Installation and Step Pumping Test of
Test Well TW-1
Sterling, New York

December 17, 2021

INTRODUCTION

This is a report on the construction and testing of Test Well TW-1 in Sterling, New York. The Town's water system is presently served by a wellfield consisting of two wells, Well 1 and Well 2, on a property south of Route 104A, about a mile west of Sterling. Our understanding is that the Town wants to increase the wellfield's production capacity, and chose to install a test well to assess the potential for developing an additional supply well at the site.

HydroSource Associates (HSA) was hired to conduct a hydrogeologic evaluation, and then to run geophysical surveys to identify promising sites for additional wells. The results of this work were provided in a report dated December 7, 2020. The work resulted in the identification of three proposed test well sites on the property. A decision was made to drill a test well at Site 2, the site closest to Well 1. HSA was asked to log the well, collect samples, perform sieve analysis, and conduct a step test on the test well, if its productivity warranted. This information was to be used to assess whether the test well site appears to possess the hydrogeologic characteristics necessary to support development of a large-diameter well at this location on the property, and whether and what specific further efforts towards this objective should be undertaken.

Figure 1 shows the location of the test well, Well TW-1. TW-1 is about 90 feet southwest of Well 1 and 235 feet northwest of Well 2. Figure 1 also shows the location of a dug well that is a little more than 30 feet east of Well 1, and about 120 feet northeast of TW-1.

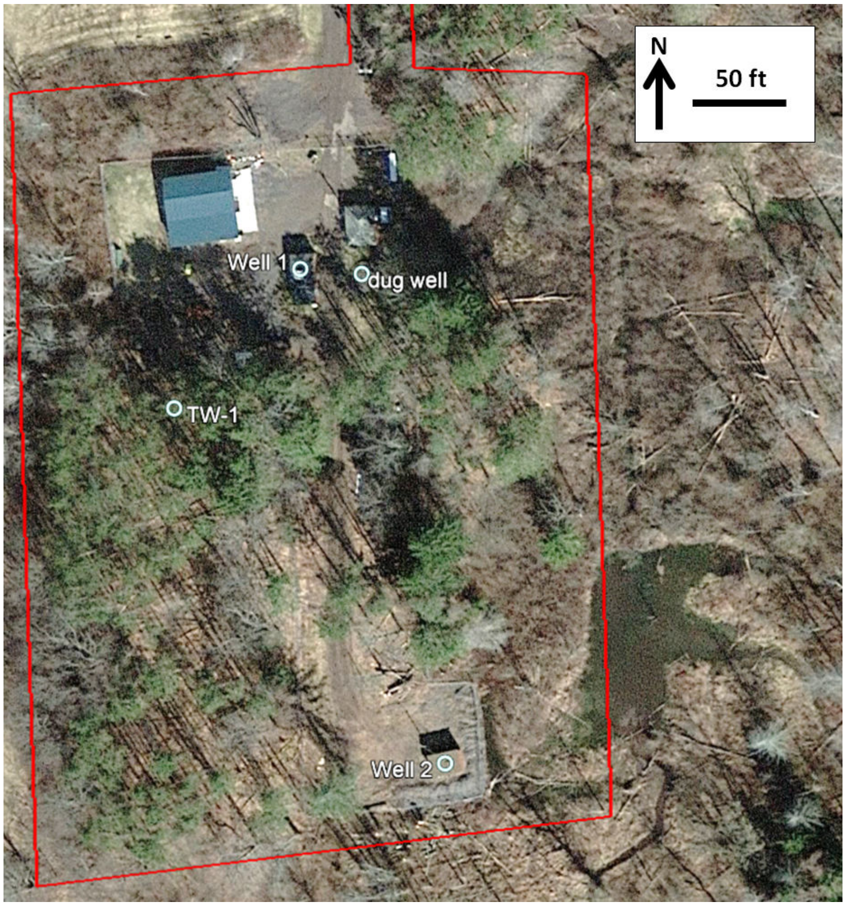
Our understanding is that Well 1 was drilled between June 1 and June 8, 1967. It is described as a 22x18x12 well, with a total depth of 46 feet. It hit "boulders, sand & gravel, medium to coarse" from 21 to 24 feet, and "gravel & sand" from 24 to 46 feet. The driller's report states that the well has 10 feet of screen, but the slot size is not provided.

The dug well was constructed using concrete well tile that is 16 feet in diameter. The well was sounded and is apparently about 13 feet deep.

No information regarding construction specifications was provided for Well 2, although it is assumed to be screened in the sand and gravel sediments and constructed in a generally similar manner to Well 1.

The wellfield area is generally flat with very little relief, such that the ground surface elevation at each of the wells is similar.

Figure 1 - Town Wellfield



WELL TW-1 CONSTRUCTION

Test Well TW-1 was installed by Frey Well Drilling of Alden, New York, using a Foremost DR-12 dual-rotary rig. The well was completed with seven-inch-diameter casing and a six-inch-diameter screen as shown in Figure 2. A seven-inch-diameter casing was used in order to accommodate a six-inch-diameter submersible test pump, which was expected to allow testing of the well at a pumping rate of as much as 350 gpm.

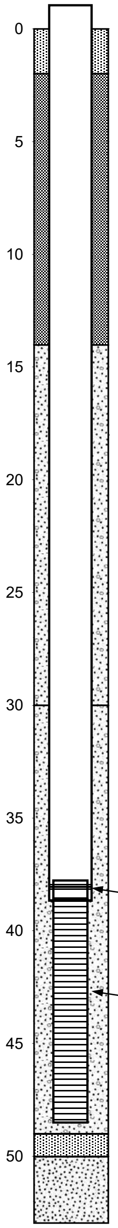
The geophysical surveys used to site the test well indicated that sand and gravel might underlie a layer of finer-grained sand, silt, and clay lacustrine deposits. The objective of the test well installation was to test whether sand and gravel did indeed exist beneath this location, and whether it constituted a productive aquifer that could support development of an additional groundwater source for the Town.

