Sterling Environmental Engineering, P.C.

HYDROGEOLOGIC REPORT

FOR
SHEFFIELD GARDENS
MONTGOMERY, NEW YORK

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FOR
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MONTGOMERY, NEW YORK

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1.0 INTRODUCTION

Sheffield Gardens is a proposed three-lot subdivision for multi-use development located on the south side of NYS Route 17K in the Town of Montgomery (the Town), NY (Figure 1). The proposed development is located on tax parcels identified as 29-1-5.1, 29-1-5.2, 29-1-5.3, 29-1-5.4 and 29-1-5.5 in the Town of Montgomery tax map.

Sterling Environmental Engineering, P.C. (STERLING) was retained by the developer, MILR, LLC, to assist Engineering & Surveying Properties, P.C. (E&SP) with hydrogeologic testing and permitting of three (3) existing water wells to be used as the project water supply. The development plan is to consolidate the five (5) parcels listed above to create a three (3) lot subdivision for a multi-use development consisting of 31,000 square-feet of potential retail space, three residential buildings with a total of 261 apartment units, a wastewater treatment plant, water treatment building and water storage tank. The water supply system will be regulated by the New York State Department of Health (NYSDOH) as a Community Water Supply (CWS) and will require a New York State Department of Environmental Conservation (NYSDEC) Water Withdrawal Permit for operation.

Three (3) existing 8-inch diameter steel cased wells are completed in the local bedrock. The dates the wells were drilled and the water well contractors is unknown. A camera inspection was performed on each of the three (3) wells in March 2023 to create well logs and obtain well construction information. Well-3 was extended from 219 feet to 310 feet in June 2023 and prior to hydrogeologic testing.

Step-drawdown tests were performed to determine the optimal rate to be used during constant rate testing. Constant rate pumping tests were performed to characterize the safe yield of the wells and water samples were collected and analyzed to determine the water quality. A well location map is provided as Figure 2. A pump test protocol document was prepared by E&SP and approved by Orange County Department of Health (OCDOH) prior to hydrogeologic testing. The pump test protocol document and well location approvals by OCDOH are provided in Appendix A. The procedures outlined in the pump test protocol and NYSDEC Pumping Test Procedures for Water Withdrawal Applications were followed throughout the hydrogeologic testing program. This hydrogeologic report summarizes the testing performed on the existing wells.

1.1 Geology and Hydrogeology

The ground surface is underlain by approximately 20 feet of lacustrine silt and clay as depicted in the Surficial Geologic Map of New York: Lower Hudson Sheet. Shales of the Middle Ordovician aged Normanskill Formation underlie the fine-grained sediments, with average depth to bedrock being 15-30 feet below ground surface (bgs). Well yields in the local shale bedrock range from less than 10 gallons per minute (gpm) to greater than 100 gpm in proximity to the project location.

The existing wells are located in the southern portion of parcel 29-1-5.5 and within proximity to NYSDEC, federal, and Army Corps of Engineers (ACOE) regulated wetlands. The depth to groundwater is relatively shallow (i.e., less than 10 feet) onsite, and the groundwater flow direction in the bedrock aquifer is primarily to the north towards the Wallkill River. The shale bedrock aquifer is confined/semi-confined as a result of the overlying fine-grained sediments.

2.0 HYDROGEOLOGIC INVESTIGATION

2.1 Well Construction Details and Inspections

Well-1, Well-2, and Well-3 are drilled through the overburden deposits and into the local shale bedrock. Inspection logs for all three (3) wells created in March 2023 during a camera inspection by New York State registered well driller DNA Water Well Maintenance (NYRD 11056) are presented in Appendix B. Following the camera inspection, the well construction was inspected by New York State registered well driller, Roarke Well Drilling, Inc. (NYRD 10012) (Roarke) to prepare well completion reports. Well casings lengths for Well-2 and Well-3 are less than 50 feet and OCDOH requires an increase in all separation distance listed in Table 2 of Part 5, Subpart 5-1, Public Water Systems - Appendix 5D by 50% (Appendix A). Well construction details are summarized in Table 1 and Water Well Completion Reports are provided in Appendix C.

Table 1. Well Construction Details

Well ID #	Diameter of Casing (inches)	Depth of Casing (feet)	Total Depth of Well (feet)	Static Water Level (feet)
Well-1	8	50	500+	9.76
Well-2	8	32	569.0	7.20
Well-3	8	21	310.0	4.05

2.1.1 Well Inspection Results

Inspection of each well using a downhole camera was used to evaluate the integrity of the wells and to identify conditions that may require remediation to restore the well or improve water production. The results of the camera inspection at Well-1 indicate fractures consistent from 66 feet below top of casing (TOC) to 481 feet below TOC. Larger fractures were noted at 269 feet below TOC and 317 feet below TOC. A void space was observed at 356-358 feet below TOC. Well-2 contained fractures from 30 feet below TOC to 489 feet below TOC. Larger fractures were observed at 422-444 feet below TOC and 455-457 feet below TOC. Void spaces were observed in Well-2 at 106-108, 275-277, 310-314, 354-356, and 388 feet below TOC. Additionally, vertical fractures were observed in Well-2 at 133-136, 336-338, and 348-351 feet below TOC. The camera inspection was concluded at Well-1 and Well-2 at 500 feet below TOC due to reaching its maximum depth of the inspection equipment (500 feet). The results of the camera inspection at Well-3 indicate fractures consistent from 25 feet below TOC to 202 feet below TOC. Large fractures were observed at 58-61, 174,188-189, 190-191, and 200-202 feet below TOC. Void spaces were observed in Well-3 at 36-40 feet below TOC and 176-179 below TOC. The camera inspection log indicates that the well was obstructed at 219 feet, though further inspection concluded that 219 feet below TOC was the bottom of the well, as described below.

