



Lake Limerick Water

Manager's Report

October 10th, 2019

Lake Limerick Water System: October meeting for September 2019.

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 and #3B is online, well 3A is offline issue with check valve.
- ✚ Well #4 is operating normally.
- ✚ Well #5 is operating normally.
- ✚ Well #6 is operating normally.

Water Usage:

7.0 million gallons were pumped in total from the sources for September and 4.9 million gallons are documented as "sold". The loss for the month is 30.7%. Total loss for the year is 20.5% 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 has dropped below the 10% mark for the three-year average at 9.8%.

DSL this month 2,175,096 gallons from Aug. 30th to September 30th that is 32 days.

$2,175,096 \text{ Gal.} \div 32 \text{ days} = 67,971.75 \text{ gpd}$

$67,971.75 \text{ gpd} \div 24 \text{ hr. day} = 2,832.15625 \text{ gph}$

$2,832.15625 \text{ gph} \div 60 \text{ min.} = 47.20 \text{ gpm}$

$47.20 \text{ gpm} \div 60 \text{ sec.} = .79 \text{ gps}$

Many valves show signs of leakage since removal of debris from valve risers.

Customer Concerns:

LLWS had 7 regular locates.

Water Sampling:

The bacteria samples for September 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. Ron Gamble from **Surplus Management, Inc. d.b.a. WATERSURPLUS** will be in the Portland area and we are scheduled to meet November 14th around 2 pm for those interested in attending.
- III. Well #2 parts room Asbestos contamination cost \$524.00 to advanced Environmental for disposal of pipe and air monitoring. I was given an all clear and resumed use of these areas.
- IV. We have a significant issue with distribution system loss. I am aware of the leaking valves and awaiting approval to use capital mainline reserves to replace these failing valves. When we flush the system, we will have identified even more failures/leaks. These need to be addressed promptly to ensure adequate service to our retail customers. I sent a quote to Don regarding the four separate areas totaling \$27,000.00 to repair. **See attached quote Lake Limerick Valve Replacement 4 Locations.pdf attached.** Once these leaks are corrected, we will have to observe consumption to see how it reduced the numbers. **I feel we need a quicker and more effective method of getting funds to replace faulty assets. I work here every day and things just keep piling up on the things I need to get done to maintain our commitment to our customers.**
- V. Several valves need locating as they are buried under county roads. While cleaning risers we have identified some buried or leaking areas. Many lids have red paint on them. Once I uncover all the lids I will paint them blue until we determine they are bad then will be painted red. Sean and I noticed someone painted the shut-offs for well 6 on Balbriggan yellow (yellow means gas, even though the lid says water).
- VI. 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.**
- VII. 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. Norm @ Baker Silo did a site visit and sent a quote to bring us in compliance with the Dept. of Health and Osha Compliance. **See attached quote Lake Limerick Concrete Reservoir Upgrades.pdf**

Representative from TBAiley 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 to be cleaned and encapsulated due to lead based primers.

VIII. Continuing to insulate pump houses and complete well 3b wellhead protection.

IX. Power issues @ well 3. VFD's fault at an input phase loss. PUD3 added a Can and transferred single phase off the 3 phase Open delta but did not correct the problem. I have spoke with Bruce from Platt electric and he stated that the purchase of ACS550 drive that are double the motor size need to be installed then De-rated to handle the single-phase loading. The ACS355 drive Nicolson put in do not like single phasing and do not meet the power needed to sustain the correct performance from the boosters. The ACS550 drives will cost around \$3700.00 + tax/commissioning. See Platt Quote 299808 Attached

X. 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.

XI. 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.

XII. Installing UPS backup power to PLC and Radios at each well. Will continue as time allows.

XIII. 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. Mark Moore of Pacific N.W. pumps will do this along with well #3 repair.

XIV. I have ordered the Upgrading of the Badger Analytics, need to purchase a specially designed rugged laptop for use.

XV. Going to meet with Kevin in October to review water rights and try to organize the filing cabinet correctly.

XVI. Well #1 & Well #2 VFD install and status. See Platt Quote 295695 is an upgraded quote to handle open delta 3ph power. This update created needed hp upgrade and is ordered and still under budget of the \$8500.00 allocated. Well #2 tank has been removed and valve isolated and 3 "line was capped using a Sch40 3" PVC Cap. I have acquired the new Well-Xtrol wx255 91 Gallon pressure tank and fittings for plumbing. Have to reset center fence post and reinstall fencing.