

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 43-7321
Exam Date: 04/25/2019

1. Current Owner:
ROUND MOUNTAIN RANCH 3475 S ROUND MOUNTAIN LN MALTA ID 83342-8626
2. Accompanied by: Jeff Sessions
Phone No: (208) 824-5721
Address: 3475 S Round Mountain LN, Malta ID 83342-8626
Relationship to permit Holder:

3. SOURCE:

ROUND MOUNTAIN CREEK
UNNAMED DRAIN
WASTE WATER

Tributary

CLEAR CREEK
ROUND MOUNTAIN CREEK
ROUND MOUNTAIN CREEK

Method of Determination: On-site inspection and GPS

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
43-45	Round Mountain Creek; Rice Creek & Clear Creek	Irrigation	Decree
43-286B	Round Mountain Creek; Rice Creek & Clear Creek	Irrigation	Decree
43-2061	Springs	Irrigation	Decree
43-2110	Round Mountain Spring	Irrigation	Decree
43-10116	Round Mountain Creek & Rice Creek	Irrigation	Decree
43-10824	Round Mountain Creek; Rice Creek; Clear Creek & Round Mountain Spring	Irrigation Stockwater	Decree

Comments: All water rights listed above will be utilized in the same 266 acre place of use along with this right

2. Other water rights with the same point-of-diversion: Yes Overlap

Water Right No.	Source	Purpose of Use	Basis
43-2110	Unnamed Drain/Tributary to Round Mountain Creek	Irrigation	Decree
43-10824	Unnamed Drain/Tributary to Round Mountain Creek	Irrigation	Decree

Comments: None

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

WASTE WATER NW¼ SE¼, Sec. 13, Twp 16S, Rge 27E, B.M. CASSIA County
WASTE WATER NE¼ SE¼, Sec. 13, Twp 16S, Rge 27E, B.M. CASSIA County
UNNAMED DRAIN SE¼ SE¼, Sec. 13, Twp 16S, Rge 27E, B.M. CASSIA County
ROUND MOUNTAIN CREEK NE¼ SE¼, Sec. 13, Twp 16S, Rge 27E, B.M. CASSIA County

Method of Determination: On-site inspection, sources verified by permit holder, GPS measurements and aerial imagery

PLACE OF USE: IRRIGATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
16S	27E	13													X	X			

PLACE OF USE: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
16S	27E	13	13.0	9.0	8.5	20.0					17.0			25.0	23.0	28.0	36.0	38.0	217.5
16S	27E	24	37.0	0.4															37.4
16S	28E	18											0.1 L4						0.1
16S	28E	19						11.0 L1											11.0

Total Acres: 266.0

Method of Determination: On-site inspection and aerial imagery in ArcMap

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
N/A					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Portable Cipoletti Weir					1.5'	
V-Notch Weir						

2. Measurements: To determine the amount of waste water flowing overland into the reservoir through a wetland, a v-notch weir was used to measure the flow of water in Round Mountain Creek just upstream of the reservoir and then a 1.5' Cipoletti weir was used to measure the outflow from the reservoir just below the reservoir spillway with the difference being the amount of waste water flowing overland into the reservoir:

V-Notch measurement above reservoir: 4" on V-notch is 0.33' of Head = 0.159 cfs

1.5' Cipoletti measurement below reservoir: 0.386' of Head on staff gage on 1.5' Cipoletti = 1.18 cfs

1.18 cfs – 0.159 cfs = **1.02 cfs** of waste water flowing into reservoir through the wetland.

E. FLOW CALCULATIONS N/A

Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: Irrigation Storage:

Prior to Idaho Code revisions in 2016, this reservoir was managed under the Dam Safety Program and Engineers monitoring the dam had determined the storage capacity of the reservoir to be 26.0 acre feet (Round Mountain Ranch Dam D43-7321 File).

