

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13827
Exam Date: 05/15/2023

1. Current Owner:
CITY OF FRUITLAND 200 S WHITLEY FRUITLAND ID 83619
2. Accompanied by: Scott Mackenzie
Phone No: 208-707-3443
Address: 505 SW 3rd St, Fruitland, ID
Relationship to permit Holder: City of Fruitland- Water Treatment Superintendent

3. **SOURCE:**
GROUND WATER

Method of Determination: GPS & Taxlot Data

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
65-12099, 12370, 12710, 12766, & 13448	Ground Water	Municipal-emergency back-up. City of Fruitland	Decreed
65-23088	Payette River	Municipal-City of Fruitland	Decreed

Comments: The permit place of use (POU) is comprised of the entire municipal service area for the City of Fruitland and is overlapped by many privately owned rights for domestic, stock water, irrigation, commercial, industrial and fire protection beneficial uses. The POU is also overlapped by other rights with wells contributing to the municipal emergency backup system for the City of Fruitland and the primary municipal right 65-23088, which diverts surface water from the Payette River for municipal use. Any concerns regarding impact to existing overlapping ground water rights were given consideration during the municipal permitting process.

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

Water Right No.	Source	Purpose of Use	Basis
NONE	NA	NA	NA

Comments: No rights share the same point of diversion (POD) as the permit.

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

GROUND WATER NW¼ NE¼, Sec. 27, Twp 08N, Rge 05W, B.M. PAYETTE County

Method of Determination: GPS coordinates taken on site using a handheld Garmin GPS.
Coordinates: -116° 55.2460', 44° 55.2460'

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
X Indicate weir size/pipe as applicable.
- X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- X 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
D0086802	Franklin	25	7T-450	Berkeley	2366159020/ 360 GPM

In the pump house (figure 1.1) a laminated description of the system is posted on the wall (see figure 1 below). The motor is 25 Hp 480 volt, with a Berkeley pump capable of 400 GPM (programmed not to exceed 360 GPM), with a draw down of no greater than 45 ft. The superintendent stated that the 10" casing described was replaced with an 8" casing when the well was improved. The pump has a 4" distribution line and a 5" discharge pipe, reduced to 3" in diameter at the outlet. The distribution line has a separate valve outside the door of the pump house for diverting water to the "Splash Pad" (see figures 1a & 1b) located in the park and irrigation of the park grounds.

WATER SUPPLY SURVEY	
Owner: CITY OF FRUITLAND	Location: FRUITLAND CITY PARK
Well ID: D0086802	Well Depth: 74' (FT)
Discharge Line: 4"	Check Valve: YES
Flow Meter: 4" SENSUS	Screened: YES 40-67
Well Vent: (18")	Screened: YES
Pump: 25 HP	Type: BERKELEY #2366159020
Flow: 360 GPM	Pressure Gauge: YES
Discharge Line: 4"	Check Valve: YES
Flow Meter: 4" SENSUS	Screened: YES
Well Vent: (18")	Screened: YES
Flush Line Size: 1"	Location: N/A
Static Water Level: 32'	Maximum Draw Down: 45'
Pump House: BRICK WITH WOOD FRAMED ROOF	Concrete Slab: YES
Chlorination: NO	Flow Drain: NO DRAIN UNDER DOOR
Type: N/A	Separate Room: N/A
Ventilation: N/A	Screen: N/A
Storage Tank: N/A	Pressure Relief Valve: N/A
Rooster Pump: (110') N/A	
Distance from Well:	
To Sewer Line (50') OK	Septic Tanks (100') OK
Property Lines (50') OK	Irrigation Ditches/Streams (50') OK
Drain Fields (100') OK	Pasture/Flood Irrigation (50') OK
Comments/Notes: WELL #19 IS OPERATED BY A FRANKLIN MOTOR S#7T-450 3 PHASE 25 HP 480 VOLT WITH A BERKELEY PUMP MODEL #2366159020. THE PUMP IS IN A 10" CASING. THE SCREEN IS SITTING AT 47-67'. THE WELL IS 88' DEEP AND THE PUMP SITS AT 74'. THE PUMP HAS THE CAPABILITIES TO PUMP 400 GPM BUT IS PROGRAMMED NOT TO EXCEED 360 GPM & SHOULD HAVE NO GREATER DRAW DOWN THAN 45'. IT HAS A 5" GALVANIZED DISCHARGE PIPE & 4" SENSUS WATER METER WITH 4" PIPE TO THE DISTRIBUTION LINE. THE PUMP'S MOTOR IS CONTROLLED BY A TELEMATIC VARIABLE FREQUENCY CONTROLLER, WHICH REGULATES THE VOLUME OF WATER TO BE PUMPED ACCORDING TO THE WATER PRESSURE OF THE DISTRIBUTION SYSTEM. THE TELEMATIC CONTROLLER IS CONTROLLED BY THE INFORMATION PROGRAMMED INTO THE S.C.A.D.A. SYSTEM LOCATED AT THE CITY SHOP. REPLACED 29' OF LAST TWO SECTIONS OF PIPE IN 2007.	

