

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22769
Exam Date: 04/01/2025

1. Current Owner:
GEORGE E COLWELL AND CHERYL F COLWELL 3990 HWY 52 PAYETTE ID 83661
2. Accompanied by: GEORGE COLWELL
Phone No: **(208)642-7617**
Address: MEETING AT BIR FEED LOT – WRIGHT LN & FORT WILSON DR, Payette, ID
Relationship to permit Holder: Permit Holder
3. **SOURCE:**
GROUND WATER
Method of Determination: GARMIN MAP76 GPS, GIS imagery

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
65-7426	Groundwater	Stockwater	Decreed 2002 (Permit holders)
65-2923, 165, 74428, et al.	Payette/Snake Rv	Irrigation	Lake Reservoir Co. & Lower Payette Ditch Co

Comments: The permitted use was developed to increase the number of livestock served under right 65-7426

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

Water Right No.	Source	Purpose of Use	Basis
65-7426	Groundwater	Stockwater	Decreed 2002 (Permit holders)

Comments: _____

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

GROUND WATER L1 (SW¼ SE¼), Sec. 17, Twp 08N, Rge 04W, B.M. PAYETTE County

GPS COORDINATES: N 44.02769° W 116.84137°.

GROUND WATER ~~NW¼ SE¼~~, L1 (SW¼ SE¼), Sec. 17, Twp 08N, Rge 04W, B.M. PAYETTE County

GPS COORDINATES: N 44.02859° W 116.84006°. (Amended- Home/Stockwater)

GROUND WATER NE¼ SE¼, Sec. 17, Twp 08N, Rge 04W, B.M. PAYETTE County

GPS COORDINATES: N 44.02892° W 116.83369°.

GROUND WATER NE¼ SE¼, Sec. 17, Twp 08N, Rge 04W, B.M. PAYETTE County

GPS COORDINATES: N 44.02906° W 116.83360°.

GROUND WATER NE¼ SE¼, Sec. 17, Twp 08N, Rge 04W, B.M. PAYETTE County

GPS COORDINATES: N 44.02901° W 116.83313°.

Method of Determination: GARMIN MAP76 GPS, GIS imagery

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	
08N	04W	17													X	X	X	X	

Method of Determination: _____

3.

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

X 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

X 1:24,000 or greater.

X Aerial Photo Attached (required for irrigation of 10+ acres).

X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Model No.	Pump Make	Set Depth / TD
Cistern #1	Flowise	3	CBFP3021-D	Flowise	95ft (pumping level)
Cistern #2	Flowise	1 ½	CBFP15-2	Flowise	95ft (pumping level)
Cistern #3	Franklin	1	2801084915	Unknown	95ft (pumping level)
SW Stockyard	Franklin	1 ½	2823008110	Unknown	95ft (pumping level)
Dom/SW	Franklin	¾	2801074915	Unknown	60ft (TD)

D. FLOW MEASUREMENTS

1.

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

2. Measurements: The steel pipe diameters for the well main lines were all smaller than 2" diameter, making flowmeter measurements inaccurate to impossible. However, the pump specifications and well log data made theoretical calculation for the system possible.

E. FLOW CALCULATIONS

Measured Method: A theoretical Calculation was made for the integrated system using the pump specifications and well log data.

Reviewer: Bob Howe
Date of Review: 4/1/2025

P/D No.:	Well #1	Well #2	Well #3	Well #4	Well #5	
PUMP HORSEPOWER	3	1.5	1	1.5	0.75	
BOOSTER HORSEPOWER	0	0	0	0	0	
PUMPING LEVEL	95 Static	95 Static	8 Static	95 Static	60 Total depth	
DISCHARGE PRESSURE	0	0	0	0	0	
RATE OF FLOW (cfs)	0.19	0.10	0.77	0.10	0.08	
	87	44	346	44	35	
						1.24 TOT CFS
						554.74 TOT GPM