Well-3 was deepened from 219 to 310 feet bgs by Roarke in June 2023. The well depth was modified as an investigation to determine if the well was originally drilled shallower than Well-1 and Well-2 or if the well had collapsed. The results of the investigation indicate that the well had not collapsed and deepening of the well was concluded at 310 feet bgs. Additionally, the total depth of Well-2 was measured and found to be 269 feet. The well completion reports for the Sheffield Gardens wells are provided in Appendix C.

3.0 HYDROGEOLOGIC ANALYSIS

3.1 Step-Drawdown Tests

Step drawdown tests were conducted at the three (3) wells to determine the optimal pumping rates for each well prior to conducting 72-hour constant rate pumping tests.

Well-1

A 4-phase step-drawdown test was performed by Roarke with oversight by E&SP at Well-1 on May 26, 2023 from 8:30 AM to 3:00 PM. A 25 hp 125 gpm submersible well pump was installed in Well-1 at a depth of 360 feet below TOC for temporary use during the pumping test. Water levels were measured in the pumping well with a submersible pressure transducer throughout the pumping period. The result of the step-drawdown test indicated that Well-1 would be sustainable for the 72-hour test at 80 gpm. The results of the step-drawdown test is summarized in Table 2 below.

Well-2

Step-drawdown tests were performed on Well-2 on June 1, 2023 and July 26, 2023. On June 1, 2023, a 3-phase step-drawdown test was performed by Roarke with oversight by E&SP at Well-2 from 7:20 AM to 1:15 PM. A 10 hp 85 gpm submersible well pump was installed in Well-2 at a depth of 360 feet below TOC, for temporary use during the pumping test. On July 26, 2023, a second step drawdown test was performed by Roarke with oversight by E&SP with the submersible well pump set at 260 feet below TOC. A second test was performed to more accurately determine the yield of the well, as the maximum yield was previously expected to be closer to the yield of Well-1. Water levels were measured in the pumping well with a submersible pressure transducer throughout the pumping periods during both tests. The results of the step drawdown tests are summarized in Table 2 below.

Well-3

A 4-phase step-drawdown test was performed by Roarke with oversight by E&SP at Well-3 on July 26, 2023 from 8:00 AM to 3:40 PM. A 10 hp 85 gpm submersible well pump was installed in Well-3 at a depth of 260 feet below TOC, for temporary use during the pumping test. Water levels were measured in the pumping well with a submersible pressure transducer throughout the pumping and recovery period. The result of the step-drawdown tests at Well-3 and Well-2 indicated that the combined wells would be sustainable for the 72-hour test at 80 gpm (40 gpm each) during simultaneous pumping. The results of the step drawdown tests are summarized in Table 2 below.

Table 2. Step-Drawdown Testing Summary

Well	Duration (minutes)	Rate (gpm)	Drawdown (ft)	Specific Capacity
Well-1	120	40	38.1	1.050
Well-1	75	60	77.2	0.777
Well-1	135	80	139.0	0.576
Well-1	60	Max 98-84*	235.6	NA
Well-2 1st	130	40	86.0	0.465
Well-2 1st	135	60	210.1	0.286
Well-2 1st	105	Max 70-62*	295.8	NA
Well-2 2nd	120	20	12.8	1.563

Well-2 2nd	135	30	43.9	0.683
Well-2 2nd	130	40	67.3	0.594
Well-2 2nd	75	50	86.4	0.579
Well-3	120	20	11.7	1.709
Well-3	135	30	48.8	0.615
Well-3	130	40	80.1	0.499
Well-3	75	50	112.5	0.444

*Well Pump operated at maximum capacity and reduced flow rate was observed as dewatering of well occurred.

3.2 Constant Rate 72-Hour Pumping Test

A constant rate 72-Hour pumping test was performed on each of the production wells in accordance with the procedures outlined in the NYSDEC Pumping Test Procedures for Water Withdrawal Permit Applications and the pump test protocol document prepared by E&SP and approved by OCDOH (Appendix A). The constant rate test at Well-1 was performed at 80 gpm from March 29, 2024 to April 1, 2024. A simultaneous constant rate test was performed at Well-2 and Well-3 (Well-2 & Well-3) to equate a total yield of 80 gpm, which matches the yield of Well-1. The wells were pumped simultaneously at a constant rate of 40 gpm each (80 gpm total) from March 11 to March 13, 2024. Well-2 & Well-3 are proposed to operate simultaneously during regular use.

Well-1

First Test – A constant rate pumping test was performed at Well-1 at a rate of 84 gpm beginning at 9:00 AM on March 25, 2024. The test was concluded after the generator failed due to a clogged fuel filter at approximately 26.5 hours into the test. The generator failure was noticed approximately 2 hours after the incident occurred and the decision was made to abandon the test. A total of 152.86 feet of drawdown was observed during the constant rate test. Water levels were given approximately 3 days to recover to the static level before a second test was conducted.

Second Test - A constant rate pumping test was performed on Well-1 for a duration of 72.5 hours at a rate of 80 gpm. The constant rate test was conducted from 8:15 AM on March 29 and concluded at 8:45 AM on April 1, 2024. A 25 hp 125 gpm submersible well pump was installed in Well-1 at a depth of 360 feet below TOC, for temporary use during the pumping test. The required six (6) hours of stabilized drawdown was achieved at end of the pumping test. The NYSDEC defines stabilized drawdown as "a water level that has not fluctuated by more than plus or minus 0.5 foot for each 100 feet of water in the well over at least a six-hour period of constant pumping flow rate". The exact depth of Well-1 is unknown but is greater than 500 feet. Given the lack of data, 500 feet has been used to calculate the pre-pumping water column.