Figure 2 - Well TW-1 Log

Project: Sterling, NY
Well: TW-1
Completion date: 10/26/21
Well depth: 48.5 ft

Driller: Frey Well Drilling
Water level: 3.0 ft below ground

Graphic Log



K-packer.

38.5-48.5: 100-slot screen.

Lithology

0-2: Reddish brown loam, silt, and FG sand.

2-14: Red-brown VFG sand, silt, clay. Loose.

14-30: CG gravel and sand, well rounded.

30-49: CG sand and gravel with some silt and FG sand. Gray-black with some reddish clasts. Well rounded. 100+ gpm airlift yield throughout.

49-50: VFG sand, silt with gravel. More angular (till-like). Sample cements at bottom of bucket. No airlift water production.

50-53: Red-tinted VFG sandstone, silt, and angular gravel, clasts are >70% red sandstone.

NOTES: Drilled by advancement of 7-inch-diameter, using a dual-rotary rig. Set 10 feet (two 5-foot lengths welded together) of 100-slot stainless steel screen (5.675-inch diameter) in interval from 38.5 to 48.5 ft.

The upper portion of the test well first passed through approximately 14 feet of reddish-brown very fine sand, silt, and clay. Well-rounded, coarse sand and gravel with silt and fine sand was observed starting at a depth of approximately 14 feet and continuing to 49 feet. Airlifted water production gradually increased with depth as drilling proceeded past 14 feet. Site conditions did not make it possible to conduct an accurate measure of the well's airlift yield, but a rough visual estimate of 100+ gpm airlift yield was consistently observed while drilling through the interval from approximately 30 to 49 feet in depth.

Sediment encountered at 49 feet was comprised primarily of very fine sand, silt, and gravel. Airlift water production ceased at this depth. Red-tinted fine-grained sand, silt, and angular gravel consisting mainly of red sandstone clasts, was observed from 50 to 53 feet. Further drilling was discontinued at this depth based on the local geology and geophysical surveys, which suggested a depth of approximately 50 feet to the low-relief bedrock surface, and based on supporting information from a number of nearby wells that reported the presence of a layer of "red clay and gravel" immediately overlying "red sandstone" bedrock.

The seven-inch-diameter well casing was retracted to a depth of 49 feet, whereupon the borehole naturally backfilled to a depth of about 48.5 feet. An assembly consisting of two, five-foot lengths of stainless steel, continuous-slot screen was telescoped to the bottom of the well. Drill rods were used to push the screen to the bottom, confirm the correct screen depth interval setting, and to hold the screen in place as the casing was retracted to expose the screen to the water-bearing gravel layer. The screen is 100-slot, and the screen assembly includes a figure K-packer at the top that forms a seal between the top of the screen and the inside of the casing, with a welded end plate on the bottom.

The well was airlift-developed for roughly 3.5 hours. The water produced was initially opaque gray, but gradually cleared.

STEP TEST

A step test was performed on Well TW-1 on October 27. The agreed-upon scope of services was to include conduct of a four- to six-hour step test, with a maximum target pumping rate of up to 350 gpm, if possible. As described in more detail below, four, 60-minute steps were performed that ranged in pumping rate from 100 to 350 gpm. Although not part of HSA's proposed scope, it was later requested that we monitor water levels in Well 1, Well 2, and the dug well during the step test, if possible, and provide this information in our report.

HSA was able to monitor water levels in the dug well and Well 1 periodically over the course of the step test that was performed on test well TW-1. We were able to install a transducer in the dug well. Well 1 has a ¾-inch-diameter monitoring tube that extends approximately two feet above ground. The tube allowed use of an electronic hand probe to measure water levels in it, so we were able to do that occasionally during the step test. A transducer wouldn't fit in the monitoring tube, and the tube may be somewhat pinched or otherwise constricted somewhere along its length, as the hand probe sometimes wouldn't descend smoothly down the tube during attempts to measure water levels in Well 1.

A port through the cover on Well 2 was occupied by a 1/4-inch airline, and wouldn't accommodate either a hand probe or transducer. That being the case, water levels were not measured in Well 2.

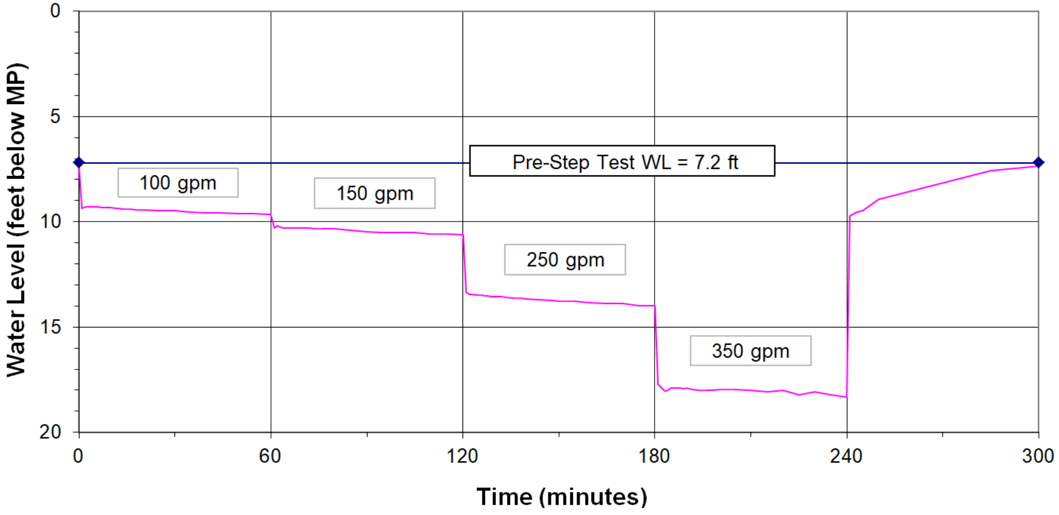
Well 2 was operated on an as-needed basis to supply water to the system while Test Well TW-1 was drilled, developed, and step tested, and for several days thereafter. Given its closer proximity to the test well, Well 1 was shut down throughout the drilling, test well development, and step-testing process to prevent the possibility of Well 1 capturing turbid water. We understand that the water system has no means of recording pumping rates, water levels, or on-off cycle times of the wells. The wells are cycled on when the level in the off-site water storage tank reaches a point where it calls for water.

