter	Ultrasonic	GE Panametrics	PT878			8/14/2019

2. Measurements: 0.27 cfs measured with Panametrics flow meter.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

Flow was measured with a flow meter. Two tables of downloaded measurements taken consecutively are attached. Table 1 includes velocity, volume, total gallons and 8 measurement records. Table 2 includes velocity, volume and 16 measurement records. The measurements between the two record sets are comparable.

Idaho Code §42-202(3) allows 0.02 cfs/acre for irrigation of more than 5 acres.
 Administrative Memo #22, Community Water Systems, indicates 0.20 cfs for 20 homes.

Permitted Domestic Use: 0.20 cfs
 Permitted Irrigation Use: 1.20 cfs
 Total Permitted Amount: 1.40 cfs

Measured Flow = 0.27 cfs

Irrigation = 7 acres X 0.02 = 0.14 cfs.

Domestic use for 20 homes = 0.20 cfs

I recommend 0.14 cfs for irrigation and 0.20 cfs for domestic use with a total of 0.27 cfs (equal to the measured flow).

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 7.0 \times 4.5 = 31.5 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.14 \times 231 \times 1.9835 = 64.1 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 31.5 \text{ AF}$$

2. Volume Calculations for Other Uses: Domestic

Administrative Memo #22 indicates 0.6 AFA per household when irrigation use is separate:

0.6 AF X 20 homes = 12 AF

G. NARRATIVE/REMARKS/COMMENTS

Horseshu Vue Ranch Water & Road Association is the owner of this permit and operates the water system for this subdivision. There are 20 lots total which have all been stubbed in; 19 homes have been built (1 unoccupied lot remains). The water system consists of a single groundwater point of diversion which pumps to a 30,000 gallon tank and is then distributed to the lots via underground pipes. The tank is located at the highest point in the subdivision, approximately 100 feet higher than the well. There is a totalizer meter and pressure gage on the pipe from the well prior to exiting the pump house. The operator records the totalizer readings every few days.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Volume</u>
IRRIGATION	3/15 to 10/31	0.14 CFS	31.5 AF
DOMESTIC	1/1 to 12/31	0.20 CFS	12.0 AF

Totals: 0.27 CFS 43.5 AF

2. Recommended Amendments:

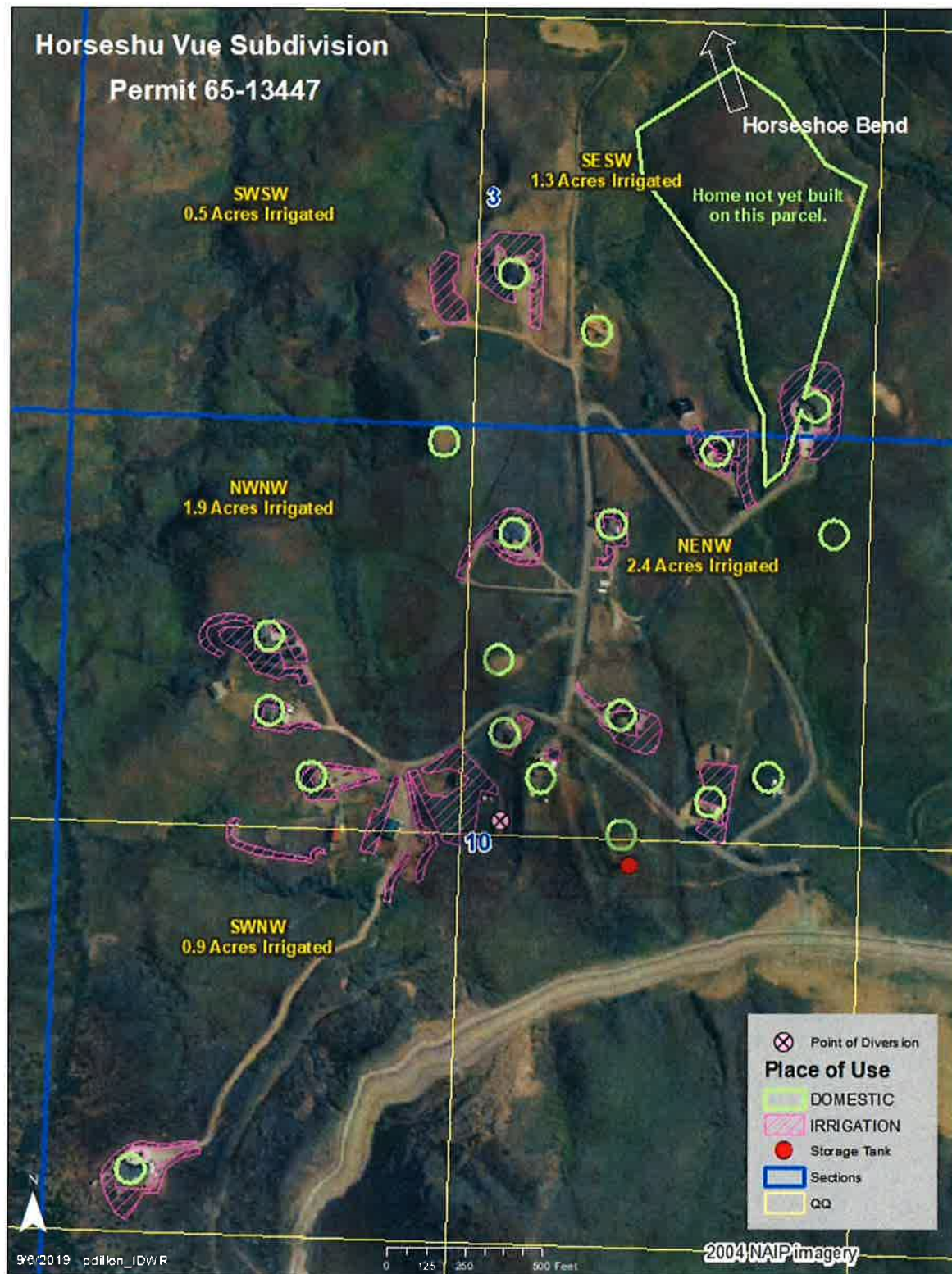
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