The pre-test water column height was calculated as 490.24 ft based on the well depth of (greater than) 500 feet and a pre-test static water level of 9.76 feet below the top of casing (TOC). The acceptable fluctuation during the final six hours of the pumping test is less than 2.45 feet. Drawdown stabilized for 24 hours and 50 minutes during the constant rate test and fluctuated a maximum fluctuation of 1.02 feet during the final 6 hours of the test.

Static water levels were measured in the pumping well (Well-1), and observation wells Well-2 and Well-3 for a minimum period of one week prior to the start of the constant rate pumping test to identify water level trends not attributable to the pumping test. Additionally, offsite wells Valley Central High School (VCHS) well, 408 Bailey Road well, and 6 Montgomery Heights well were measured for two (2) days prior to the start of the pumping test at Well-1. The locations of all monitoring wells are provided in Figure 3. Water

levels were measured using submersible pressure transducers capable of recording water levels to at least the nearest 0.01 foot. Water levels continued to be measured in all wells for a minimum of 24 hours during the recovery period following the constant rate pumping test. The water levels in Well-1 recovered to 95% of the pre-test level within 2 hours and 20 minutes.

Water discharged during the constant rate test was conducted away from the production well to avoid recharging the water into the aquifer. Water was discharged 300 feet to the north and downgradient of Well-1, as presented in Figure 2. Hydrographs for static water level monitoring and the constant rate pumping tests are provided in Appendix D.

Continuous pumping of the well at 80 gpm resulted in a maximum drawdown in the well to 159.02 feet below TOC throughout the constant rate pumping test at Well-1. This results in 200.98 feet of remaining water column above the level of the submersible well pump with the pump set at 360 feet below TOC . A semi-logarithmic plot showing the 180-day projection of the time-drawdown curve was prepared and is provided in Appendix E. The 180-day projection analysis indicates a total projected drawdown of 168.85 feet from TOC or 191.15 feet of water column above the well pump intake at the end of the 180-days. The water column height is dependent on the depth at which the pump is set. A distance-drawdown graph of maximum drawdown vs. distance for Well-1 is provided in Appendix F. The graph shows drawdown decreases as distance from the pumping well increases. A distance-drawdown graph is useful in identifying the radius of influence in an unconfined aquifer. However, the Sheffield Gardens wells are completed in bedrock and the distance-drawdown method is of limited use in evaluating the radius of influence.

Well-2 & Well-3

A simultaneous constant rate pumping test was performed on Well-2 & Well-3 for a duration of 72 hours at a rate of 40 gpm for each well (80 gpm combined). The constant rate test was conducted from 8:45 AM on March 11 and concluded at 8:45 AM on March 14, 2024. A 10 hp 85 gpm submersible well pump was installed in both wells at a depth of 260 feet below TOC, for temporary use during the pumping test. More than six (6) hours of stabilized drawdown was achieved before the end of the test.

The depth of Well-2 is 569.0 feet. Prior to initiating the pumping test, the static water level in Well-2 was 7.20 feet below the top of casing (TOC), equating to a total pre-test water column height of 561.8. The acceptable water level fluctuation to meet the NYSDEC definition for stabilization during the final six hours of the pumping was less than 2.81 feet. Throughout the final 6 hours of the pumping test, the water level in Well-2 fluctuated a maximum of 0.963 feet and the stabilization criteria was achieved for 21 hours and 10 minutes.

The depth of Well-3 is 310 feet. Prior to initiating the pumping test, the static water level in Well-3 was 4.05 feet below the top of casing (TOC), equating to a total pre-test water column height of 305.95. The acceptable water level fluctuation to meet the NYSDEC definition for stabilization during the final six hours of the pumping test was less than 1.53 feet. The pumping well displayed a maximum fluctuation of 0.934 feet and the stabilization criteria was achieved for a total of 11 hours and 15 minutes throughout the final 6 hours of the pumping test.

Static water levels were measured in the pumping wells (Well-2 & Well-3) and observation well Well-1 for a minimum period of one week prior to the start of the constant rate pumping test to identify water level trends not attributable to the pumping test. Additionally, offsite wells VCHS well, 408 Bailey Road well, and 6 Montgomery Heights well were measured for two (2) days prior to the start of the simultaneous pumping test of Well-2 & Well-3. Water levels were measured using submersible pressure transducers capable of recording water levels to at least the nearest 0.01 foot. Water levels continued to be measured in these same wells for a minimum of 24 hours during the recovery period. Following the constant rate

pumping test, the water level recovered to 95% of the pre-test level in Well-2 within 7 hours and 25 minutes, and within 16 hours and 45 minutes in Well-3.

Water discharged during the constant rate test was conducted away from the production wells to avoid recharging the water into the aquifer. Water was discharged 300 feet to the north and downgradient of Well-2 & Well-3, as presented in Figure 2. Hydrographs for static water level monitoring and the constant rate pumping tests are provided in Appendix D.

Simultaneous and continuous pumping of Wells-2 & Well-3 at 40 gpm each (80 gpm combined) resulted in a maximum drawdown in Well-2 to 120.04 feet below TOC and 139.96 feet of remaining water column above the level of the submersible well pump at the end of the pumping test. Continuous pumping at 40 gpm resulted in a maximum drawdown in Well-3 to 88.58 feet below TOC and 171.42 feet of remaining water column above the level of the submersible well pump. Semi-logarithmic plots showing the 180-day projection of the time-drawdown curve was prepared and is provided in Appendix E.