Figure 1- Images of the laminated system description posted within the pump house.

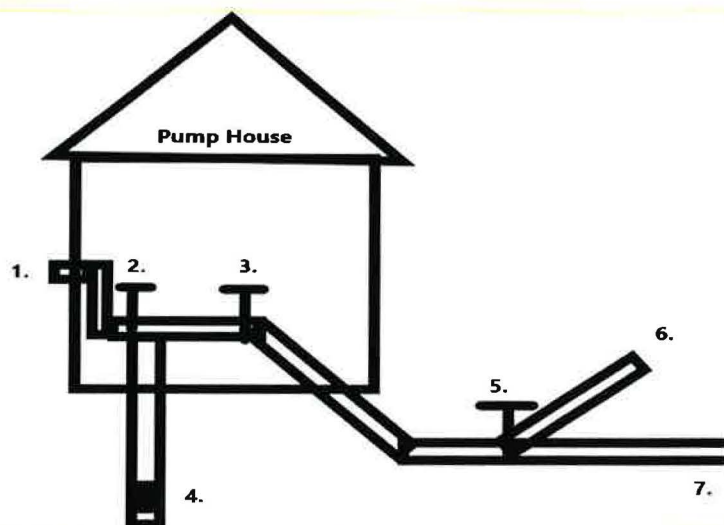


Figure 1a- System diagram of Well #19- 1. Discharge, 2. Bypass to discharge valve, 3. Main valve to distribution, 4. Submersible 25 Hp pump @74' depth, 5. Diversion valve to "Splash Pad", 6. Pipeline to "Splash Pad", 7. Pipeline to municipal system.



Figure 1b- Valve for diversion to the "Splash Pad".



Figure 1c- "Splash Pad" located northeast of the pump house, within the Fruitland Community Park.

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
GPM Totalizer	Flow-through	McCrometer	E7000-000	Unknown	2" dia	Unknown

2. Measurements: The pump is controlled by a VFD set at 50 psi target pressure. Readings were recorded from the GPM totalizer at the start and at 2- and 5-minute intervals. Total testing time was 5 mins.



Figures 1.1 & 1.1a- Photo (facing east) of the pump house and measurement equipment as set up for measurements.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

Start: 342,740 Gal

2 mins: 343,290 Gal (275 GPM)

5 mins: 344,120 Gal (276.7 GPM)

AVG Rate= 276 GPM, approx. 0.61cfs

F. VOLUME CALCULATIONS

NA, Municipal beneficial use- Emergency Backup and seasonally for Splash Pad in park.

G. NARRATIVE/REMARKS/COMMENTS:

The City of Fruitland developed Well #19 (the POD) to operate as part of an emergency backup for the main municipal Right 65-23088, which diverts surface water from the Payette River. The permit of right 65-13827 was developed as a Non-RAFN Municipal right. The right place of use (POU) is the entire service area for the City of Fruitland. No changes were made to the permit POU for licensing. There are about 6 wells remaining for municipal use in an emergency. Since its development the well has only been utilized a couple of times to provide back pressure to fill the water tower and municipal service in the vicinity of the well for the emergency backup system. The POD is currently used to provide irrigation to the Fruitland Community Park and to provide water for the "Splash Pad" recreational water area in the park. Before the wells could be used for the emergency backup system, they would all need to be processed through chlorination systems, which are not connected for regular use as it does not require potable water. To make an accurate record of the operating pressure for the backup system the surface water plant for Fruitland would need to be taken offline. The complicated set of circumstances for emergency operation make it unreasonable to ask for it to be run for field exam purposes.