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: The system utilized 5 wells each with a dedicated pump integrated to service 30+ stock tanks and 3 frost-free hydrants for cleaning and doctoring livestock. Three wells in the NESE discharge directly into a buried 50' x 15ft x 10' deep concrete cistern with a float valve control. From the cistern the water is gravity fed to 30+ float valve controlled troughs (with hand valve shut off) and frost-free hydrants. In the SWSE a 8" stockwater and 6" domestic well also supply the system. The same lift for all wells except the domestic, the maximum flow rate would be 238.27 gpm total (0.53 cfs). open Discharge

Comments/Recommendation: A theoretical calculation found that the system is capable of 554.74GPM (1.24cfs) which exceeds the full permitted rate of 0.55cfs (standard rate for 2,500 hd. Of cattle according to Admin. Memo #3) and the overlapping rate of WR 65-7426 (0.27cfs for stockwater) combined. The theoretical rate is based on a conservative estimate of the pumping levels for several wells using 2 well logs ranging from 95ft to 8ft static water level and a domestic/stockwater well with a 60ft total depth. Although it is reasonable to accept that the system is capable of exceeding the permitted license rate should be limited by the scope of the permit. I recommend that the license is issued with a maximum rate of 0.55cfs for stockwater serving 2,500 head of cattle (per Administrative Memo #3).

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: NA

2. Volume Calculations for Other Uses: **Stockwater (Standard volume, per Admin Memo #3)**

2,500 Head of range cattle X 0.0134AF/hd (Admin Memo #3)= **33.5 AF annually**

Comments/Recommendation: At the time of the field examination approximately 1,000 head of cattle were in various areas throughout the facility. However, the permit holder stated that at peak use the facility serves up to 5,000 head of cattle. The overlapping right (65-7426) was issued for 2,500 head of cattle. I recommend that the license is issued with an annual volume of **33.5 AF** (per Administrative Memo #3) to provide stockwater for 2,500 head of cattle. As the overlapping right and the permitted use are additive a condition limiting the use is not necessary.

G. NARRATIVE/REMARKS/COMMENTS

The Department received the Proof of Beneficial Use for permit 65-23285 on April 28, 2008, submitted and signed by the permit holder, George Colwell. In section 5 of the proof the permit holder stated that beneficial use was developed to provide stockwater to 2,500 head of cattle, with the standard rate of 0.55cfs stated in section 6 of the form. On April 1, 2025, a field examination was conducted with George Colwell and his son as escorts. Permit 65-22769 is for stockwater diverted from 5 wells filling a 10' deep 50' x 15' concrete cistern integrated with two wells in the southwest of the POU to fill 35 stockwater troughs (375-gal ea.) throughout the POU with buried supply lines and float valves. The right is fully overlapped by WR 65-7462 for stockwater using the same system to serve 2,500 head of cattle. The original pumps in the wells feeding the cistern were upgraded increasing the integrated system by 3 Hp. There are no concerns regarding the combined use as it is additive, and the theoretical calculation indicates the system is capable of exceeding the combined rates.

At the time of the field examination several hundred head of cattle were in feedlot of the permitted POU. The permit holder stated the feed lot at peak use serves about 4,000-5,000 head of cattle. The facilities for the feedlot include 35 water troughs, three frost-free hydrants for doctoring and cleaning cattle, and a feeding trough lining the fence along the service roads, which seem capable of providing for peak usage.

The permit was issued with five well head points of diversion (POD), one of which was located in the NWSE of section 17. During the examination GPS coordinates taken at the well head confirmed that the POD is located in the SWSE of Government Lot 1. An amendment of permit was issued correcting the POD legal description. Originally 4 wells in the NESE of section 17 were integrated for filling the concrete cistern which distributes water gravity fed to the 30 water troughs, but the only 3 wells in the NESE remain and two wells in the SWSE of Government Lot 1 were integrated to provide adequate flow to fill the troughs in the southwest of the POU.

