



Lake Limerick Water

Manager's Report

February 7, 2020

Lake Limerick Water System: February 2020 meeting for January 2020.

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

Well Conditions:

- ⊕ Well #1 is operating normally.
- ⊕ Well #2 is still in stand-by and is considered a Seasonal use per Water Rights.
- ⊕ Wells #3A/3B are operating normally.
- ⊕ Well #4 is operating normally with oversight.
- ⊕ Well #5 is operating normally.
- ⊕ Well #6 is operating normally.

Water Usage:

4.4 million gallons were pumped in total from the sources for January and 3.7 million gallons are documented as "sold". The loss for the month is 16.7%. Total loss for the year is 16.7% up from 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 is above the 10% mark for the three-year average at 14.6% for the next year.

Customer Concerns:

LLWS had 6 regular locates.

Water Sampling:

The bacteria samples for January were unsatisfactory.

Thoughts: Past, present, and future...

Future:

- 1) DOH Assessment follow-up from October 2019 Coliform Treatment Technique Trigger:
By January 31, 2020, submit photo documentation that the following sanitary defects have been corrected:
 - The level gauges on Well 1 Reservoir and Well 4 Reservoir have been covered or modified to prevent entry of contamination. *Thank you for the submitting photos of the temporary fix on Well 1 Reservoir. This has been extended to March 31 2020 by DOH, NWS is in charge of compliance so they will have the info.*
 - ~~The hatching on reservoirs 3, 4, and 6 have been upgraded to prevent entry of contamination.~~ **See attached pdfs regarding assessment and email.DONE**
- 2) Booster pump @ well 4 will be replaced in January. The pump is failing and can be heard outside the pumphouse. This pump has a datasheet with a pump curve from 1966 and has finally meeting it's end of life. Cost is \$2,907.38 and has been ordered through H.D. Fowler. Is sitting on floor for installation.
- 3) WSRB evaluation review for fire suppression from Tim McKern, the Fire Chief of Central Mason Fire & EMS was forwarded to Kevin at NWS on 12/16/2019 to be completed prior to April as they will have much more Data to enter than I will.
- 4) January 9th, 2020 @ 12pm, 811 Safety committee review of complaint filed by Rainier Valley Construction against Lake Limerick for Main damage. I was found at fault, I took the NUCA Dig Law class to forfeit a \$1,000 fine to lake limerick. I still did not get the answer regarding exactly how you put the triangle down with the direction of the tip to point at?? I am contacting Don Evans with a drawing to verify this for two gas line installs on Saint Andrews this coming week.
- 5) Installation of well depth transducers
 - a) Well 3b depth 167' - MEAS KPSI 330 4-20mA output 0-75 psi 180' cable length, cost \$1,109.95 + T/S
 - b) Wells 1,2,3A,4,5 each use a MEAS KPSI 700 4-20mA, 0-60 psi, 150' cable length, cost \$734.95 ea. + T/S
 - c) Install of sounding tubes will be done by contractor, transducers can be installed as we want.
- 6) Schedule a meeting to address the 2009 mainline replacement project map by Morrisette and establish additional issues addressing pressure zones, missing hydrants, dead ends, and more.
- 7) VFD for Well #2 – This VFD is mounted and some wiring and plumbing needs to be completed before commissioning the drive.

- 8) VFD for Well #1 – Received the VFD, it is on site at well 1. When well 2 is completed , you will have to hire Ram Electric to install the VFD. \$\$\$\$
- 9) Badger Analytics upgrade in progress – software is being populated by badger and UMS, laptop and accessories have arrived, and I am installing antennas and components into the F350 as time allows. Laptop is in the office, components for the rest of the antennas is in the right middle compartment of the F350.
- 10) Pilot program to remove the Iron and Manganese from the water by filtration @ well #2 using Pyrolusite. Ron Gamble from **Surplus Management, Inc. d.b.a. WATER SURPLUS** will be in the area the week of January 20th. He will give me a couple days' notice to meet the 22nd or 23rd of January. **The reason I am trying to get ahead of the game is the EPA reviews contaminants every 6 years and Manganese is one of the top contaminants they have been seeing issues with. It may become a primary contaminant and must be removed prior to introducing water from this source.**
- 11) VFD & Pressure tank upgrade status: **Ram electric to re-run conduit and wiring from Generator to building as it was tied to concrete pedestals supporting the tank. Re-wire well head conduit from building to well head.**
Addition: Replace booster pump building, move VFD's and Line reactors to booster room per ABB. Will require adding more underground conduit raceway for control wires.
- 12) Well 5 is breaking suction above 35 gpm. Well pumper report shows the system pump 120 gpm for four hours when initially drilled. Will need to pull pump, bail and surge the Aquifer to establish flow. I will estimate around \$15,000.00 as a not to exceed in event there are other failures of anything below the surface of the well head seal and monies should come from WCR. Mark Moore of Pacific N.W. pumps

Present

- 1.) 980 E Saint Andrews had a coliform trigger only Repeat confirmed the presence of coliform @ 980 only, Up and Down Stream were good and so were Sources. Sean considers it weak, but DOH requirements are to do a level 2 assessment. NWS is taking care of it per contract.
- 2.) Taking care of employee is valuable to an organization, offering what it would take to keep me, I am grateful but if the Business would have taken care of the employee from the start then you would retain good quality employees. Do your research, call other Water Systems, Lake Cushman, Timberlake's, Fawn Lake and see what they have in their EMPLOYEE handbooks about specific positions the department requires. I will send a copy of an excerpt from LCMC.

Past

- I. Baker Silo retrofitted and upgraded all concrete reservoirs to DOH/OSHA standards-in December.

- II. WSP update to meet compliance. On Going – draft should be supplied early 2020 for review.
- III. Representative from T Bailey came out to look at the steel tank to ensure it meets DOH and OSHA compliance. He will be sending me a quote shortly. He did take a sample of the tank paint chip we found lying on the ground. His quote was, “if it is red, it’s lead” and sure enough the tank will need cleaning and encapsulated due to lead based primers.
- IV. Continuing to insulate pump houses and complete well 3b wellhead protection.
- V. Installing UPS backup power to PLC and Radios at each well. Will continue as time allows.