Flow measurements were taken through the 3-inch discharge outlet using a 2-inch hose to a GPM totalizer. The measured average output for the current system is approximately 0.61cfs at an operating pressure of 52 psi. The measurement system used for the exam was believed to be the best option available for an accurate measurement, as the system set up for the totalizer restricted the output of the well more than running the unrestricted system for the splashpad and irrigation system in the park, which are supplied by the 4-inch distribution line. Water Treatment Superintendent Scott MacKenzie was the escort for the field examination and provided additional details related to the emergency back up system. Scott stated that well #19 is intended for providing back pressure to the municipal system and municipal service in the vicinity of the well, while the other wells in the system provide service to other areas and fill the city water tower. I am recommending a rate of 0.61cfs on the license.

I am recommending that the license be issued with conditions 124, 103, 01M, 102, and 004.

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>	
MUNICIPAL	1/01 to 12/31	0.61 CFS	

Totals: 0.61 CFS

2. Recommended Amendments

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

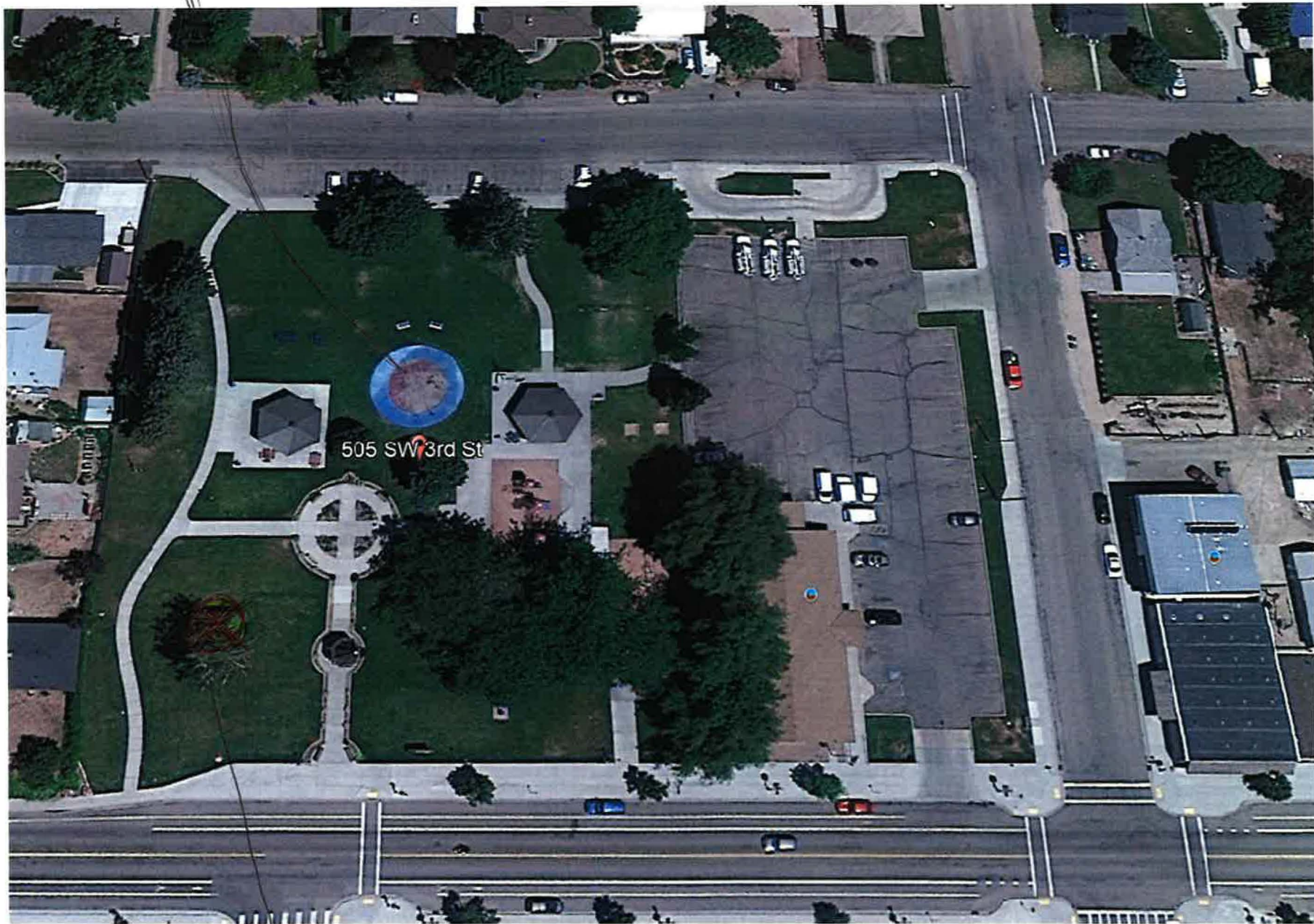
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ None