I recommend the license is issued with conditions 01M & 103. Conditions X02, 046, and 26A should be removed at licensing, according to current guidance. Condition 121 should be replaced with condition 103, per current guidance. Conditions 082 and 106 should be removed for licensing as they request that the permit holder comply with county and DEQ requirements and the Department does not have authority to monitor or enforce county or DEQ regulations. These conditions were added at permitting due only to the proximity of the use with Willow Creek and the Payette River. Additionally, no comment has been received regarding the permit or water use of the overlapping right (65-7462) for the same use. The license should be issued for the full permitted rate of 0.55cfs and 33.5 AF annually for stockwater use serving 2,500 head of range cattle, per Administrative Memo #3 (sections E & F 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>
STOCKWATER	01/01 to 12/31	0.55 CFS	33.5 AF

Totals: 0.55 CFS 33.5 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

Bob Howe - Water Resource Agent, Sr.

Field Examiner's Name [Signature] for Bob Howe Date 6/17/2026

Reviewer [Signature] Date 6/17/2026



Figure 1- System Diagram- 5 total wells fill the 10' deep concrete cistern controlled by a float valve located upslope from which water is gravity fed via buried steel pipes of unknown diameter to the 30 (375-gal) stock troughs throughout the feed lot and to supply water to several frost-free hydrants used for cleaning and doctoring cattle. Location for the buried pipeline is inferred as the permit holder was not certain of the layout. The only known location is at the well heads and where the line crosses the creek under the bridge.



Photos 1-6 (left to right, top to bottom)- The GPS coordinates taken for each of the 5 wells and the cistern (lower right).



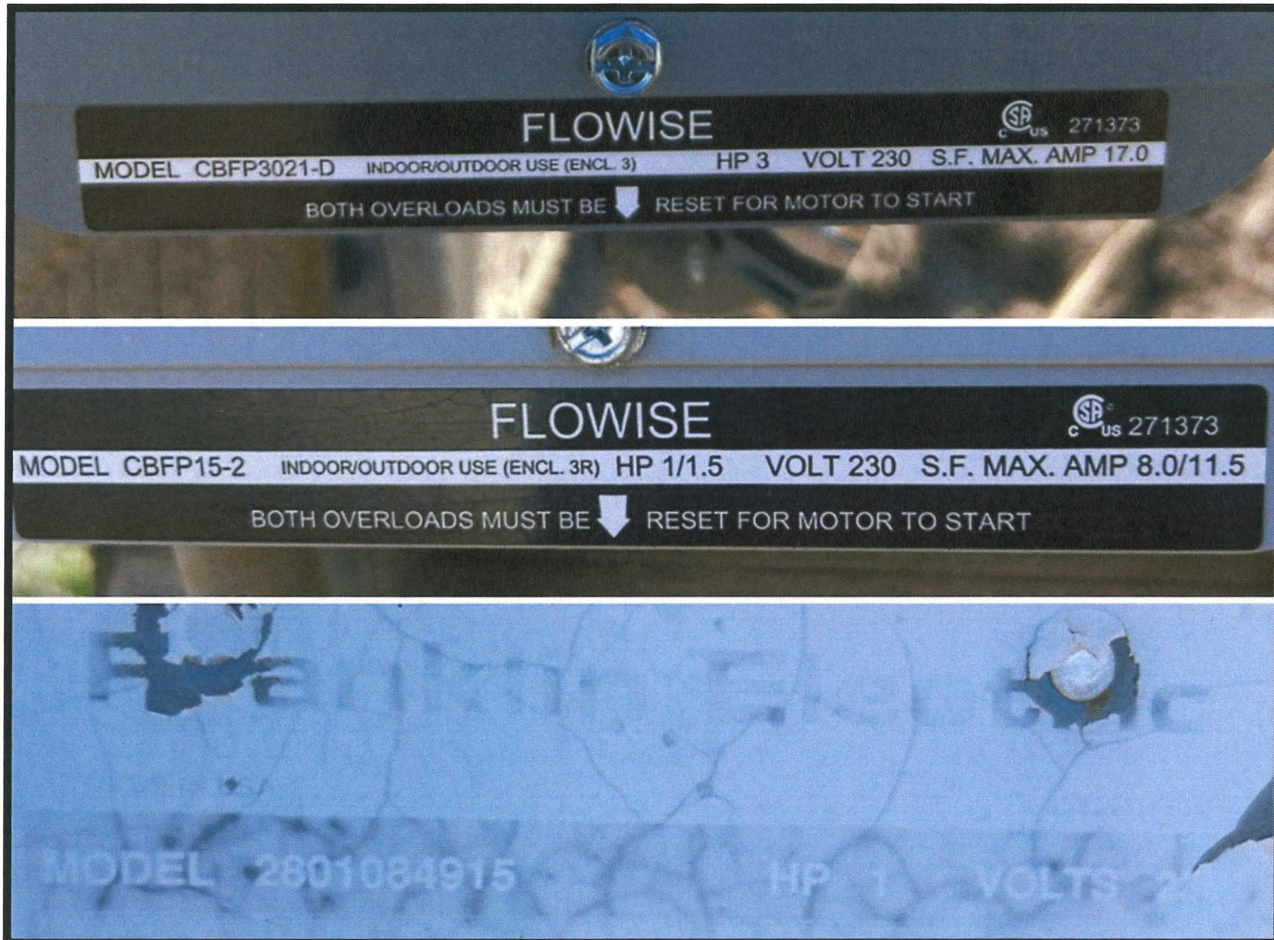
Photo 7- Standing on the east side of the 10' deep cistern, facing west. The hand valves for the gravity fed flow from the cistern in the white standing pipes. The 1 7/8" and 1 5/8" steel lines from the other 2 wells enter the cistern through the steel hatch in the top.