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

I. AUTHENTICATION Paula Dillon - GIS Analyst II

Field Examiner's Name Paula J Dillon Date 9/10/2019

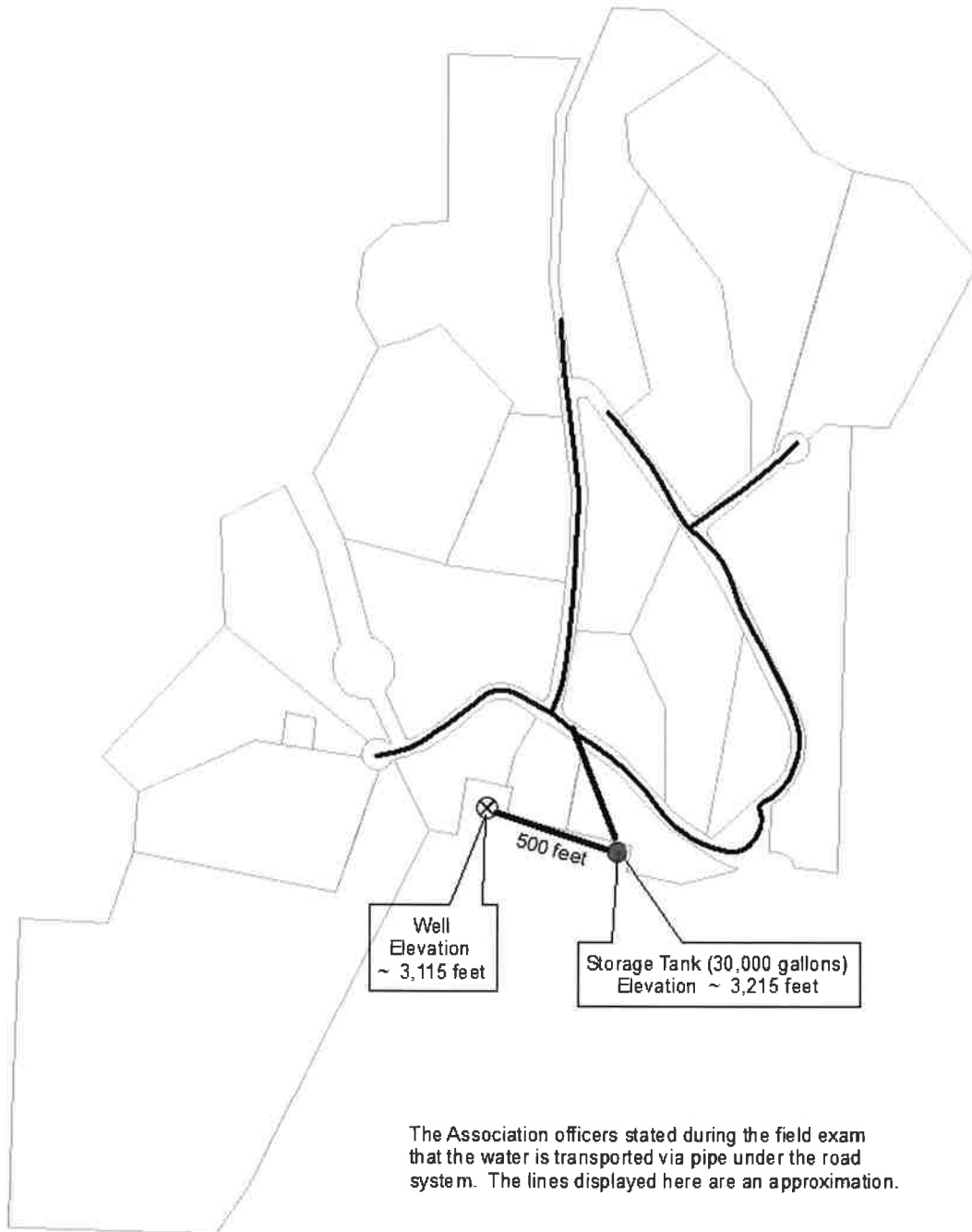
Reviewer Daniel A. Meltz Date 9-10-19



Google Earth imagery was used to clarify and identify irrigated areas from areas that appear green due to rainfall.

Delivery System Diagram

 Horseshoe Vue Ranch Home Lots





Well house looking south.



Well to the right, Totalizer meter on the left.