The 180-day projection analysis of Well-2 indicates a total projected drawdown of 149.85 feet from TOC and 110.15 feet of water column remaining above the well pump intake at the end of the 180-days. The 180-day projection analysis for Well-3 indicates a total projected drawdown of 116.65 feet below TOC and 143.35 feet of water column above the well pump intake at the end of the 180-days. These water column heights are dependent on the depth at which the pump is set. A distance-drawdown graph of maximum drawdown vs. distance for Well-2 and Well-3 is provided in Appendix F. The graphs show drawdown decreases as distance from the pumping wells increases. A distance-drawdown graph is useful in identifying the radius of influence in an unconfined aquifer. However, the Sheffield Gardens wells are completed in a semi-confined to confined bedrock and the distance-drawdown method is of limited use in evaluating the radius of influence.

3.2.1 Background Monitoring

Background water level monitoring was conducted from March 8 through April 2, 2024. Pressure transducers were installed in Well-1, Well-2, and Well-3 and three (3) offsite private water supply wells. Water levels in offsite wells VCHS well, 408 Bailey Road well, and 6 Montgomery Heights well were recorded for two (2) days prior to the start of the first pumping tests of the Sheffield Gardens wells. Surface water monitoring was conducted at monitoring locations Wetlands East and Wetlands West. Additionally, precipitation and barometric pressure were recorded throughout the background monitoring period. Monitoring locations and linear distances between locations are displayed in Figure 3. Monitoring location coordinates in NAD 1983 State Plane New York East FIPS 3101 (US Feet) and separation distances between locations are included in Appendix F.

3.2.2 Offsite Well Monitoring

Water levels in offsite well were recorded from March 8 through April 2, 2024 at water supply wells located at VCHS, 408 Bailey Road, and 6 Montgomery Heights. All wells were in normal use throughout the background monitoring and pumping test periods. Well construction details for these wells are currently not available. Pressure transducers capable of recording water level data to 0.01 inch were installed within the wells two days prior to the first pumping test (Well-1 & Well-2). Time-drawdown hydrographs were prepared for the data recorded from each of the wells and are provided in Appendix D.

<u>Valley Central High School</u>

A review of the water level data recorded at VCHS indicates the well is pumped on a regular schedule and allowed to recover. The VCHS well is located approximately 1,100 feet northwest of Well-2 & Well-3 and

1,820 feet west-northwest of Well-1. The maximum drawdown is 242.4 feet during this regular pumping cycle. Regular cyclic pumping of the well occurred throughout the background monitoring and pumping tests of Wells 1, 2, and 3. The VCHS static water level prior to the Well-2 & Well-3 pumping tests was approximately 2 feet higher than the static water levels during the test and no differences were observed during the Well-1 pumping test. The results of the pumping tests indicate approximately 2 feet of total water column loss in the VCHS water supply well during constant pumping of the Sheffield Gardens wells. Long-term pumping of the Sheffield Gardens wells will not adversely affect water availability at the VCHS wells based on these data.

408 Bailey Road

A review of the water level data recorded at the 408 Bailey Road well indicates that recharge in the well is influenced by precipitation events. Drawdown resulting from regular pumping of the well is evident throughout the monitoring period. The 408 Baily Road Well is located approximately 1,875 feet north of Well-2 & Well-3 and 1,828 feet northwest of Well-1. No effects from the pumping tests at the Sheffield Gardens wells were observed in the 408 Bailey Road well.

6 Montgomery Heights

Drawdown resulting from regular pumping of the 6 Montgomery Heights well is evident throughout the monitoring period. Periodic increases in water levels corresponding to precipitation events indicates the well is recharged during periods of precipitation. The well is located approximately 1,400 feet north of Well-2 & Well-3, and 1,400 feet northwest of Well-1. A decrease of approximately 0.25 feet in the static water level was observed during the Well-1 constant rate test. The hydrograph for the 6 Montgomery Heights well indicates no more than 0.25 feet attributable to the constant rate pumping tests at the Sheffield Gardens wells. Long-term pumping of the Sheffield Gardens wells will not adversely affect water availability at the 6 Montgomery Heights well based on this data.

3.2.3 Surface Water Monitoring

Surface water elevations were measured at all surface waters within 1,000 feet of the pumping wells throughout the background monitoring period, constant rate tests at Well-1, Well-2, and Well-3, and the pumping test recovery periods. Surface water elevations were recorded in temporary stilling wells using both submersible pressure transducers and manual measurements. A review of the surface water data indicates that changes in surface water levels are consistent with precipitation events. Hydrographs for Well-1, Well-2 and Well-3 do not exhibit direct connection between the surface waters and the bedrock aquifer in which the wells are completed. A surface water hydrograph including precipitation data is presented in Appendix G.

3.2.4 Precipitation and Barometric Pressure Monitoring

Accumulated precipitation data ranging from March 8 through April 2, 2024 was obtained from the Scott's Corners Weather Station located in Montgomery, NY and approximately 3,000 feet north of the site. No precipitation was recorded throughout the duration of the constant rate pumping tests. A rain event accumulating 1.6 inches was recorded on March 9, 2024, two (2) days prior to the start of the pumping test at Well-2 & Well-3. A second rain event accumulating 1.44 inches was recorded on March 23, 2024, six (6) days prior to the pumping test at Well-1. Increased water levels are evident, especially in Well-2 & Well-3, during the background monitoring periods. Recharge during precipitation events is observed as increases in water level data for relatively short periods of time (i.e., less than 6 hours) before receding.

Increases in the groundwater levels due to precipitation did not occur during either of the constant rate tests. Groundwater levels were stable or receding immediately prior to the pumping tests. Time-drawdown and accumulated precipitation hydrographs are provided in Appendix H. Barometric pressure was recorded onsite in 15-minute intervals from March 8 through April 2, 2024, with a barometric pressure transducer and was additionally downloaded from the Scott's Corners Weather Station database. Increases in barometric pressure correlate to precipitation events except for the decrease in barometric pressure on March 17, 2024, which was independent of a precipitation event. Increases in barometric pressure were observed during both constant rate pumping tests. No evidence of influence to water levels during barometric pressure changes was evident in the groundwater level data. Accumulated precipitation and barometric pressure data is displayed in the hydrographs in Appendix H.