I. AUTHENTICATION

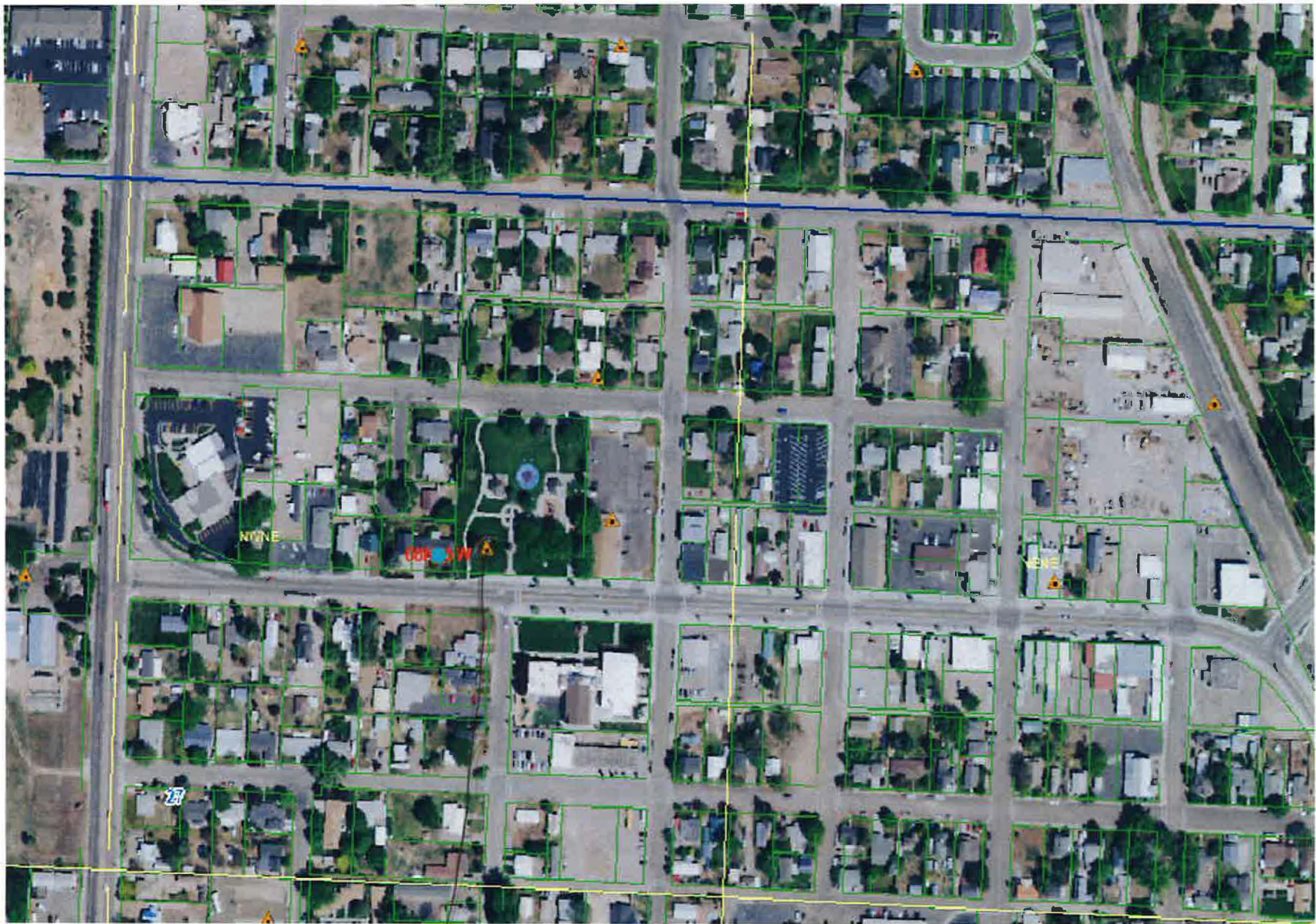
Bob Howe -Water Resource Agent

Field Examiner's Name  Date 3/12/20Reviewer  Date 3/11/24

"Splash Pad"



