

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 74-16111
Exam Date: 06/11/2024

1. Current Owner:
LEADORE LAND PARTNERS LTD PARTNERSHIP 29 TYLER LN LEADORE ID 83464-5046
2. Accompanied by: Karl Tyler
Phone No: (208) 360-2438
Address: 29 Tyler Lane, Leadore, ID 83464-5046
Relationship to permit Holder: Representative

3. **SOURCE:**
GROUND WATER

Method of Determination: Garmin Trek 20 GPS, GIS, and Tax Lot Data

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
74-971	GROUNDWATER	DOMESTIC	DECREEED 2000
74-162 to164	CANYON CREEK	IRRIGATION/STOCKWATER	DECREEED 2007
74-7271	GROUNDWATER	IRRIGATION	DECREEED 2007
74-7064	GROUNDWATER	IRRIGATION	DECREEED 2007

Comments: Several rights currently held by the permit holder overlap the permitted place of use (POU). However, the only stockwater right partially overlapping the permitted POU has a surface water source. All other rights are for irrigation and domestic uses. There are no concerns found due to the overlapping uses.

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

Water Right No.	Source	Purpose of Use	Basis
74-7064	GROUNDWATER	IRRIGATION	DECREEED 2007
74-16047	GROUNDWATER	IRRIGATION	DECREEED 2007
74-16048	GROUNDWATER	IRRIGATION	DECREEED 2007
74-16054	GROUNDWATER	IRRIGATION	DECREEED 2007

Comments: The Well head point of diversion (POD) lists 4 irrigation rights held by the permit holder. However, the well GIS point has 2 well numbers with 2 different well logs. Driller's Report for well 452823 identifies the well as a 6" domestic drilled in 2018. The other well, a 20" diameter irrigation well which was drilled in 1979, is logically the POD for the irrigation rights. There are no concerns regarding the de minis use diversion impacting the irrigation rights utilizing the same source.

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION: GARMIN GPS COORDs: W113° 19.377', N44° 41.233'**

GROUND WATER NW¼ SE¼, Sec. 26, Twp 16N, Rge 26E, B.M. LEMHI County

Method of Determination: Garmin Trek 20 GPS and GIS.

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
16N	26E	34	X																
16N	26E	35						X											
16N	26E	26			NO				X		X	NO				X			

Comments: Red X = Amendment needed to add qtr/qtr with stock water trough. Red NO = No stock water trough located within permitted qtr/qtr removed at licensing.

Method of Determination:

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
D0075952	Unknown	2	Unknown	Unknown	unknown

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE	NA	NA	NA	NA	NA	NA

2. Measurements: At the time of the field examination the system was installed, but the livestock were not in the POU and the system was not in use. In NAIP aerial imagery from 2021 and Google Earth 2020 imagery (Figures 2-5) livestock can be seen throughout the POU and gathered at watering troughs. Beneficial Use Rule 035.01.r.iii. states that a direct measurement is not necessary for uses other than irrigation or storage if the total combined diversion rate for all the uses does not exceed 0.24cfs. As the permitted rate is only 0.02cfs, a theoretical calculation and current guidance were used to determine a reasonable rate.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: A theoretical calculation and Administrative Memo #03 were used to determine an acceptable rate of diversion. The Well Driller's Log (figure 2) lists a total depth of 180ft and the DRG indicates that all the stockwater troughs are at lower elevations than the well head.

If 1 in= 0.03613 Psi

HP= 180ft x 12 in/ft x 0.03613Psi= 78 Psi

$Q = (2 \text{ Hp})(8.8)(0.80 \text{ efficiency}) / (180 \text{ ft lift}) + (2.31) * (78 \text{ psi}) = 0.04\text{cfs}$

Theoretical Calculation= 0.04cfs

Permit allowed = 0.02cfs

BU limited Rate = 0.12cfs

Recommendation= 0.02cfs

No. of Stock (head)	RANGE CATTLE		DAIRY CATTLE	
	Rate*	Volume	Rate*	Volume
	c.f.s. (1)	AF/yr. (1)	c.f.s. (2)	AF/yr. (2)
0 - 10	0.02	0.2	0.02	0.4
11 - 25	0.02	0.4	0.02	1.0
26 - 50	0.02	0.7	0.04	2.0
51 - 100	0.03	1.4	0.07	4.0
101 - 200	0.05	2.7	0.13	7.9
201 - 300	0.07	4.1	0.20	12.0
301 - 400	0.09	5.4	0.26	16.0
401 - 500	0.12	6.7	0.33	20.0
501 - 600	0.14	8.1	0.39	24.0
601 - 700	0.16	9.4	0.46	28.0
701 - 800	0.19	11.0	0.52	32.0
801 - 900	0.20	12.0	0.58	36.0
901 - 1000	0.23	14.0	0.65	40.0
1001 - up (3)				