Water levels were measured manually in TW-1, using a Solinst-style water level probe inside a one-inch-diameter PVC measuring tube. The measurements were reported in terms of depth below the top of the tube, which was 4.2 feet above ground surface. During each of the four hour-long rate steps, water levels were measured using a variable schedule, with measurements made once a minute at the start of each hour, and once every five minutes by the hour's end.

Water levels were also measured in Well 1 and the dug well. Well 1 water levels were measured manually, with measurements made once or twice during each step. Measurements in the dug well were made using a pressure transducer, programmed to take readings at 15-minute intervals.

The step test on Well TW-1 began at 11:15 A.M., and consisted of four steps (Figure 3). The first step was run at 100 gpm, the second at 150 gpm. At the end of the second step it was concluded that the well was productive enough to justify increasing the rate increments from 50 gpm to 100 gpm, and the last two steps were thus run at 250 gpm and 350 gpm.

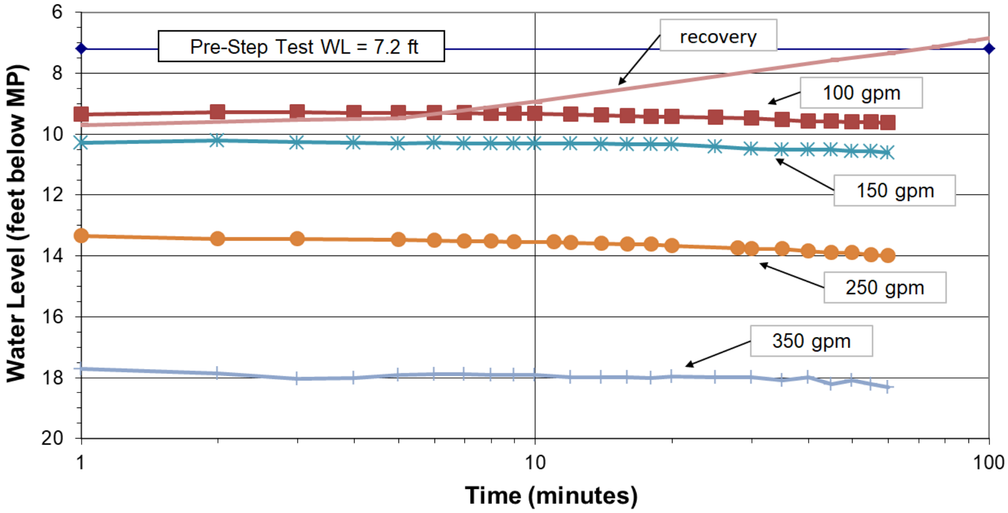
Figure 3 - Well TW-1 Step Test



The water level in Well TW-1 was 7.2 feet below the measuring point just before the test started, or three feet below ground surface after accounting for the 4.2-foot stickup. Most of the drawdown associated with each step occurred during the first minute of the step, with the water level remaining generally stable for the remainder of each hour. By the end of the final step at 350 gpm, the TW-1 water level had declined to 18.31 feet, which amounts to drawdown of 11.11 feet.

Figure 4 shows the same data as Figure 3, but using a logarithmic time axis, with time as measured from the start of each step, or from the start of recovery. In logarithmic time, all of the rate steps show relatively minor rates of decline. Small high-frequency fluctuations in the pumping water level were observed to occur during the 350-gpm step. These are suspected to have been caused by surging action of the test pump presumably in response to the limited annular space between the pump motor and well casing, which may have acted to limit flow from the well's screened interval to the pump intake above the motor. As such, it is possible that a small proportion of the drawdown observed may be a result of head loss that wouldn't otherwise occur in a larger-diameter well that provided sufficient room for an appropriately sized production pump.