G. NARRATIVE/REMARKS/COMMENTS

On 4-25-2019 I visited Round Mountain Ranch in hopes of completing the field exam for this water right. As I drove onto the Ranch from the south, I noticed a brand new pivot with recently plowed ground underneath it. As I approached the reservoir to the north, I saw a second new pivot just northeast of the reservoir. There was also a third, larger pivot on the east side of the ranch that I knew from aerial imagery had been installed within the past four years. The permit listed three sources of water: an unnamed drain; Round Mountain Creek and waste water, and I believed I might have some difficulty determining the actual points of diversion and sources without direct assistance from the permit holder. I had called twice and left messages prior to coming out, but no one answered or returned my calls. I was in the area working on another field exam, so I decided drop by and see what I could get done. Once there, I attempted contact at each of the three houses on the ranch, but no one answered the door at any residence. I then decided to take a portable Cipoletti weir out to the spillway and measure the outflow from the reservoir. While I was setting up the weir, I looked out along the southwest shore of the reservoir and could see it was a wetland with less than an inch of water "sheeting" across the wetland and eventually down into the reservoir. After completing the measurement, I walked across the southwest shore to see if the flow was channelized in any way. It wasn't. There is irrigated pasture and a pivot to the southwest of the wetland on higher ground and this is the source of the waste water. The waste water flows from the pasture over the wetland and eventually down into the reservoir. I later used a V-notch weir to measure the inflow to the reservoir from Round Mountain Creek. The difference between inflow and outflow was determined to be approximately 1.02 cfs, which is almost exactly the permitted diversion rate of 1.0 cfs for diversion to storage for the waste water. It should be noted that this is an on-stream reservoir, so the diversion rate only applies to the waste water as the other sources all enter Round Mountain Creek's channel prior to entering the reservoir.

As I was walking through the wetland area, I had noticed activity at the house, so I went over and knocked on the door. Mrs. Sessions answered and she referred me to her husband who was out on the open range herding cattle. I left my card and asked her to have him call me. He contacted me the next morning and we scheduled a follow up visit.

On 5/1/2019, Corey Skinner and I returned to the Ranch to meet with Mr. Sessions. He drove us around and showed us the various points of diversion and drove us out to the pivots to take GPS measurements at the pivot centers. It was already clear, that due to addition of the three pivots, the POU wasn't correct on the permit. After Mr. Sessions showed us around, it was also evident that the PODs would also need to be updated on the permit. A second "POD" was needed for the waste water element in the NESE of Sec. 13, Twp 16S, Rge 27E, to describe the entire wetland area providing water to the reservoir as the wetland is located in both the NWSE and the NESE of Sec. 13. The unnamed drain source had also been described in the NWSE of Sec. 13 when it was actually located in the SESE of Sec. 13. The original permit did not have irrigation from storage listed as a beneficial use, only irrigation storage and diversion to storage. Irrigation from storage from

4/1 to 10/31 will be added to the license amendment since irrigation from storage is clearly implied if irrigation storage is a beneficial use on the permit. We also discussed drafting a companion transfer for his other irrigation rights to update their place of use to include all of the ground that will be irrigated under his new pivots. Mr. Sessions agreed and there is also an application for transfer, #83292, that seeks to rearrange the existing 266 acre place of use to match current irrigation practices that is being processed as a companion to this amended license.

After reviewing the conditions of the permit, it seemed that the condition requiring "measuring devices to determine the amount of water diverted" was impractical since none of the waste water is actually channelized in a manner that would allow it to be measured. I contacted the Watermaster for the Upper Raft River Water District 43B, he was familiar with the ranches irrigation practices, agreed with my assessment and signed a measuring device waiver for this permit. A picture of the waiver is attached to this report and the condition has been dropped. I have modified Condition R43 to read "Upon specific notification, the right holder shall maintain a measuring device and lockable controlling works of a type approved by the Department in a manner that will provide the watermaster suitable control of the diversions" and added it to the draft license. I have also added an X35 condition limiting irrigation of all combined rights to 266 acres and condition R05 indicating this right may be regulated by the watermaster of Water District 43B.

Recommend Licensing 26.0 af of Irrigation Storage; 1.0 cfs for diversion to storage; updating /changing PODs as listed in Section C.(1) of this report; adding Irrigation from storage as a beneficial use and adding a 266 acre irrigation place of use, also described in Section C.(1) of this report.

