

Lake Limerick Water

Manager's Report

September 9, 2019

Lake Limerick Water System: September meeting for August 2019.

The general condition of the water system is good with water availability to the customers good.

Well Conditions:

- **₩ell #1** is operating normally.
- ₩ell #2 is still in stand-by and is considered a Seasonal use per Water Rights.
- ₩ells #3A and #3B is online, well 3A is offline issue with check valve.
- **₩ell #4** is operating normally.
- **₩ell #5** is operating normally.
- **Well #6** is operating normally. ♣

Water Usage:

8.4 million gallons were pumped in total from the sources for August and 7.0 million gallons are documented as "sold". The loss for the month is 16.1%. Total loss for the year is 19.2% down from 19.8% last month. (Per DOH, all real and apparent losses are considered DSL if it is before the customers meter) State requirements for compliance is less than 10% for the next year, based on a 3-year average of the three previous years. Currently our DSL has dropped below the 10% mark for the three-year average at 9.4%.

Customer Concerns:

LLWS had 16 regular locates.

Water Sampling:

The bacteria samples for August are satisfactory.

Thoughts:

Past, present, and future...

- I. WSP update to meet compliance. On Going
- II. Looking into the cost of doing a pilot program to remove the Iron and Manganese from the water by filtration @ well #2 using Pyrolusite. I will present this when complete.

- III. Well #2 parts room had to be vacated do to a 2-foot piece of Asbestos Cement pipe that should never have been there. As time permits, I will be creating a standard operating procedure for Asbestos Work Practices. The room has had an Air Quality test done last week and sent to a laboratory for analysis. Once I get the status of the air quality and all clear, I will be able to regain access to the parts room. Asbestos is one of the TOP TEN company violations in the general industry per WA L&I.
- IV. We have a leak again at the end of Saint Andrews, I have Quantified it being probably around 230,000 gallons since the last read. We have an apparent leak again in the system as you can see by the volume of DSL for the month. I drove around and inspected hydrants, boxes, standpipes, and any visible signs of a leak. The only one I found was on Saint Andrews. That connection has been clamped twice in a 3-month period. Sean agrees with me to run a new line up to the connection. This will take place this week in September.
- V. Kooltronics cooling system issue at well #6. After replacing all the items in the circuit, I found a diode that essentially assists with suppressing transient voltage behind the wiring assembly. Ordered part and will install this week.
- VI. Working on getting quotes and estimates for capital projects. Have info on source meter upgrades, well level sensors, vfd upgrades at well 1 & 2. Ernie Klimek and Lynn from ERWOW recommended installing soft starts to all wells just like we have @ well 5, essentially installing vfd's for these motors as well.
- VII. Exercising of valves and hydrants Record keeping is being kept on a DOH standard Document. Several valves are inoperable or need locating as they are buried under county roads. We will be flushing the system starting September 16, 2019 until complete. A letter will be provided for distribution to members for a notice.
- VIII. Leaking valves getting quote from Kevin @ NWS; Dartmoor and Balbriggan Saint Andrews and Shamrock Ballantrae and Mason Lake Road (Hire out, everyone is very busy)
 - IX. VFD & Pressure tank upgrade status: Tank removed, and isolation valve found. Ram electric to re-run conduit and wiring from Generator to building as it was tied to concrete pedestals supporting the tank.
 - X. Researching extension ladders to be mounted below all reservoir cages for safety. Extensions have a fold over assembly that prevents access. Research is being sought through BakerSilo. Email has been sent with links to photos. Norm from BakerSilo is coming out for a site visit this Thursday morning @ 8 am to review for OSHA compliance and to discuss hatch improvements.

- XI. Continuing to insulate pump houses and complete well 3b wellhead protection.
- XII. Power issues @ well 3. VFD's fault at an input phase loss. Waiting on a reply from the distribution engineer about installing the third transformer time frame.
- XIII. Franchise agreement with the county has been submitted. I signed the notary Agreement on behalf of Lake Limerick. Just waiting on an approved copy from the county.
- XIV. Part of item IV above. Well 3A pump needs to be pulled and a new check valve installed. Contacted Mark Moore with Pacific NW Pumps and he is working on repairing the check valve, test pump, inspect screen with camera to determine if cleaning is needed during removal.
- XV. Installing UPS backup power to PLC and Radios at each well. Will continue as time allows.
- XVI. 660 Aycliffe service install from main is almost complete. Pav-X will be doing the finishing road work. Completed