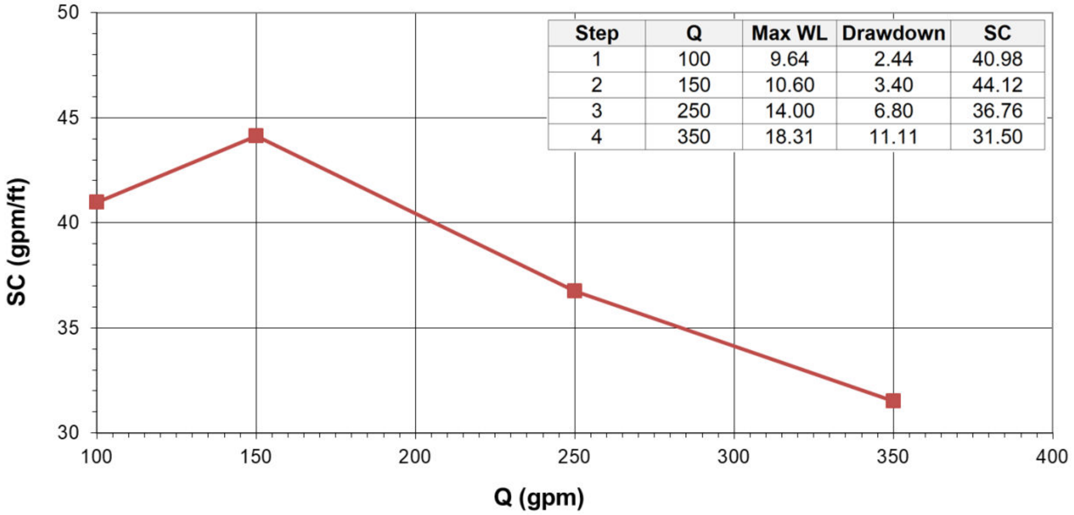
Figure 4 - TW-1 Step Test Semilog Graph



It will be noted that the curve showing recovery begins on a near-horizontal trend, but then steepens after about five minutes. The steeper slope of the recovery curve persists with time, until the recovery water level rises to a level higher than the pre-test water level after about 80 minutes of recovery time. The point where the steeper recovery curve begins probably marks the end of a Well 2 pumping cycle (and this is consistent with the Well 2 pumping cycle pattern seen in the days after the test; see Figure 8). After Well 2 stopped pumping, the water table was then recovering from the combined effects of cessation of pumping in both TW-1 and Well 2. The TW-1 water level recovered to a level higher than the level measured at the beginning of the step test presumably because at the start of the step test the aquifer had not completely recovered from previous Well 2 pumping events and/or airlift development of the test well.

Figure 5 shows the variation of specific capacity with changing flow rate. The first point to make is that the range of specific capacities shown here (31.50 gpm/ft to 44.12 gpm/ft) suggest that the well and aquifer are quite productive. Aside from that, for the final three steps specific capacity varies inversely with flow rate, showing the predictable decreasing efficiency of the well with increasing pumping rate.

Figure 5 - Specific Capacity vs. Flow Rate



Step	Q	Max WL	Drawdown	SC
1	100	9.64	2.44	40.98
2	150	10.60	3.40	44.12
3	250	14.00	6.80	36.76
4	350	18.31	11.11	31.50

Figure 6 shows water levels in Well 1. The water level was rising during the two hours preceding the start of the step test (rising by about 0.3 feet), recovering from airlifting of the test well that took place during the TW-1 well development process that concluded about two hours before the step test began. The water level in Well 1 was 5.31 feet below the monitoring point, or about 3.3 feet below ground, a few minutes before the step test started. Although water levels could not be measured frequently enough in Well 1 to precisely define how the well responded to each TW-1 rate step, Well 1 showed drawdown that was proportionate to the TW-1 rate steps. By the end of the test, the water level had fallen to 8.31 feet, for drawdown of three feet.

Figure 6 - Well 1 Water Levels

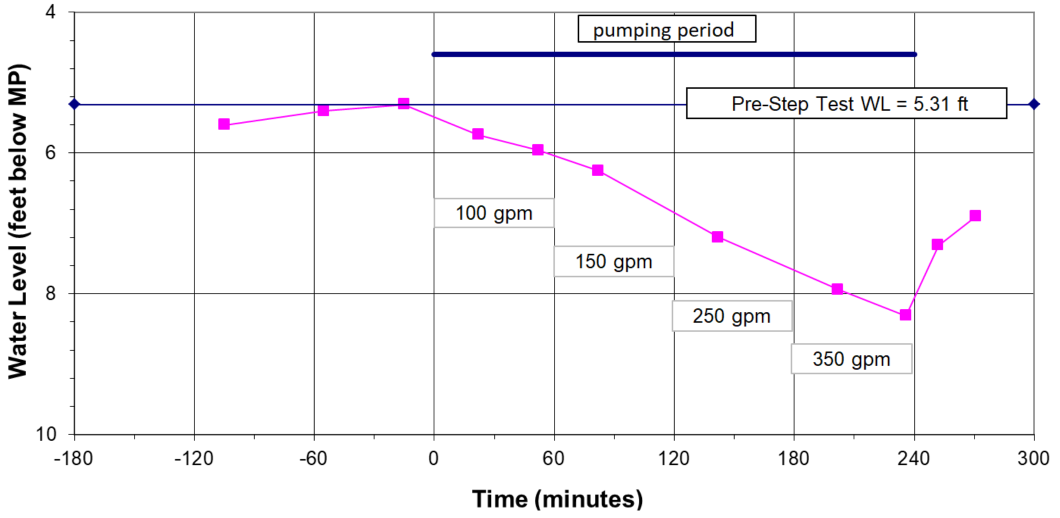
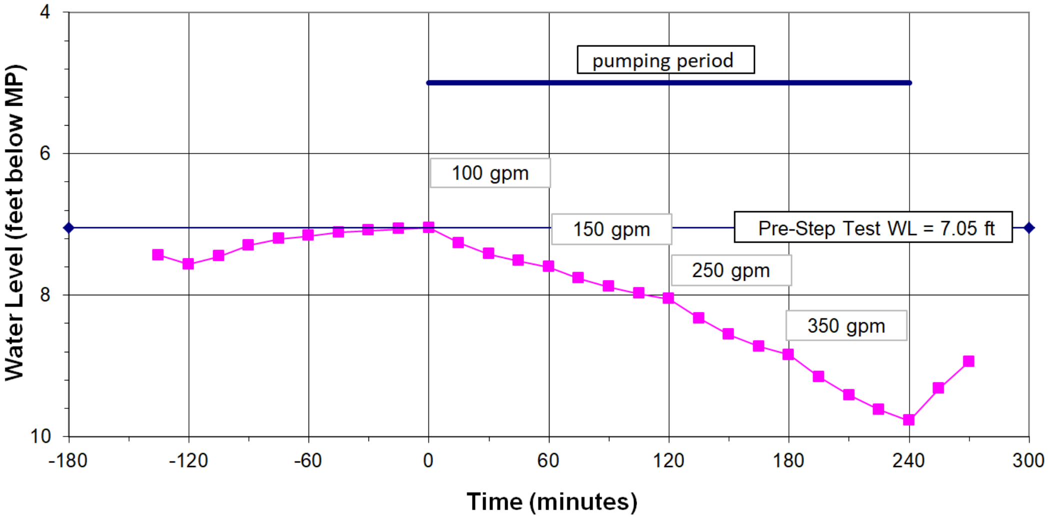