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>Annual Volume</u>
IRRIGATION STORAGE	11/16 to 3/14		26.0 AF
DIVERSION TO STORAGE	11/16 to 3/14	1.00 CFS	
IRRIGATION FROM STORAGE	04/01 to 10/31		26.0 AF
<u>Totals:</u>		1.00 CFS	26.0 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

William Mills - Water Resource Agent, Senior

Field Examiner's Name David Mills Date 7-8-2019

Reviewer _____ Date _____



Figure 1: Looking northwest across the north end of the reservoir



Figure 2: Looking west across the south end of the reservoir

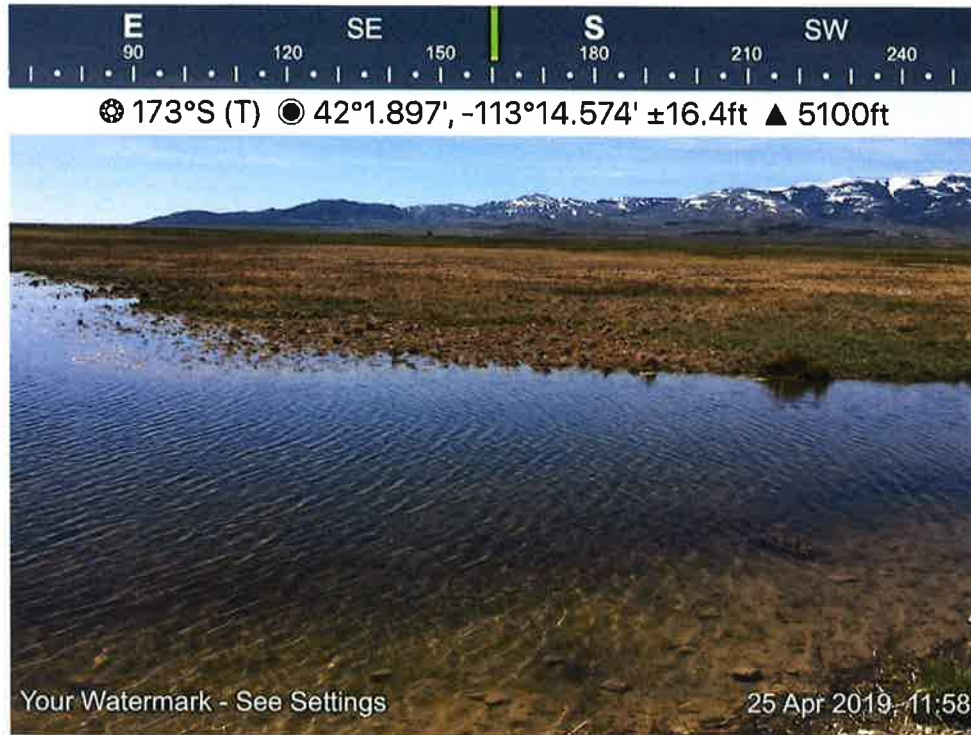


Figure 3: Looking southwest from the north end of the reservoir across the wetland and the pasture