Photos 8 & 9- The control cable to the float valve sensor on the left and the other 2 pipes entering the hatch are the water lines from wells. The float valve is visible in the hatch (right image).



Photos 10 & 11- Standing on the cistern facing north (left) two well heads are in the background. Power for 3 wells (right).



Photos 12 to 14- The specification labels for each well. Flowise 3 Hp and 1 ½ Hp submersible pumps in two wells and a 1 Hp Franklin Electric submersible pump in the third well.



Photos 15 & 16- Cistern Well #1 located northeast of the cistern, facing east (left image) and circled, facing west toward cistern (right image).



Photo 17- Cistern well #2 located north of the cistern. The main to cistern well #3 is in the background.



Photo 18- Cistern well #3 located north-northeast of the cistern.



Photos 19 & 20- Diameter measurements for steel mains of cistern well #2 (left image) and cistern well #3 (right image).

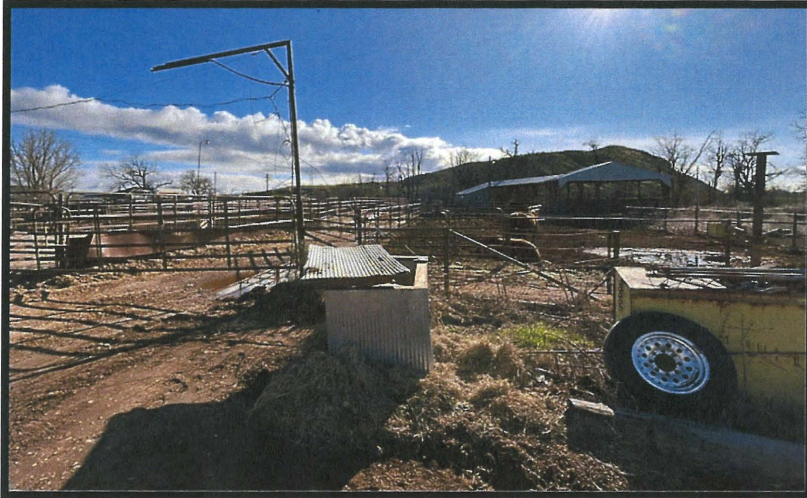


Photo 21- Well head housing at the southwest stockyards (corrugated enclosure).

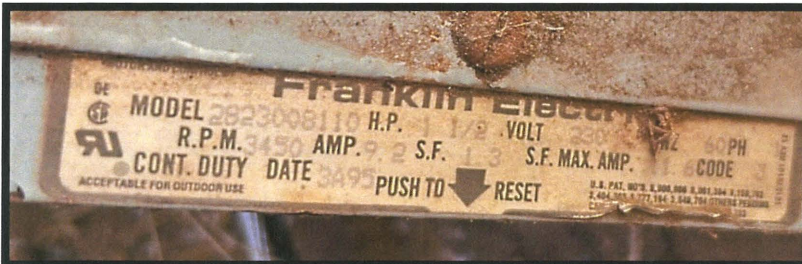


Photo 22- Pump spec. label for the southwest stockyard submersible pump (1 ½ Hp Franklin Electric).