Figure 7 shows water levels in the dug well. As was seen in Well 1, the dug well water level was rising during the two hours preceding the start of the step test. The level rose by about 0.4 feet. The water level was 7.05 feet below the dug well measuring point (a point on the edge of a four-inch diameter PVC vent that extends through the concrete well tile cap; the PVC vent extends approximately 4.2 feet above ground), or about 2.85 feet below ground, just prior to the start of the TW-1 step test. By the end of the test, the water level in the dug well had drawn down 2.72 feet.

Figure 7 - Dug Well Water Levels



A pressure transducer was used to continue measuring water levels in TW-1 for several days after the step test ended. Figure 8 shows TW-1 water levels for the period beginning at 11:15 on October 27 (the start of the step test) through 11:15 on November 1.

The transducer water levels indicate that five complete cycles of pumping and recovery occurred in Well 2 during the period shown in Figure 8, with the associated data reported in Table 1. The average length of the five pumping periods was 12.7 hours, and the average time between pumping periods was about 10 hours. Pumping of Well 2 produced average drawdown of slightly more than one foot in TW-1, and the recovery amount between each pumping cycle was about the same.

Following the step test, the water level in Well TW-1 rose to a depth of about five feet, or about 2.2 feet higher than the water level that was measured at the start of the test. As noted earlier, this occurred because the water level at the start of the step test had not completely recovered from the effects of extractions from the aquifer during airlift development of the test well, or from the most recent Well 2 pumping event.

Figure 8 - Well TW-1 Water Levels for Days Following Step Test

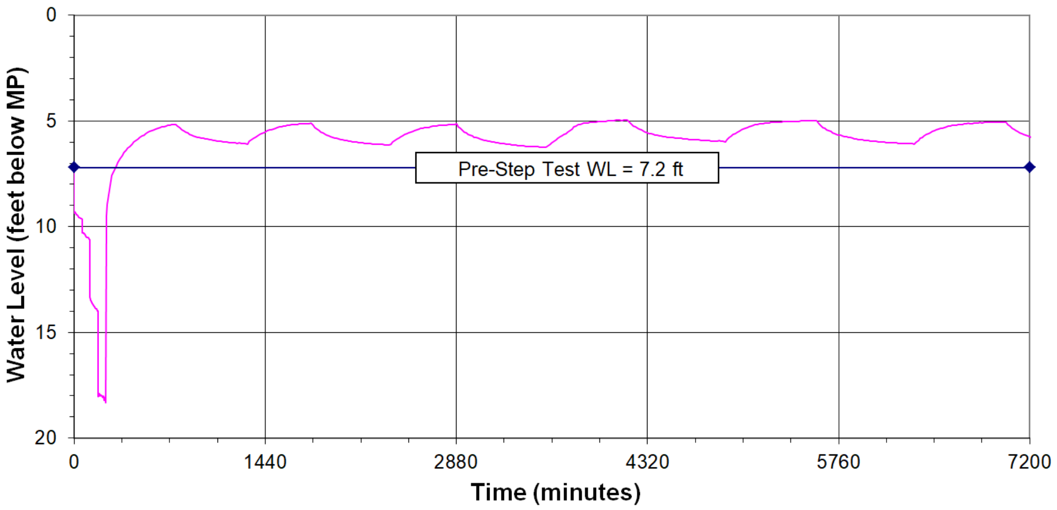


Table 1 - Well 2 Pumping Events, TW-1 Recovery Period

Pump On		WL	Pump Off		WL	Pumping Duration	Drawdown	Recovery Duration	Recovery Amount
10/27/21	15:00	5.16	10/28/21	9:00	6.09	18.00	0.93	8.00	0.98
10/28/21	17:00	5.11	10/29/21	2:45	6.13	9.75	1.02	8.50	0.98
10/29/21	11:15	5.15	10/29/21	22:30	6.24	11.25	1.09	10.25	1.29
10/30/21	8:45	4.95	10/30/21	21:00	5.98	12.25	1.03	11.50	0.98
10/31/21	8:30	5.00	10/31/21	20:45	6.09	12.25	1.09	11.50	1.04

SIEVE RESULTS

A composite sample of the sand and gravel sediments was collected for the depth interval from 30 feet to 36 feet, and samples were collected at one-foot to two-foot intervals from 36 feet to 50 feet in depth. The samples were split, and one set of samples was sent to the screen manufacturer by Frey Drilling for sieve analyses. HSA completed its own independent sieve analyses on the other set of samples. HSA's analysis was conducted according to protocols for grain size distribution analysis and well screen design as described in *Groundwater and Wells* (Driscoll, 1986).