Table 1- Annual Use of Water for Stockwater Purposes-from Administrative Memo #3.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: NA

2. Volume Calculations for Other Uses: Administrative Memo #3 allows an annual volume of up to 6.7 AF for 500 head of cattle. The use developed is within the elements described in IC 42-111 and the permit has condition N05 which allows for up to 13,000 Gallons/day for livestock use, however, the maximum permitted rate of 0.02 cfs could only divert a maximum of 6.7 AF annually. I recommend the license is issued with the daily volume stated in condition N05 and a stated maximum annual volume of 6.7 AF.

G. NARRATIVE/REMARKS/COMMENTS

The proof of beneficial use for permit 74-15907 was received by the Department on August 1, 2022. The field examination was conducted by Bob Howe (WRA) and Justin Shearer (Supervisor) on June 11, 2024. The permit proposed to drill a new well to replace a surface water pumping system for stock water, which was abandoned after the delivery ditch source was relocated. The location is about 1 mile northeast of Leadore, ID on the south side of Old Idaho 28. The representative for the permit holder met to review the permit map and discussed system details at the ranch house adjacent to the POU prior to documenting the troughs and POD. The system was described as a 2 Hp submersible pump delivering water to 4 stock water troughs with float valves (Figures 1 & 2, Photos 1-8A&B) via a 1 ½" buried plastic pipe. GPS Coordinates and field observations found that 3 of the 4 troughs are in quarter/quarters different from the permitted POU and no trough is located in the SWNE of Section 26 (see redline corrections in section 1). A call was made to notify the representative and the application for amendment of the POU was mailed to the representative removing the SWNE of Section 2 while adding the NENE of section 34, the NESW of Section 2, and the SWNW of Section 26 (Figure 1- System Diagram). The amendment cover letter was mailed requesting that the amendment be signed and returned to the Department with the amendment fee within 14 days, or the permit may be voided. As of February 24, 2025, the signed amendment and amendment fee were not received by the department. IC 42-219 (8). States that if the Department find that the applicant has not fully complied with the law and conditions of a permit, it may issue a license for that portion of the use that is in accordance with the permit. I recommend the license is issued for eligible stockwater use within POUs in the NENE of section 35 and the SWNE of section 26, as these are the only permitted locations that could be confirmed by the field examination.

Although cattle were not at the troughs at the time of the field examination historical imagery supports use of the troughs by livestock during the development period (figures 3-5). Field observations, GPS coordinates, and GIS measurements provided data for a theoretical calculation to find a reasonable theoretical rate for the system (Section E of this report). Based on the calculation the system is capable of the full permitted rate. The permitted rate is lower than the standard rate for providing stockwater to 500 head of range cattle (Table 1-in section F of this report). I recommend the license is issued with the full permitted rate of 0.02cfs.

Administrative Memo #3 allows an annual volume of up to 6.7 AF for 500 head of cattle. The use developed does not exceed the elements of domestic use as described in IC 42-111 and the permit has condition N05 which allows for up to 13,000 Gallons/day for livestock use. However, the maximum permitted rate of 0.02cfs could only divert an annual volume of 6.7 AF. I am recommending the license be issued with the daily volume stated in condition N05 and an annual volume of 6.7 AF. I recommend the license be issued with conditions N05 and 01P. Conditions X02 and 046 should be removed for licensing, per current guidance.

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>
STOCKWATER	01/01 to 12/31	0.02 CFS	6.7 AF

Totals: 0.02 CFS 6.7 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

Bob Howe - Water Resource Agent, Sr.

Field Examiner's Name

Bob Howe

Date

3/3/2025

Reviewer

Scott King

Date

April 28, 2026



Figure 1 -GIS NAIP 2023 Imagery blue circles are the locations of the stockwater tanks with GPS Coordinates collected in the field examination on June 11, 2024. The red rectangles represent the permitted POUs. The red triangles shaded in are permit POU areas where no troughs were found. The GPS coordinates written in yellow indicate the amended POU areas. The black lines between the trough areas represent the buried 1 1/2" pipeline.