The well water exits the well house through the concrete floor on the west side of the building.



Pressure gauge prior to exit.



Electrical panel and meter.



Pump information tag.



Storage tank, looking east from the well house.



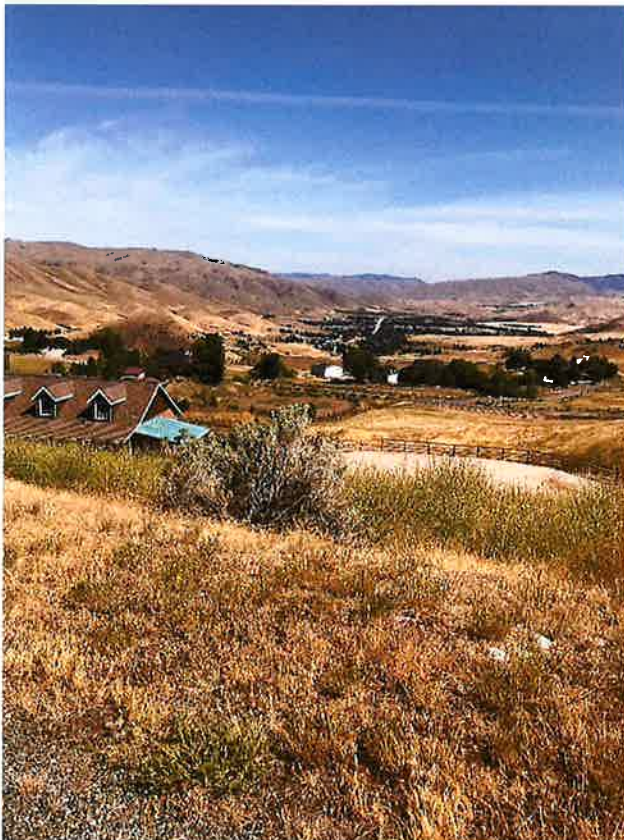
Storage tank near entrance off Highway 55.



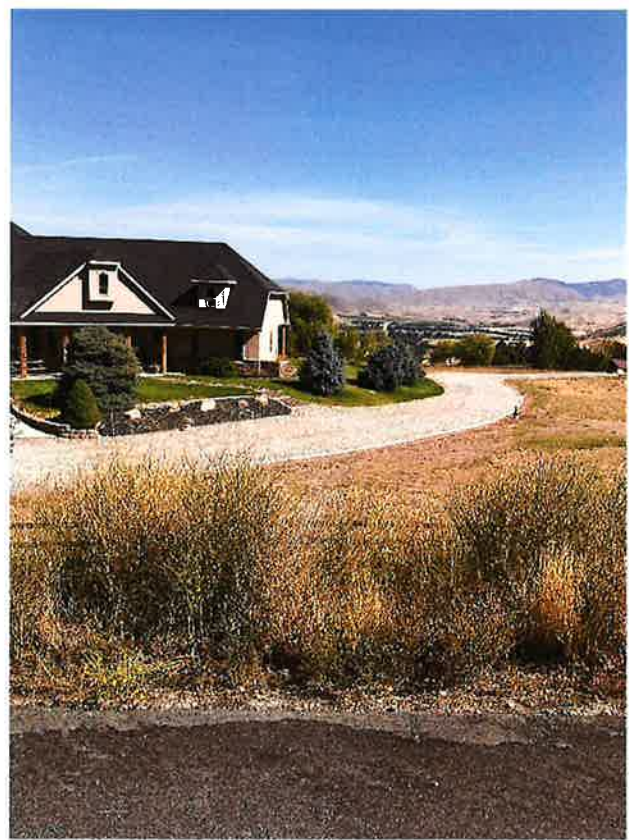
Looking west from the well house.



Fire hydrant.



No pastures are irrigated.



Irrigation is focused primarily around a small amount of landscape.