Figure 4: Round Mountain Creek where it enters south end of reservoir

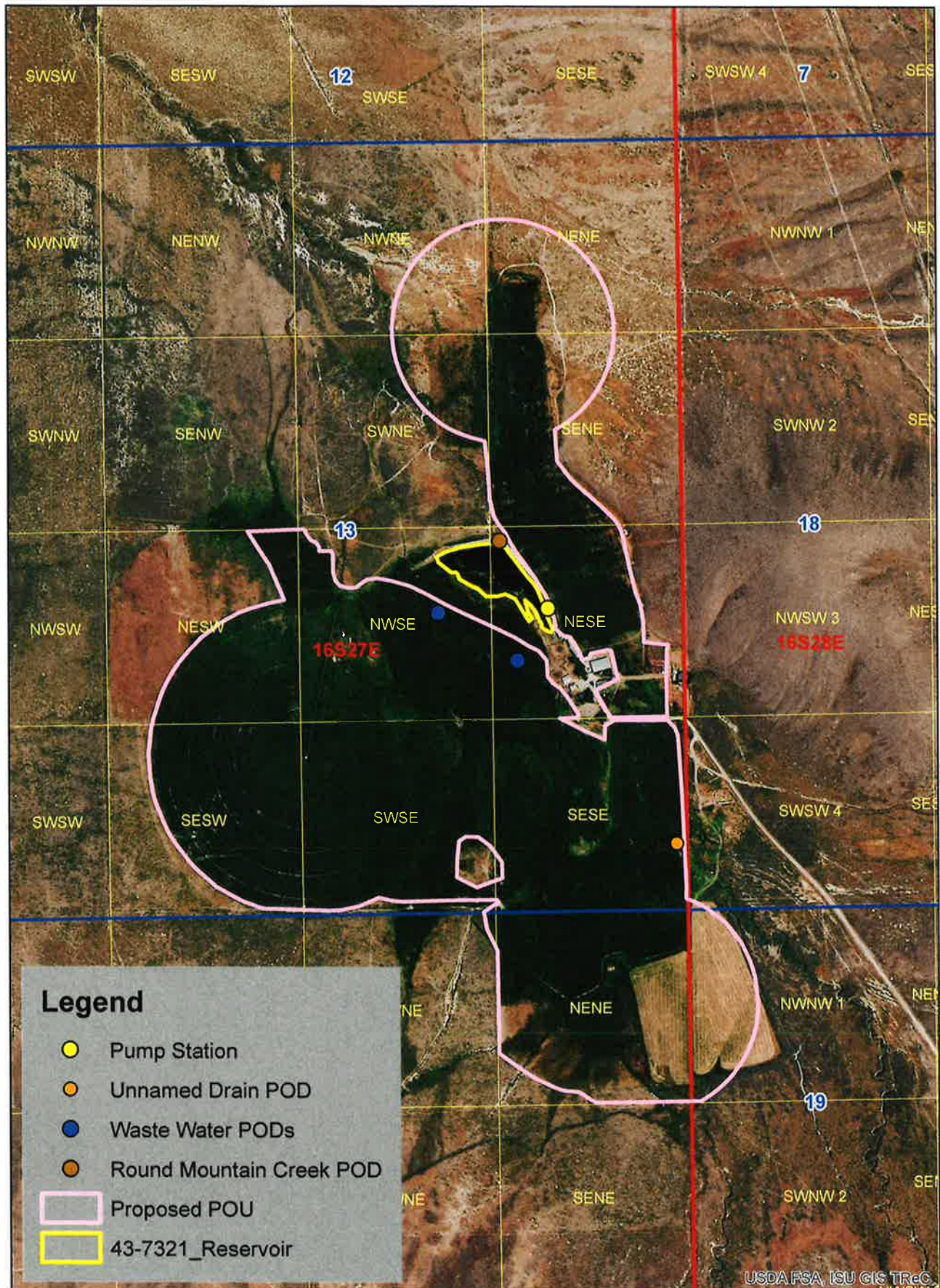


Figure 5: Standing in the wetland/marsh looking northeast across reservoir



Figure 6: Looking south from center of new north pivot

System Diagram



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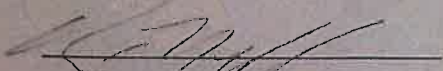
Request for Waiver of Measuring Device

Permit: 43-7321

Owner: Round Mountain Ranch

Water District: 43B

The original permit included a condition that would require the installation of measuring devices. A field examination conducted on 4/25/2019 found a system where the water to be measured was waste water that is not channelized but simply flows over a wetland area and eventually winds up being captured in a small reservoir at the low end of the wetland. Additionally, the reservoir was built on-stream on a small creek, Round Mountain Creek, which rises from a spring only a few hundred feet from the upper end of the reservoir and on the occasion when water spills from the reservoir it sinks without ever reaching the Raft River channel. **Recommend that the measuring device condition be waived.**


Rick Neff Watermaster Water District 43B

June 7th 19
Date