3.3 Hydrogeologic Analysis of Test Data

Drawdown data recorded during the constant rate pumping tests was analyzed using the Moench solution to determine the transmissivity and hydraulic conductivity at all three of the pumping wells. Aquifer parameters were determined using the curve matching techniques within the commercially available AQTESOLV software. The method allows for the development of type curves specific to hydrogeologic conditions and solves an automatic curve fit to water level data changes. Appendix I provides the AQTESOLV reports and time-displacement graphs for Well-1, Well-2, and Well-3.

The analysis for Well-1 utilizes drawdown and recovery data from observation well Well-2. The analysis estimates transmissivity (T) for Well-1 as 0.6897 ft^2/min and hydraulic conductivity (K) as $1.379x10^{-3}$ ft/min. The analysis for simultaneous pumping of Well-2 & Well-3 utilizes drawdown and recovery data from observation well Well-1. The analysis estimates transmissivity (T) for Well-2 & Well-3 as 0.1272 ft^2/min and hydraulic conductivity (K) as $2.544x10^{-4}$ ft/min. Storage values could not be determined from the analysis of the pumping tests using available methods for fractured rock aquifers. Aquifer parameters are available in Table 3 below. Aquifer parameters are consistent with the pumping test results.

Table 3. Calculated Aquifer Parameters

Well	Transmissivity (T)	Hydraulic Conductivity (K)
Well-1	0.6897 ft^2/min	$1.379x10^{-3}$ ft/min
Well-2 & Well-3	0.1272 ft^2/min	$2.544x10^{-4}$ ft/min

3.3.1 Hydrogeologic Analysis

Well-1 was pumped for 72 hours at a constant rate of 80 gpm and Well-2 & Well-3 were pumped simultaneous at 40 gpm each (80 gpm total). Well-1 reached stabilization for the final 24 hours and 50 minutes during the constant rate test, indicating that the well likely has a safe yield greater than the rate at which it was pumped. Well-2 and Well-3 reached the stabilized drawdown criteria for 21 hours and 10 minutes and 11 hours and 15 minutes, respectively. While pumped simultaneously at 40 gpm Well-2 & Well-3 have a combined safe yield of 80 gpm. Water levels measured during the recovery period for Well-1, Well-2, and Well-3 indicate water levels returned to 95% of the pretest levels within 2 hours and 20 minutes, 7 hours and 25 minutes, and 16 hours and 45 minutes, respectively.

An analysis of the drawdown and recovery data using the Moench with slab blocks method in AQTESOLV software resulted in aquifer parameters consistent with the fractured shale bedrock (Appendix I). Hypothetical 180-day drawdown plots were prepared for the drawdown data measured from each of the constant rate pumping tests (Appendix E). The results of the analysis indicate that after 180 days with no direct recharge and pumping at a rate of 80 gpm at Well-1 and a pumping rate of 80 gpm for Well-2 and Well-3 pumping simultaneously, water levels in Well-1, Well-2 and Well-3 would be 191.15, 110.15, and

143.35 feet, respectively, above the well pump intake. The water column height is dependent on the depth at which the pump is set.

The results of the pumping tests and analyses indicate the safe yield of Well-1 during continuous (24 hour per day) pumping is at least 80 gpm (115,200 gallons per day (gpd)) and the safe yield of Well-2 & Well-3 pumping at 40 gpm each is a combined 80 gpm (115,200 gpd). The project would use Well-1 as its primary well, permitted for at least 80 gpm, and Well-2 & Well-3 would serve as a temporary backup well when Well-1 is out of service based on these results.

3.3.2 Surface Water and Upper Aquifer Interactions

A review of water level data from the pumping and observation wells shows minor recharge to the bedrock aquifer in which the wells are completed during periods of heavy precipitation (Appendices E and H). No precipitation was observed during the constant rate tests at Well-1 and Well-2 & Well-3. Increased surface water levels directly correlate with precipitation events. A review of the surface water level changes and water level data in the wells indicates no connection between surface waters and the confined/semi-confined aquifer in which the wells are completed.

3.4 Water Quality Sampling

Potable water samples were obtained from each of the well discharges near the end of the constant rate tests and analyzed for selected parameters required by Subpart 5-1 of the New York State Sanitary Code. The samples were collected directly from a temporary sampling port into laboratory supplied glassware, placed in a cooler containing ice, and transferred to an ELAP certified laboratory under standard chain-of-custody procedures. The chain-of-custody form was completed with the sampling date, site name, unique sample identification, sampler's name, and requested analysis.

No parameters exceeded the Subpart 5-1 standards in the water sample obtained from Well-2. The presence of total coliform was detected in the sample obtained from Well-3, though no other exceedances of Subpart 5-1 standards were reported. Disinfection of wells before being put into operation is expected to address any coliform present in Well-3.

Total iron at a concentration of 1.12 mg/L exceeded the Subpart 5-1 standard of 0.3 mg/L at Well-1 and subsequently the sum of total iron and manganese (1.219 mg/L) exceeded the Subpart 5-1 combined standard of 0.5 mg/l. Iron and manganese are common constituents in bedrock-derived groundwater and can be addressed with standard water treatment methods if concentrations remain elevated after well development and use. Table 4 displays the results of the water samples obtained at Well-1, Well-2, and Well-3. Analytical reports for these samples are provided in Appendix J.