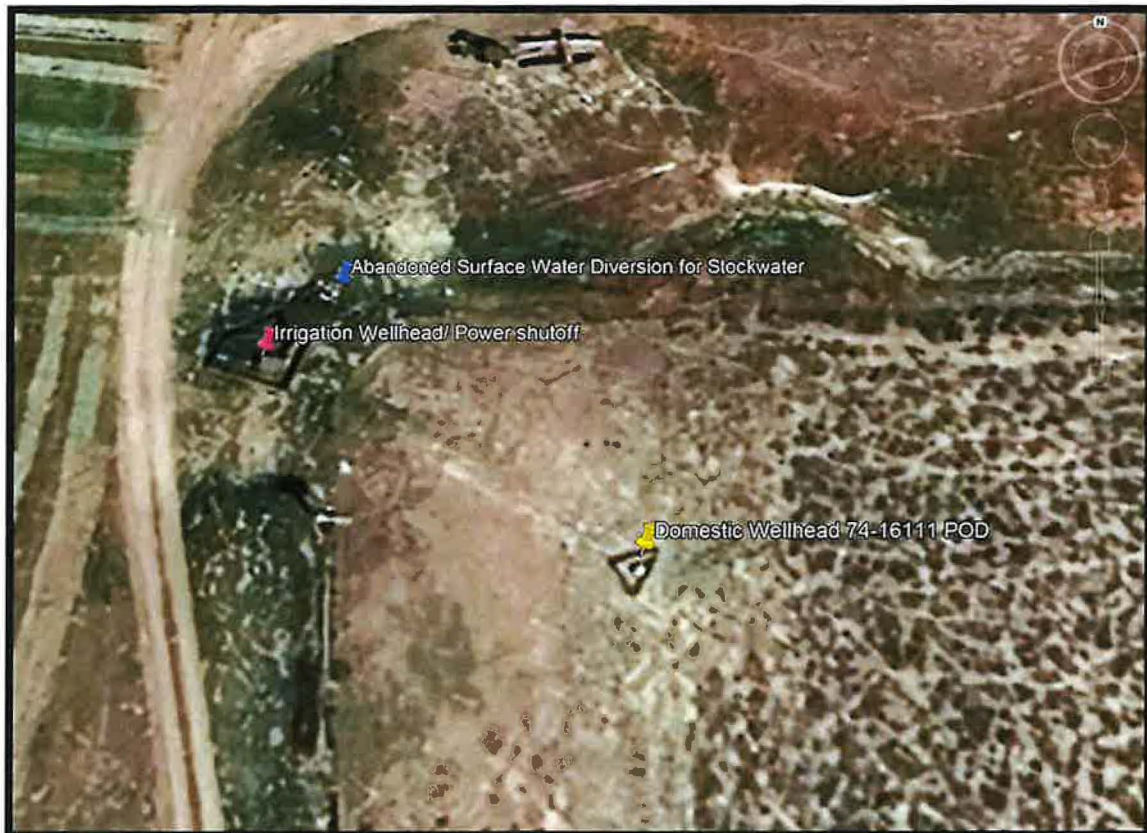
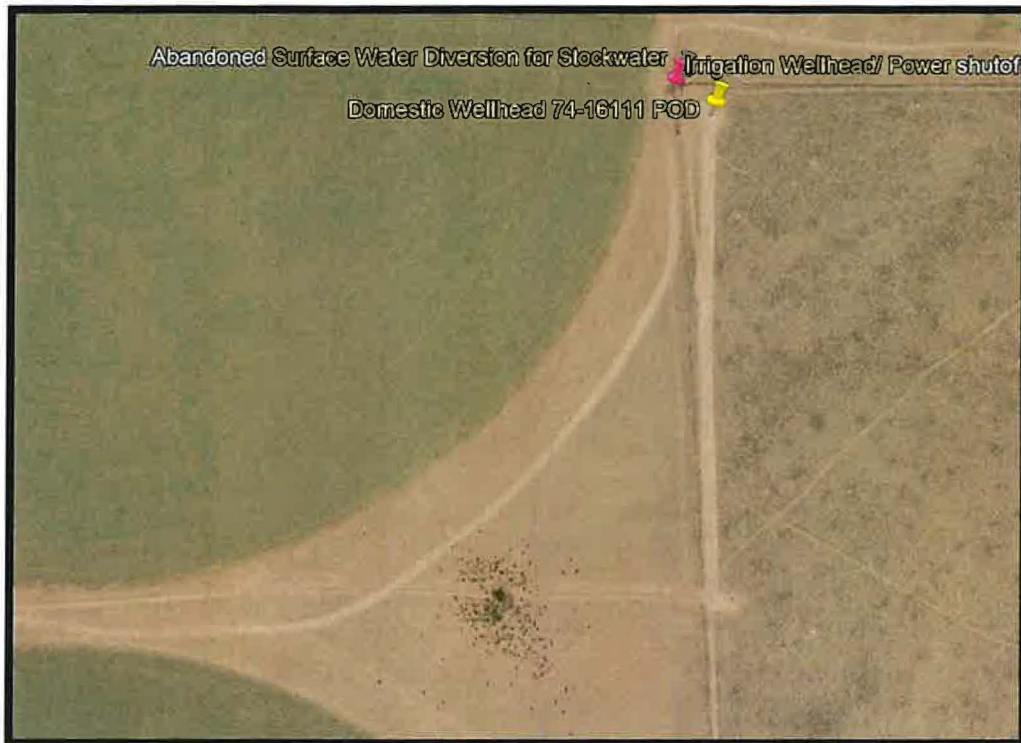


Figure 2 - Google Earth 2023 Imagery- The domestic and irrigation wells located in the NWSE of Section 26.