Flow Measurements

Table 1

Start Time:	8/14/2019 10:15
End Time:	8/14/2019 10:23
Interval:	60
Records:	8
Cyclic Flags:	2
Error Flags:	8208

Date/Time	Velocity (ft/s)	Volume (ft³/s)	(+)Total (gal)
8/14/2019 10:15	2.77615743	0.267097639	221221.6273
8/14/2019 10:16	2.757422038	0.265295083	221343.0702
8/14/2019 10:17	2.755244513	0.265085581	221458.4733
8/14/2019 10:18	2.756091661	0.265167086	221578.9473
8/14/2019 10:19	2.746677756	0.264261362	221700.7032
8/14/2019 10:20	2.781291086	0.267591555	221813.3633
8/14/2019 10:21	2.792616899	0.268681226	221940.7675
8/14/2019 10:22	2.798066648	0.269205553	222061.075
Average cfs		0.266548136	119.9211034
Average gpm		119.5201841	0.267203885

For clarification, the units used in the Volume column of Table 1 are ft³/s while the Total column units are gallons. Therefore, both columns were converted to ft³/s (cfs) or gallons.

Table 2

Start Time:	8/14/2019 10:30
End Time:	8/14/2019 11:29
Interval:	60
Records:	16
Cyclic Flags:	2
Error Flags:	8208

Date/Time	Velocity (ft/s)	Volume (gal/m)
8/14/2019 10:30	2.764070333	119.3597922
8/14/2019 10:31	2.77694625	119.915808
8/14/2019 10:32	2.754598435	118.9507709
8/14/2019 10:33	2.772046387	119.7042191
8/14/2019 10:34	2.787737824	120.3818164
8/14/2019 10:35	2.766032322	119.444516
8/14/2019 10:36	2.792552508	120.5897271
8/14/2019 10:37	2.794722876	120.6834493
8/14/2019 10:38	2.761422811	119.2454653
8/14/2019 10:39	2.760092281	119.1880095
8/14/2019 10:40	2.765581198	119.4250353
8/14/2019 10:41	2.757895483	119.0931461
8/14/2019 10:42	2.764265507	119.3682204
8/14/2019 10:43	2.749596167	118.7347599
8/14/2019 10:44	2.774955831	119.8298565
8/14/2019 10:45	2.763351966	119.3287713
Average gpm		119.5777102
Average cfs		0.266676428



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**STATE OF IDAHO***Office of the secretary of state, Lawrence Denney***ANNUAL REPORT**

Idaho Secretary of State

PO Box 83720

Boise, ID 83720-0080

(208) 334-2301

Filing Fee: \$0.00

*For Office Use Only***-FILED-**

File #: 0003383426

Date Filed: 12/28/2018 10:55:30 AM

B0131-6485 12/28/2018 10:55 AM Received by ID Secretary of State Lawrence Denney

Entity Name and Mailing Address:

HORSESHU VUE RANCH WATER & ROAD ASSOCIATION, INC.

The file number of this entity on the records of the Idaho Secretary of State is: 0000333499

Address

ROBIN FINDL
5 SPRING CREEK DR
HORSESHOE BEND, ID 83629-5011

Entity Details:

Entity Status

Active-Good Standing

This entity is organized under the laws of:

IDAHO

If applicable, the old file number of this entity on the records of the Idaho Secretary of State was: C108171

The registered agent on record is:

Registered Agent

BRENDA BRASSFIELD
Registered Agent

Physical Address

5 SPRING CREEK DR
HORSESHOE BEND, ID 83629

Mailing Address

The name and street address of the new registered agent and office in Idaho is:

Registered Agent

Registered Agent
ROBIN R FINDL

Physical Address:

5 SPRING CREEK DRIVE
HORSESHOE BEND, ID 83629

Mailing Address:

5 SPRING CREEK DR
HORSESHOE BEND, ID 83629-5011

Signature of newly appointed agent:

ROBIN R FINDL12/28/2018

Sign Here

Date

Corporate Officers and Directors:

Names of officers and directors	Title	Address
DAVE THOMPSON	Treasurer	5 SPRING CREEK DR HORSESHOE BEND, ID 83629
MICHAEL MORGEN	Director	5 SPRING CREEK DR HORSESHOE BEND, ID 83629
ROBIN FINDL	President	5 SPRING CREEK DRIVE HORSESHOE BEND, ID 83629
KIM RAU	Secretary	5 SPRING CREEK DRIVE HORSESHOE BEND, ID 83629
ELIZABETH BAGGERLY	Vice President	5 SPRING CREEK DRIVE HORSESHOE BEND, ID 83629



The annual report must be signed by an authorized signer of the entity.

ROBIN R FINDL

Sign Here

Signer's Capacity: PRESIDENT

12/28/2018

Date

B0131-6486 12/28/2018 10:55 AM Received by ID Secretary of State Lawrence Denney