3.5 Existing or Potential Groundwater Contamination

The Sheffield Gardens wells are completed in a relatively undeveloped area with minimal to no history of commercial or industrial use. All minimum separation distances to protect public water supply wells from contamination listed in Table 1 of Part 5, Subpart 5-1, Public Water Systems – Appendix 5D of the State Sanitary Code have been maintained. State and federal wetlands exist with 200 feet of each of the Sheffield Gardens wells (Figure 2). OCDOH has issued a requirement for microparticulate analysis (MPA) testing of the wells once they are placed in service, to determine if the wells are subject to groundwater under direct influence (GWUDI) of surface water. The NYSDEC Info Locator mapping application was used to review existing or potential contamination threats to the wells. A topographic map displaying the existing or potential groundwater contamination threats within 3,500 feet of the site parcel is provided as Figure 4.

No existing or potential groundwater contamination threats were identified within 2,000 feet of the wells. A facility containing closed/removed petroleum bulk storage tank (PBS) is located approximately 2,100 feet southeast of the wells. To the south, two (2) fueling stations, and an in-service PBS tank exist 3,500 and 2,700 feet from the wells, respectively. Two (2) additional fueling stations exist approximately 2,600 feet to the northeast of Well-1, and one in-service PBS tank exists 3,600 feet to the northwest. It is unlikely that groundwater contamination from the identified locations, if any, would affect water quality in the Sheffield Gardens wells, given the distances from the Sheffield Gardens wells to the locations identified. The absence of petroleum-related compounds in any of the groundwater samples obtained from the wells further suggests the identified potential groundwater contamination sources do not affect water quality in the Sheffield Gardens wells.

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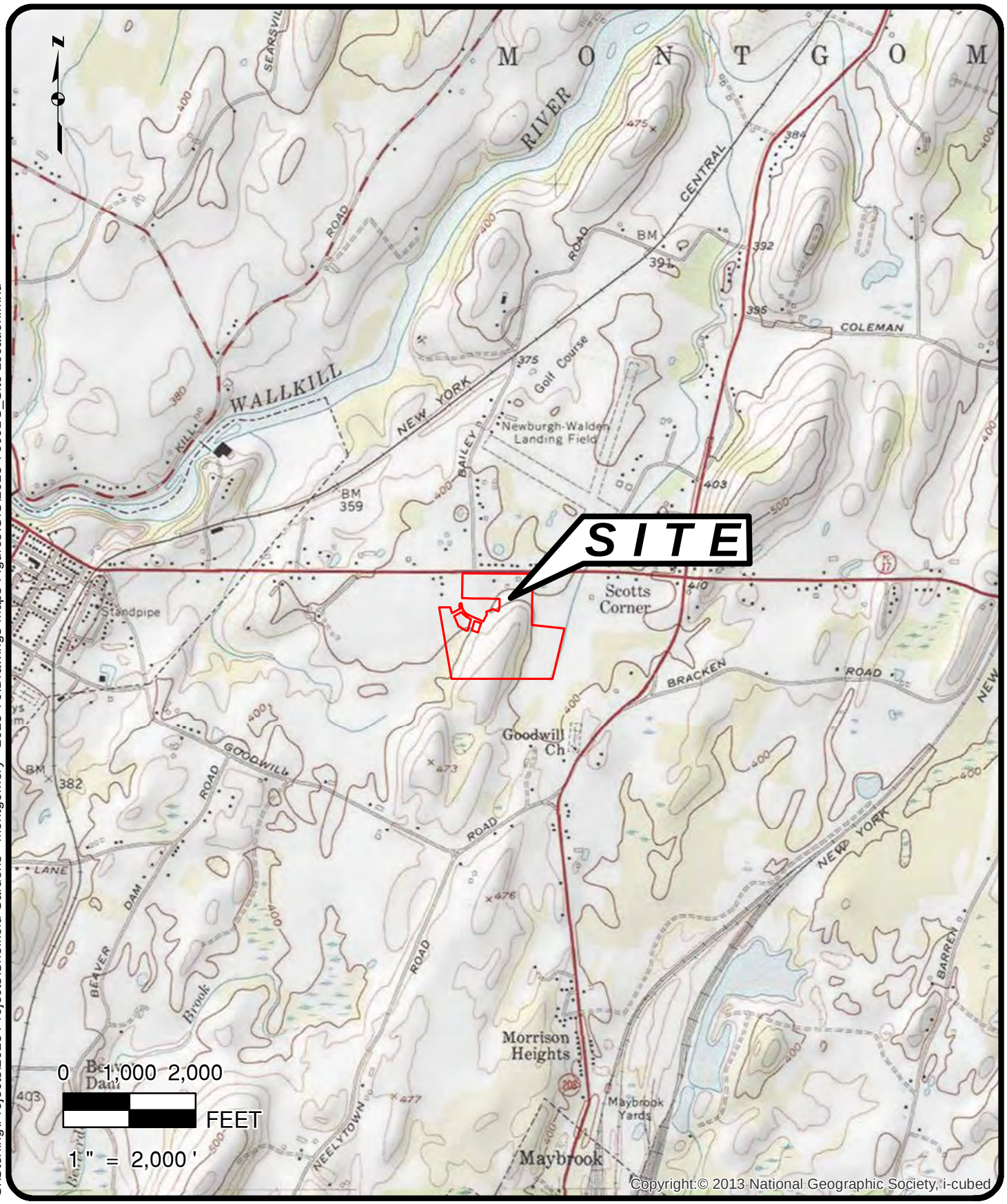
FIGURES



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STERLING

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SITE LOCATION MAP

SHEFFIELD GARDENS

NYS ROUTE 17K

TOWN OF MONTGOMERY ORANGE CO., NY

PROJ.NO.	DATE:	SCALE:	DWG.NO.	FIGURE
2023-76	04/12/2024	1 " = 2,000 '	2023-76001G	1

LEGEND

- WATER WELL LOCATION
- 200' WELLHEAD PROTECTION BUFFER
- 100' WELLHEAD PROTECTION BUFFER
- APPROXIMATE PROPERTY BOUNDARY
- ONSITE FEDERAL WETLANDS