Figure 3- NAIP 2021 imagery- Cattle gathered at the trough in the NENE of Section 34 and the NWNW of Section 35.



Figures 4 & 5- Google Earth 2020 imagery. Cattle are visible gathered around the troughs in the NESW of Section 26 (above), and the SWNW of Section 26 (below).





Photo 1- Irrigation well head and pump, adjacent to abandoned surface water source POD.



Photo 2- Facing west- Abandoned surface water diversion screen adjacent to irrigation wellhead. New POD is to the southeast.



Photo 3- Facing east- Trough in NENE of section 34 and the NWNW of section 35 (#1 in Figure 1).



Photo 4- Facing west -At the same trough in photo 3. The home, barn, and outbuildings along Hawley Creek Rd can be seen in the background.



Photo 5- Float Valve system in the center of each trough. Taken at the trough in the NENE of Section 34 and NWNW of Section 35.



Photo 6- Facing east, standing on the west side of the trough in the NESW of Section 26 (#2 on Figure 1). The trough in the NWSE of Section 26 is visible in the background to the east.

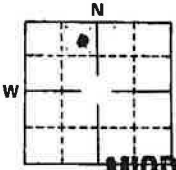


Photo 7- Facing east, taken on the west side of the trough in the NWSE of Section 26 (Trough #3 in Figure 1)



Photos 8A-(Left) Facing north on the southside of the trough in the SWNW of Section 26 (Trough #4 in Figure 1) Hwy 28 is visible in the background. **Photo 8B-(Right)** Facing west on the east side of the same trough Hwy 28 running northeast-southwest. The western fence line of the parcel is visible in the background.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTState law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.USE TYPEWRITER OR
BALLPOINT PEN**RECEIVED**
JUN 29 1979

1. WELL OWNER Name <u>Charles Isom</u> Address <u>Leadore</u> Owner's Permit No. <u>74-7064</u>	7. WATER LEVEL Department of Water Resources Eastern District Office Static water level <u>110</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ °F. Quality _____																																														
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☐ Bailer ☐ Air ☐ Other _____ Discharge G.P.M. _____ Pumping Level _____ Hours Pumped _____																																														
3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type) _____	9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>20</td><td>0</td><td>2</td><td>Top soil</td><td></td><td></td></tr><tr><td></td><td>2</td><td>40</td><td>Clay filled coarse gravel</td><td></td><td></td></tr><tr><td></td><td>40</td><td>125</td><td>Finer Gravel</td><td></td><td></td></tr><tr><td></td><td>125</td><td>135</td><td>Sandy Gravel</td><td></td><td></td></tr><tr><td></td><td>135</td><td>165</td><td>Heavy Gravel</td><td></td><td></td></tr><tr><td></td><td>165</td><td>200</td><td>Clean water bearing heavy gravel</td><td></td><td></td></tr></tbody></table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	20	0	2	Top soil				2	40	Clay filled coarse gravel				40	125	Finer Gravel				125	135	Sandy Gravel				135	165	Heavy Gravel				165	200	Clean water bearing heavy gravel		
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4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____																																															
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>2.50</u> inches</td><td><u>20</u> inches</td><td><u>1</u> feet</td><td><u>200</u> feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☒ Yes ☐ No How perforated? ☐ Factory ☒ Knife ☐ Torch Size of perforation <u>1/2</u> inches by <u>2</u> inches Number of perforations <u>15</u> From <u>120</u> feet To <u>196</u> feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☐ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>40</u> Material used in seal: ☒ Cement grout ☒ Puddling clay ☐ Well cuttings Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld _____ ☐ Cemented between strata Describe access port _____	Thickness	Diameter	From	To	<u>2.50</u> inches	<u>20</u> inches	<u>1</u> feet	<u>200</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	051693																										
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>NE 1/4 NW 1/4 Sec. 35, T. 16N, R. 26E E.W.</u> MICROFILMED	10. Work started <u>6-1-79</u> finished <u>6-19-79</u>																																														
11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Bonus Drilling + Pump</u> Firm No. <u>23</u> Address <u>Box 558</u> Date _____ Signed by (Firm Official) <u>[Signature]</u> and (Operator) <u>Same</u>																																															