Pump House
Well #19



Pop - Rino have
well #19

Howe, Bob

From: Scott MacKenzie <SMacKenzie@fruitland.org>
Sent: Tuesday, May 2, 2023 12:43 PM
To: Howe, Bob
Cc: Scott MacKenzie
Subject: Well #19 Water Test

CAUTION: This email originated outside the State of Idaho network. Verify links and attachments BEFORE you click or open, even if you recognize and/or trust the sender. Contact your agency service desk with any concerns.

Bob, we will see you May 15th @ City Hall. Thanks Scott MacKenzie

Howe, Bob

From: Howe, Bob
Sent: Tuesday, May 2, 2023 8:50 AM
To: jcampbell@fruitland.org
Subject: Field Exam Scheduling- Permit 65-13827
Attachments: 65-13827 Permit P1.PNG; 65-13827 Permit P2.PNG

Good Morning Jerry,

I am reaching out to you this morning in regard to City of Fruitland Water Permit 65-13827. Our state office is currently working on catching up the backlog for field exams in the Western Region. We need to arrange a time for a field examination of the point of diversion identified as a well at 505 SW 3rd St, Fruitland, ID. In previous correspondence you referred to the site as Well #19.

At the time of the exam we will need access to the well/pump, so we can take flow measurements. During the examination we will need to have the pump running at the rate of flow you would like the system to be licensed for.

Please let me know the soonest possible time convenient for you to arrange to meet with us, provide access, and answer any questions regarding the system.

Feel free to reach out to me if you have any questions or concerns. Thank you for your time and assistance in this matter.

Regards,

Bob Howe

Water Resource Agent

Phone: 208-287-4847

Bob.howe@idwr.idaho.gov



IDAHO DEPARTMENT OF
WATER RESOURCES

Mailing Address:

IDAHO DEPARTMENT OF WATER RESOURCES
PO BOX 83720
BOISE, ID 83720-0098

Hemenway, Sandy

From: Jerry Campbell [jcampbell@fruitland.org]
Sent: Tuesday, November 12, 2013 2:14 PM
To: Hemenway, Sandy
Subject: RE: water Right 65-13827 City of Fruitland

This well #19 Located at 505 SW 3rd St.. This is our best producing well. We operated this well on a constant basis until 2010. Now this well is kept in active status for emergency use. We need to maintain this water right. What is my next step?

Jerry

From: Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]
Sent: Tuesday, November 12, 2013 11:00 AM
To: Jerry Campbell
Cc: Hemenway, Sandy
Subject: FW: water Right 65-13827 City of Fruitland
Importance: High

From: Hemenway, Sandy
Sent: Tuesday, November 12, 2013 10:32 AM
To: jerry.campbell@fruitland.org
Cc: Hemenway, Sandy
Subject: water Right 65-13827 City of Fruitland
Importance: High

Active Well for this Water Right

MEMORANDUM

Date: November 12, 2013
To: Water Right File 65-13827
From: shemenway
Re: Well Abandoned

Jerry Campbell stated that the well has not been used since June 2010, that it was a back-up well, and abandoned. That they have a surface water system now from the Payette River (infiltration gallery, pump system and treatment plant). Jerry will check with the city engineers to see if they should file a transfer to show the system as it currently exists. Currently the entire system is a looped system, with the primary source being the surface water source, and the wells being the back-up sources. I told Jerry if he does not file a transfer, that they should file a Notice of Abandonment of Water Right form. Jerry will get back with the department and let them know their intentions. Scanned and emailed Jerry copies of everything on the left side of the file.

Jerry Campbell (208)452-4421, jcampbell@fruitland.org; cell: (208)707-4763.