MAP REFERENCES: USGS HIGH RESOLUTION ORTHOIMAGERY, 2021;

FIGURE 2

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT	
PROJ. ENGR.:	
PROJ. NO.:	
PREPARED BY:	PWS
DRAFTED BY:	PWS
CHECKED BY:	
APPROVED BY:	
DATUM:	
CONTOUR INTERVAL =	FEET

0 25 50 100 200

1" = 100'

WELL LOCATION MAP
SHEFFIELD GARDENS
NYS ROUTE 17K
TOWN OF MONTGOMERY ORANGE CO., NY

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

DATE: 04/12/2024 | SCALE: 1" = 100' | DWG. NO. 2023-76001 | SHEET 1 OF 1

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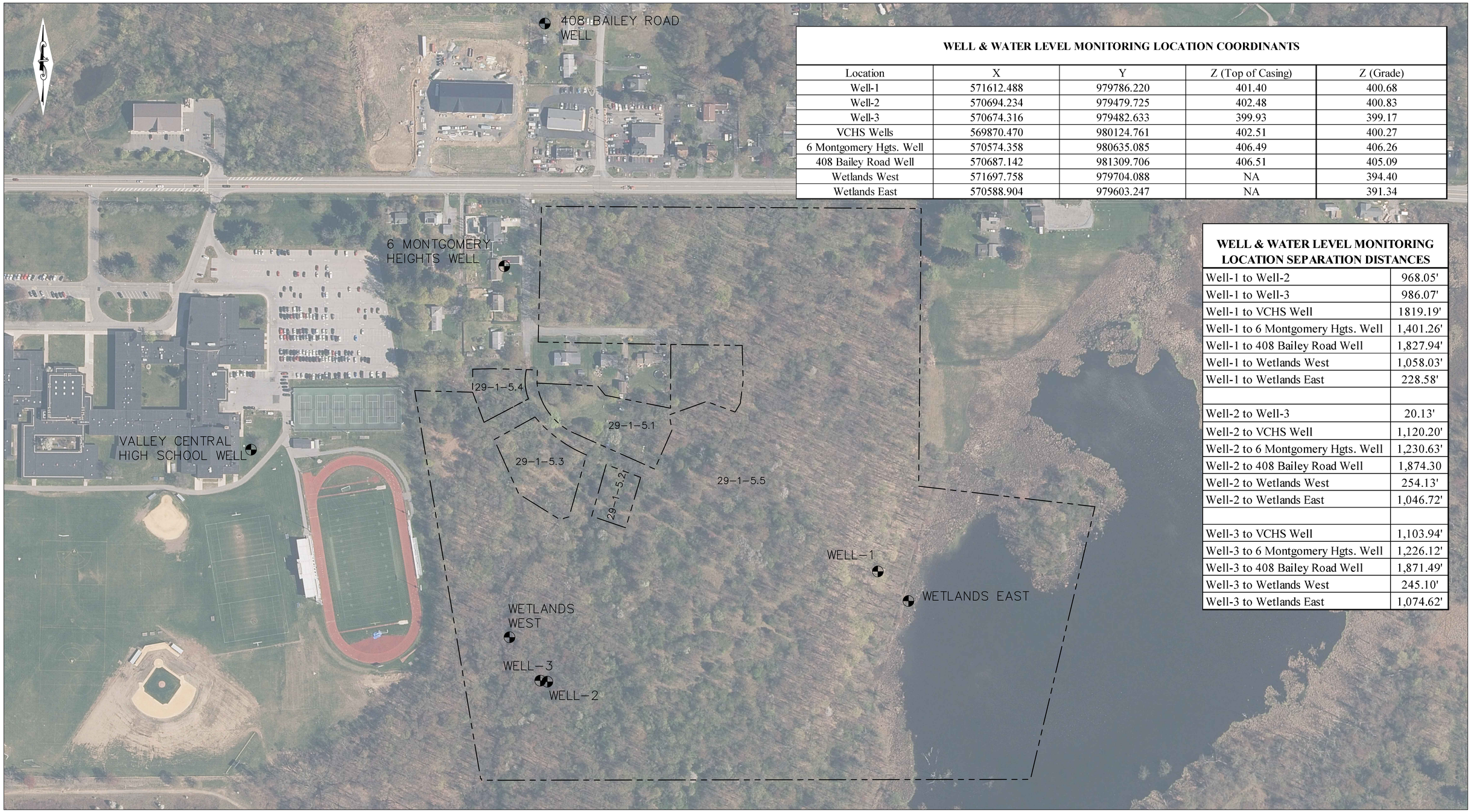
PAUL SCHLAR



WELL & WATER LEVEL MONITORING LOCATION COORDINANTS

Location	X	Y	Z (Top of Casing)	Z (Grade)
Well-1	571612.488	979786.220	401.40	400.68
Well-2	570694.234	979479.725	402.48	400.83
Well-3	570674.316	979482.633	399.93	399.17
VCHS Wells	569870.470	980124.761	402.51	400.27
6 Montgomery Hgts. Well	570574.358	980635.085	406.49	406.26
408 Bailey Road Well	570687.142	981309.706	406.51	405.09
Wetlands West	571697.758	979704.088	NA	394.40
Wetlands East	570588.904	979603.247	NA	391.34