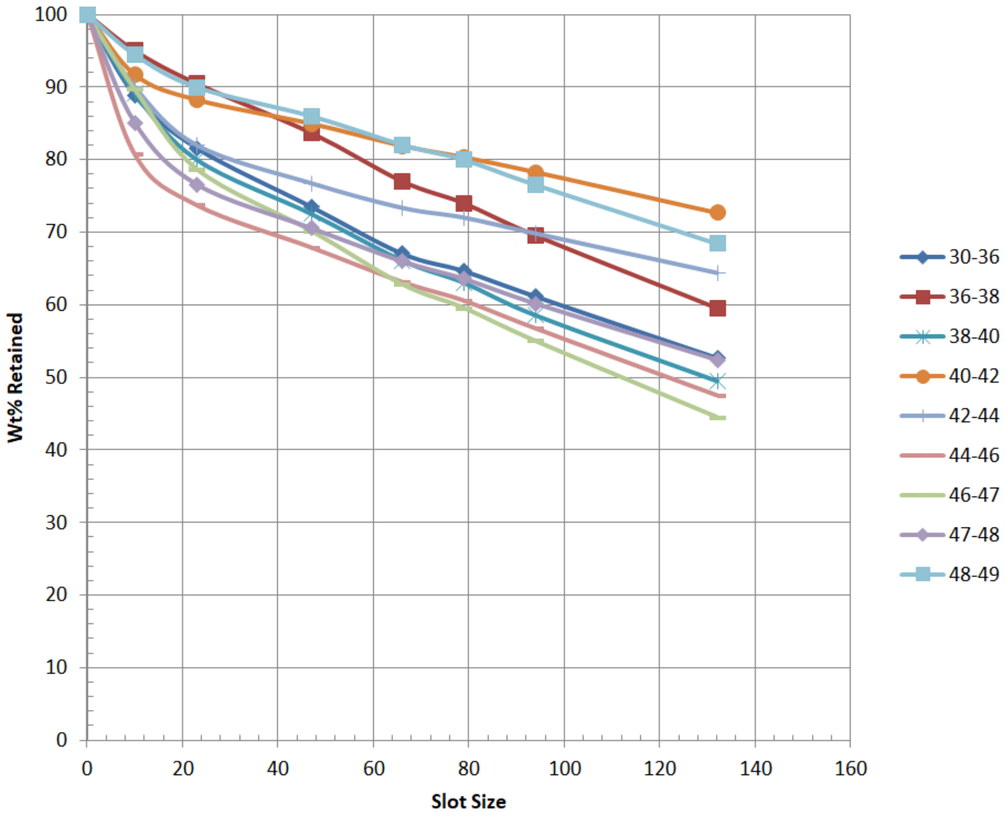
Table 2 - HydroSource Sieve Analysis

Slot size	30-36	36-38	38-40	40-42	42-44	44-46	46-47	47-48	48-49
132	52.66	59.53	49.49	72.67	64.41	47.53	44.54	52.41	68.41
94	61.13	69.53	58.54	78.27	69.83	56.75	55.03	60.17	76.51
79	64.63	73.98	63.03	80.33	72.02	60.58	59.58	63.58	79.97
66	67.05	77.03	66.10	81.92	73.37	63.16	62.86	66.00	82.05
47	73.49	83.67	72.52	84.96	76.76	67.90	70.20	70.56	85.99
23	81.58	90.47	79.99	88.25	81.98	73.73	78.70	76.59	89.97
10	88.88	95.00	89.21	91.72	90.03	80.73	89.69	85.09	94.47
PAN	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

HSA's review of the screen manufacturer's sieve results indicated that a substantial error must have occurred in the manufacturer's sieving procedure. The manufacturer is repeating its analysis, but the HSA sieve results appear internally consistent and are a good match for subjective observations made of the sediments. Therefore, we have used the HSA results to predict the likely range of screen parameters for the planned supply well.

Table 2 shows the cumulative weight percentages retained by each successively finer slot size, for each of the samples. Slot sizes are displayed in terms of thousandths of an inch. For example, the 132-slot sieve allows passage of all sediment less than 0.132 inches in diameter. The percent value reported in the 94-slot row includes the sum of the sediment amounts retained by the 132-slot and 94-slot sieves. After the amount collected by the pan is added to the sum of the amounts retained by all the sieves, the sum is by definition 100 percent. The data shown in Table 2 is graphed in Figure 9.

Figure 9 - Sieve Results



Inspection of Figure 9 shows that the shape of the grain size frequency distribution curves is similar for all of the intervals. The main conclusion to be drawn from the graph is that a screen with a slot size of 120 should retain more than 40% of the Well TW-1 sediment encountered in the entire interval from 30 to 49 feet. Figure 10 is a photograph of the sample from 48 to 49 feet.

Figure 10 - Gravel Sample 48-49'

PRELIMINARY PROPOSED LARGE-DIAMETER WELL CONSTRUCTION SPECIFICATIONS

The sieve analysis indicates that a naturally developed well should be an appropriate design at this location, and that a large-diameter well may be outfitted with perhaps a 10-foot to 15-foot length of at least a 130-slot size screen spanning the depth interval from roughly 35 to 50 feet below ground. Figure 11 is a proposed preliminary well design and schematic construction diagram based on the sieve analysis, test well drilling observations, and step test results.

The proposed specifications should be considered preliminary opinions to be used for planning purposes. Although subsurface geologic conditions are expected to remain generally consistent within the immediate area of Test Well TW-1, it is possible that conditions that differ from those observed during the test well installation could nonetheless be encountered at the site of the large-diameter well. If so, modification to the proposed specifications may be required. The proposed specifications should be refined, as needed, based on actual conditions encountered where a large-diameter well is installed.

Note that “TBD” (To Be Determined) is listed on the proposed preliminary well design and schematic construction diagram at locations related to well casing and screen diameters. We assume the optimal casing and screen diameters for a large-diameter well will be determined based on the completed well diameter needed to accommodate an appropriately sized submersible pump that can produce the withdrawal capacity sought, at up to a maximum of about 25 to 30 feet of well water level drawdown, plus whatever system head (i.e., pressure and elevation head, friction loss, etc.) is required to deliver water to the system.