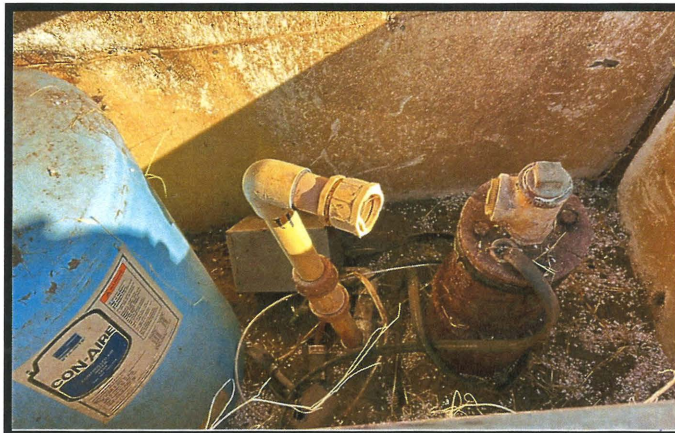


Photo 23- Well head within the corrugated housing. The old pressure tank for domestic use (now disconnected).



Photos 24 & 25- Domestic / stockwater pump house near the home north of the southwest stockyard area.



Photo 26- Submersible pump spec label for domestic/stockwater well.



Photos 27&28- Stockyard areas in the north and northeast of the property. Concrete troughs are along fence lines running between field enclosures.



Photos 29&30- Stockyard in the northwest extent (upper image) and the southwest stockyard (lower image) both have water troughs along the fence lines for enclosures.



Photos 31&32- Southwest stockyard with small troughs on the fence line (bottom image) and frost-free hydrant near the outbuilding (upper image).



Photo 33- Frost-free hydrant found in “doctoring” areas north of the road crossing the southwest stockyard area.



Figure 2- Google Earth Pro, C.2024



IDAHO DEPARTMENT OF
WATER RESOURCES

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Governor Brad Little

Director Mathew Weaver

May 21, 2026

GEORGE E & CHERYL F COLWELL
3990 HWY 52
PAYETTE ID 83661

Rev'd 6/11/26

RECEIVED

JUN 15 2026

WATER RESOURCES
WESTERN REGION

RE: Water Right Permit No. 65-22769

Dear Permit Holders:

The Department of Water Resources is reviewing the permit referenced above prior to issuing water right license. By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit.

The examiner who verified your water use reported that certain elements of the permit(s) have been developed differently than described on your permit. Changes that do not increase the authorized use of water under the permit can be requested and approved in accordance with Idaho Code § 42-211. Before license can be issued, your permit must be amended to depict your water use as it was actually developed.

Based on the examiner's report, the following elements were developed differently than described on your permit:

☒ Point(s) of Diversion

☐ Place(s) of Use

☐ Other

The enclosed Application for Amendment form depicts the elements of the water right as they will appear on the license when issued. Please review the amendment form carefully. If you concur with the information presented, please sign and return the form with the filing fee of \$100.00 within fourteen (14) days.

If you have any questions, please call me at (208) 605-4621.

Sincerely,

Izzy Crichton

Izzy Crichton
Water Resource Agent

Enclosure(s): Application for Amendment
Amended License Map

Idaho Department of Water Resources Receipt

Receipt ID: W053153

Payment Amount	\$100.00	Date Received	6/15/2026	Region	WESTERN
Payment Type	Check	Check Number	3099		
Payer	SMOKE RANCH, L.P.				
Comments	APPLICATION FOR AMENDMENT FOR GEORGE & CHERYL COLWELL FOR WR NO 65-22769				

Fee Details

Amount	Description	PCA	Fund	Fund Detail	Subsidiary	Object
\$100.00	AMENDMENTS	62105	0229	21		1155

CC

Signature Line (Department Representative)