

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 11-7829

Exam Date: 9/6/2023

1. Current Owner:

FISH HAVEN PIPELINE CO INC
C/O HENRY HOWELL
2658 HIGHWAY 89
FISH HAVEN ID 83287-5022

2. Accompanied by: Henry Howell

Phone No: 208-317-7499

3. **SOURCE: Ground Water****B. OVERLAP REVIEW**

1. Place of Use: Water rights 11-4270 (Fish Haven Spring) and 11-7413 (Ground Water) supply water for domestic use to the same 200 homes described in Permit 11-7829. Water right 11-7829 bears a condition limiting the three rights to domestic use at 200 homes. Permit 11-7847 is for future connections within the Fish Haven Pipeline Company service area.

2. Point of Diversion: Water right 11-7413 and Permit 11-7847 are diverted from the same ground water well. Permit 11-7847 (for future connections) will be diverted from the same well.

C. DIVERSION AND DELIVERY SYSTEM1. **POINT(S) OF DIVERSION:**

GROUND WATER L2 (NE¼ SE¼), Sec. 22, Twp 16S, Rge 43E, B.M. BEAR LAKE County

Method of Determination: Site visit. Concrete vault containing well is also visible in aerial imagery.

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	
16S	43E	14		X L1	X L2		X L1		X	X L2	X L3	X	X L4	X L4		X L3			
16S	43E	15			X	X				X					X	X			
16S	43E	22	X			X L1									X L2			X L3	
16S	43E	23						X L1	X L1										
16S	43E	27	X L1			X L2									X L3	X L3	X L4	X L4	

3. **DELIVERY SYSTEM:** The domestic and municipal use within the Fish Haven Pipeline Company system is primarily supplied by the Fish Haven Spring (water right 11-4270). Two ground water wells were added to the system in 1994 to maintain service during times when the spring flow is interrupted and to cover peak demands during the summer. Spring is diverted into a pipeline and held in a large storage tank. Small well is no longer connected to the system. Large well can also be used to fill the storage tank, if necessary.

Large well in vault is equipped with a 40 hp submersible pump. At one time a smaller well, located 50 feet east of the vault, was part of the system. The small (east) well is not connected to the system and was not connected to the system during any portion of the development period for water right 11-7829. Therefore, the small (east) well will not be included as a licensed point of diversion.

D. FLOW MEASUREMENTS

System is automated. Ground water well only kicks on when the level in the storage tank drops to a certain point. At the time of the exam, the demand on the system was low so the spring was satisfying the full demand of the system and the well was not pumping. Mr. Howell was able to manually turn on the well. The highest observed flow during the test period was 275 gpm (0.61 cfs).

Flow Meter: Siemens FM Mag 5000
Serial No, N1MN260021

E. FLOW CALCULATIONS

The Department conducted a field exam for water right 11-7413 in 2015. At that time, the large well was equipped with a 7.5 hp pump. The field examiner measured a flow of 64 gpm (0.14 cfs). The 7.5 hp pump has since been replaced with a 40 hp pump. Mr. Howell said the pump was set at 200 feet below land surface. Based on measurements and calculations from the field exam for water right 11-7413, the measured capacity of the current system is consistent with the previous measurement. In other words, assuming the aquifer parameters and pumping levels are the same, and accounting for the increase in horsepower, the new pump would theoretically increase the yield to approximately 275 gpm. Water right 11-7413 authorizes a diversion rate of 0.24 cfs. Water right 11-7829 will be licensed for the remaining 0.37 cfs of measured capacity.

F. VOLUME CALCULATIONS

By condition, water rights 11-4270, 11-7413 and 11-7829 are limited to a combined annual diversion volume of 240 acre-feet, which equates to 1.2 af per year for each of the 200 homes served by the well. Although Fish Haven Spring (water right 11-4270) is generally used as the primary source of water for the 200 homes, there are times when the spring source is diminished or unavailable. During such times, ground water rights (11-7413 and 11-7829) are used to cover the full domestic demand. For example, in the summer of 2023, Fish Haven Pipeline Company replace a large section of the pipeline running from the spring. During this time the demand was fully met by the ground water well.

Water rights 11-7413 (0.24 cfs, 240 af) and 11-7829 are used for the same purpose and diverted from the same well. Anytime the well is in operation, the first 0.24 cfs pumped from the well would be under 11-7413. If water rights 11-7413 and 11-7829 were used to supply the full 240 acre-foot demand for the 200 homes, 60% of the demand (146 acre-feet) could potentially be met by water right 11-7829.

G. NARRATIVE/REMARKS/COMMENTS

Fish Haven Pipeline Company provides water for domestic use at more than 200 homes in and around the Fish Haven community. Water rights 11-4270 (Fish Haven Spring) and 11-7413 (Ground Water) are used for domestic purposes at 200 homes. Permit 11-7829 was issued to increase the authorized diversion rate from ground water for domestic use at the 200 homes. Permit 11-7829 was not intended to cover any additional homes. Any homes above and beyond the 200 homes originally connected to the system are covered by existing Permit 11-7847. Primary source of water is Fish Haven Spring. Ground water well only kicks on when the spring and storage tank are not sufficient to meet peak demands. Many of the homes connected to the system are summer homes or cabins. Peak demand usually occurs on holidays and weekends in the summer when the recreation homes are occupied.

Have conditions of permit approval been met?

 X 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>
DOMESTIC	01/01 to 12/31	0.37 CFS	146 acre-feet
<u>Totals:</u>		0.37 CFS	146 acre-feet

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

 Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION

Field Examiner's Name James Cefalo Date 9/20/2023

Reviewer Blake Sordan Date 9/20/2023



Flow meter installed on large well in concrete vault.



Siemens flow meter.



Highest instantaneous flow rate = 275.2 gpm.



Well head in concrete vault.