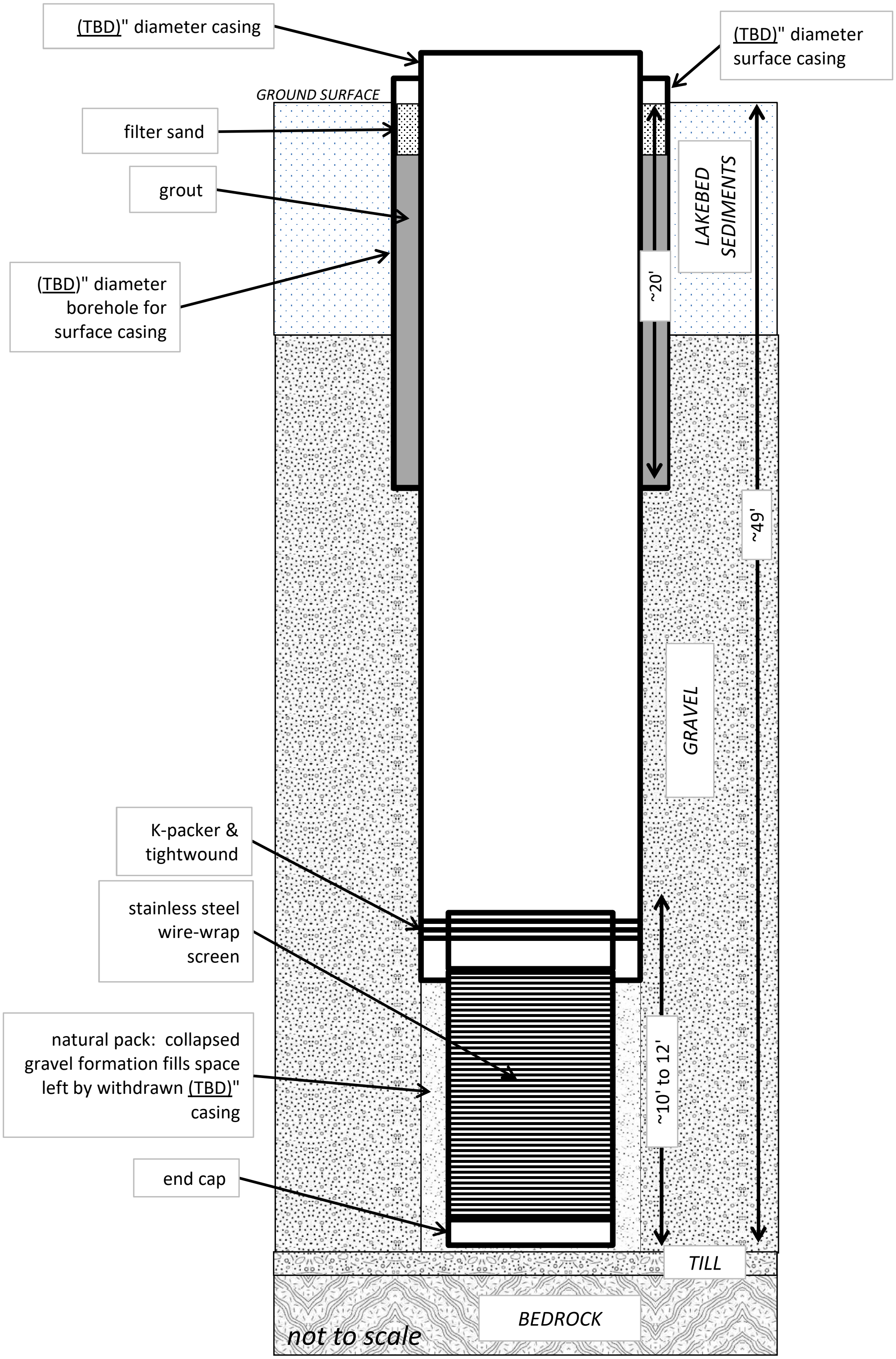


Figure 11 - Proposed Preliminary Well Design and Schematic Construction Diagram

LARGE-DIAMETER WELL YIELD PREDICTION

As discussed above, a well's specific capacity can be expected to decrease with increasing pumping rate. However, it is also reasonable to expect that specific capacity for any given pumping rate should be higher in a properly designed and constructed production well, which would have a larger diameter, may be screened through a thicker interval of the aquifer, and would be more thoroughly developed. Test wells are typically less efficient and less productive than properly designed supply wells due to the nature of their construction. That is, a test well's design and construction is normally suited for the limited purpose of testing the viability and hydraulic characteristics of an aquifer. Consequently, test wells are normally outfitted with readily available stock screens that may not produce the best possible performance. The screen in Test Well TW-1 is only about six inches in diameter, has less than ten feet of slotted screen, and was developed for only a few hours. A larger-diameter well with a longer, custom-designed screen and more-complete development is likely to be more efficient and productive. As noted earlier, a larger-diameter well that provides more annular space between the production pump motor and well casing may also lessen head loss during pumping, which would be expected to result in higher specific capacity, as well.

Notwithstanding, using the assumption that the specific capacity of a larger-diameter well at this site would be no greater than the projected 180-day specific capacity of approximately 30 gpm/ft that has been demonstrated by Test Well TW-1 when pumped at 350 gpm, and an available drawdown of about 15 feet (50% of the approximate difference between a static water level of about five feet and the presumed top of where a well screen would be placed in a large-diameter well at a depth of around 35 feet), it is then possible to roughly predict the maximum theoretical sustainable production rate that may be expected from such a well. A specific capacity of 30 gpm/ft, combined with available drawdown of 15 feet, suggests that a theoretical sustainable pumping rate of as much as 450 gpm may be possible.

This projection relies on the assumption that pumping interference caused at this location by operation of Well 2 remains relatively modest, in the range of about one foot. It is also important to note that this projection does not take into account possible interference effects from pumping of Well 1. Given Well 1's closer proximity and higher production rate, we would expect a greater degree of pumping interference at the TW-1 site when Well 1 is in operation. Operation of a large-diameter supply well at the TW-1 location should be expected to similarly cause some degree of pumping interference on Well 1 and Well 2.

