



**Beverly Beach Improvement Club
Annual Report of Water System Operation
November 2017 – October 2018**

The following is a brief outline of the operations and maintenance that has taken place over the past twelve months on the Beverly Beach Improvement Club water system.

Water Production

Over the past twelve months the production from the system's source was:

Date	Well Meter Reading	Well Production	Days	GPD
11/29/17	83412300	186,630	29	6,436
12/29/17	83556760	144,460	29	4,981
01/31/18	83742600	185,840	31	5,632
02/26/18	83858100	115,500	26	4,442
03/30/18	84071700	213,600	32	6,675
04/30/18	84288200	216,500	31	6,984
05/30/18	84571900	283,700	30	9,457
06/29/18	84917100	345,200	30	11,507
07/30/18	85431900	514,800	31	16,606
08/31/18	85843300	411,400	32	12,856
09/28/18	86085870	242,570	28	8,663
10/31/18	86296400	210,530	33	6,380
Totals		3,070,730 Gal		8,413

The 3,070,730 gallons of water produced translates into an average of 8,413 gallons per day, which in turn translates into 78 gallons per connection per day (108) connections.

Water Quality

The water quality for the system was good, the monthly bacteria samples met D.O.H standards. Well depth averaged 227.4' static.

Equipment Miscellaneous

Based on treated water quality ATEC system is running well.

Miscellaneous Actions

11/22/17- Flushed Alder/Beach Drive; 6,000 gallons of water flushed to waste.

12/08/17- Installed pre-filter sample tap.

12/13/17- Post filter CL2 injection pump offline. Pre-filter dosage is meeting and exceeding chlorine demand providing free chlorine residual in reservoir.

12/15/17- Flushed north end of system; 6,000 gallons of water flushed to waste.
03/16/18- Reservoir hatch seal gaskets “ok”, hatch corners are corroded, no evidence of contaminant entry.
03/19/18- Flushed north end of system; 12,000 gallons of water flushed to waste.
04/02/18- Flushed north end of system; 9,000 gallons of water flushed to waste
04/02/18- Repaired pre-filter chlorine injection line.
04/16/18- Attended meeting with contractors to discuss Spruce Street mainline extension.
04/18/18- Flushed system; 6,000 gallons of water flushed to waste
04/03/18- Performed chloride/conductivity test.
04/25/18- Onsite with contractor for Spruce Street mainline extension. Pressurized and tested new construction – PASSED.
05/02/18- Flushed north end of system; 6,000 gallons of water flushed to waste.
05/14/18- Repaired leak on chlorine injection line.
05/18/18- Installed meter at Lot 137.
05/18/18- Flushed north end of system; 6,000 gallons of water flushed to waste.
05/28/18- Yard Maintenance; mowed around all hydrants and valves in system.
05/30/18- Checked service leak at 4294 Maple, excavated and found old gate valve leaking.
05/30/18- Trico Spruce Street Project; cut out Beach Drive tap and installed tee and 2” gate valve, extended poly line and installed blow-off and four (4) services. Backfilled.
06/08/18- Bi-weekly system flush; 6,000 gallon of water flushed to waste.
06/08/18- Beach/Spruce hydrant valve may be detached from stem. Opens, but does not closed. Closed foot valve and bagged hydrant.
06/20/18- Hydrant Inspections. #4: 5 ¼” cap stuck. #10: Hydrant left full open. Closed, freed caps. #9: All caps stuck. Freed all. #6: Lower valve stem break under breakaway coupling. Closed at road valve. All other hydrants operate and drain normally.
07/23/18- 4298 Basswood Cross Connection evaluation (well)/water system connection approval evaluation.
8/01- Met with AquaTech and Robin for well pump inspection.
8/01- Replaced pre-filter chlorine injection point. Faulty check valve/plugged injector.
8/06- Cleaned and refilled post filter chlorine tank, primed pump.
8/10- Took monthly well depth with well depth sounder, well measured 229.15’ static.
8/13- Collected monthly compliance bacteria sample at 4170 Beach Drive.
8/13- Collected compliance Chloride & Conductivity sample.
8/13- Pre-filter chlorine injection line clogged with debris. Flushed line, flow increased.
8/17- Well drawdown test; 224.5’ static and 228.8’ pumping.
8/20- Collected annual compliance nitrate sample at S02 post reservoir tap.
8/24- Replaced chlorine pump injection tubing and O-rings.
8/31- 9,600 gallons of water was backwashed in August.
9/05- Took monthly well depth with well depth sounder, well measured 229.2’ static.
9/05- Observed filter backwash cycle at programmed 12 hour interval. Backwash cycle does not run until wash water is clear. Increased backwash duration from 5 to 6.5 minutes per vessel. 3,120 gallons per backwash at 12 hours filter run time.
9/05- Fire protection meeting with board and fire chief.
9/07- Flushed North end of system. 6,454 gallons flushed to waste.
9/07- Repaired hydrant valve stem coupling. Two new pins and gasket seal installed.



9/07- Chlorine pump air locked due to stuck check valve on auto prime air relief. Purged air and freed check valve.

9/17- Collected monthly compliance bacteria sample at 4010 Alder.

9/19- Installed 1" meter on backwash line.

9/21- Bi-weekly system flush; 6,000 gallons to waste.

10/03- Metered backwash flow reading much lower than expected.

10/05- Bi-weekly system flush; 5,000 gallons to waste.

10/08- Collected monthly compliance bacteria sample at 1868 Foliage.

10/10- Resampled monthly bacteria at 1868 Foliage, due to incubator malfunction at Edge.

10/10- Manual backwash.

10/31- Took monthly well depth with well depth probe, well measured 223.8' static.

10/31- Bi-weekly system flush; 4,413 gallons to waste.