The step test carried out on Test Well TW-1 was done to gage the feasibility of developing a relatively productive large-diameter well at the Site 2 location. Although a step test is not an appropriate means of evaluating well interference, the results have been used in an attempt to qualitatively assess the current pumping interference that exists between the wells in the wellfield to the degree possible, and the relative degree of interference that may be expected if an additional well were to be developed and operated at the test well location.

The way the system is currently designed, constructed, and operated necessitates periodic pumping of the existing supply wells to supply water to the system; that is, the wells cannot be shut down for a prolonged period, nor can they be set to run constantly, without some type of system modification. This makes assessment of interference between the wells challenging because the interference caused by one well cannot entirely be separated from that caused by another. More specific testing would be necessary to more reliably evaluate this.

Some amount of interference was expected and is considered normal. The actual amount of interference suggested by the step test when pumping at 350 gpm appears to be relatively small. We understand the Town is seeking to develop a well that can provide up to 200 gpm of additional production from the wellfield. Extraction of water at this lower rate should create proportionately less interference. The step test results indicate a specific capacity of around 40 gpm/ft should be expected when a large-diameter supply well at the same location is pumped at a rate of 200 gpm. This implies that drawdown of perhaps about five feet could be expected at the pumping well location, plus the interference produced by pumping of the two other supply wells in the wellfield, which would appear to be relatively minor. Overall, these preliminary testing results indicate that a sufficiently productive supply well can probably be developed at the test well site, and that sustained withdrawal of up to an additional 200 gpm from this location in the wellfield is likely to result in relatively little drawdown in the new well itself, and minimal interference on existing Wells 1 and 2.

OTHER NOTES AND OBSERVATIONS

- The step test results have been used primarily to estimate the potential productivity of a larger-diameter well, if such a well were to be developed at the test well site. With the proviso that the testing performed was limited to a step test, and one that had to be performed while other withdrawals in the wellfield were required to continue, only basic observations of aquifer water level behavior and pumping interference effects have been described in this document. As already mentioned, additional testing and water level monitoring and analysis could be performed to assess pumping interference. We would also recommend conducting an analysis of recharge potential to the wellfield before a new large-diameter well is installed to further confirm there is likely to be sufficient groundwater recharge to support total wellfield output.

- Our current understanding is that the Town may wish to use the water level information collected during the step test on Well TW-1 to try to define the wellfield's capture area. If so, we would caution that the results of the step testing may be of limited utility in assessing aquifer parameters beyond those near the test well. Although a crude distance-drawdown relationship could be estimated based on the data, the estimate would have to use water levels from only the dug well, Well 1, and the test well, which is less than ideal geometrically. Well 1 and the dug well are also offset in the same general direction from the test well, and the dug well is not screened over the same depth interval. Beyond that, the drawdown observed in the pumping well includes a component related to well inefficiency. Finally, as described above, the wells at the wellfield are in hydraulic communication, and periodic pumping of Well 2 affected water levels that were measured during the testing of Well TW-1. These factors may make a distance-drawdown determination based on the step test results unreliable.

- For the sake of completeness, we note that Test Well TW-1 was installed at the second of three sites HSA had proposed for possible test wells based on the geophysical survey results. It is the only site of the three that has so far been tested. We note that although Site 1 does not provide as much setback from the Town's western property boundary, it is farther away from Well 1, and about equidistant from Wells 1 and 2. It is not a given, but due to its location and greater setback distance, it is possible that a well at Site 1 may cause and/or exhibit less pumping interference. It is unknown, however, whether subsurface conditions at Site 1 are favorable for well development. They could prove to be better, comparable, or worse than at Site 2. A longer access road would also be needed to allow for drilling ingress and egress to this site, at additional cost.

- While on site, HSA measured the depth of the dug well to be about 13 feet below ground surface. A relatively soft bottom to the dug well was also observed, suggesting it may have filled in somewhat over the years. Of particular note is that the dug well's depth and bottom elevation roughly correspond with the base of the overlying lacustrine deposits described in HSA's report on the geophysical surveys, and then subsequently confirmed to occur at approximately 14 feet in depth when Well TW-1 was drilled. It seems plausible that when the dug well was initially installed many years ago, it may have been excavated through the fine-grained sediments and just to the top of the coarser, more permeable, water-bearing sand and gravel layer that lies immediately beneath. This makes practical sense in that the shallower lacustrine sediments would have been likely not to collapse, which would have allowed for relatively straightforward excavation, whereas the underlying sand and gravel would have been much looser, allowing rapid infiltration of water, and most likely readily collapsing preventing deeper excavation.

- We believe these observations are important because monitoring of water levels during the recent step test shows that the dug well is in hydraulic communication with the aquifer that supplies water to the local community. As such, the dug well currently serves as a direct, and relatively large, conduit to the aquifer. We note that the top of the dug well tile is only a few inches above ground surface, and although it appeared to be in relatively decent condition, the concrete well tile is nonetheless many years old at this point. In its present condition, and as currently constructed, the dug well may pose a risk by means of allowing contaminated water (e.g., from a spill or flood) to be introduced to the aquifer.

- If there are no plans to use the dug well in the future, we suggest the Town consider: 1) properly abandoning it by backfilling the dug well tiles with clean sand, and then pouring a concrete cap over the top; or 2) somehow improving its current construction (e.g., raising the height of the concrete tiles, if possible and practical), to eliminate the risk of potential contamination.

- The Town may wish to keep the dug well intact for now to use as a water level monitoring location until after the new well is installed, developed and tested, but proceed with its abandonment later on as appropriate. We recommend consulting with NYSDOH beforehand to obtain their input and concurrence with any well abandonment procedures the Town chooses to undertake.