WELL & WATER LEVEL MONITORING LOCATION SEPARATION DISTANCES

Well-1 to Well-2	968.05'
Well-1 to Well-3	986.07'
Well-1 to VCHS Well	1819.19'
Well-1 to 6 Montgomery Hgts. Well	1,401.26'
Well-1 to 408 Bailey Road Well	1,827.94'
Well-1 to Wetlands West	1,058.03'
Well-1 to Wetlands East	228.58'
Well-2 to Well-3	20.13'
Well-2 to VCHS Well	1,120.20'
Well-2 to 6 Montgomery Hgts. Well	1,230.63'
Well-2 to 408 Bailey Road Well	1,874.30
Well-2 to Wetlands West	254.13'
Well-2 to Wetlands East	1,046.72'
Well-3 to VCHS Well	1,103.94'
Well-3 to 6 Montgomery Hgts. Well	1,226.12'
Well-3 to 408 Bailey Road Well	1,871.49'
Well-3 to Wetlands West	245.10'
Well-3 to Wetlands East	1,074.62'

LEGEND

WATER WELL OR WATER LEVEL MONITORING LOCATION

APPROXIMATE PROPERTY BOUNDARY

MAP REFERENCES: USGS HIGH RESOLUTION ORTHOIMAGERY, 2021;

FIGURE 3

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT

PROJ. ENGR.:
PROJ. NO.:
PREPARED BY: PWS
DRAFTED BY: PWS
CHECKED BY:
APPROVED BY:
DATUM:
CONTOUR INTERVAL = FEET

0 30 60 120 240

1" = 120'

WATER LEVEL MONITORING LOCATIONS MAP
SHEFFIELD GARDENS
NYS ROUTE 17K
TOWN OF MONTGOMERY ORANGE CO., NY

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

DATE: 04/16/2024 | SCALE: 1" = 120' | DWG. NO. 2023-76001 | SHEET 1 OF 1

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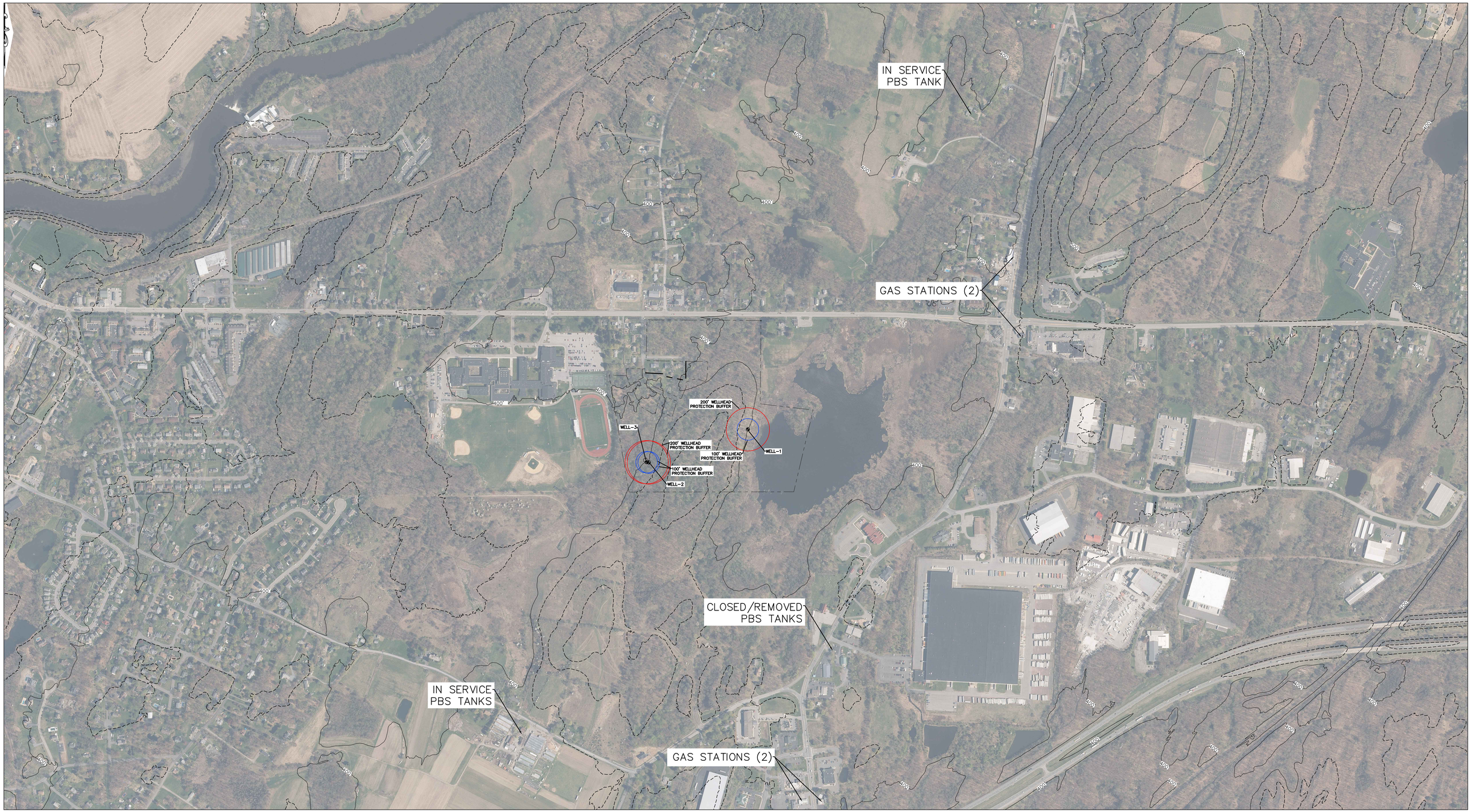


LEGEND

- WATER WELL LOCATION
- APPROXIMATE PROPERTY BOUNDARY
- 200' WELLHEAD PROTECTION BUFFER
- 100' WELLHEAD PROTECTION BUFFER
- 100 FOOT CONTOUR
- 20 FOOT CONTOUR

MAP REFERENCES: USGS HIGH RESOLUTION ORTHOIMAGERY, 2021;

FIGURE 4

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT	
PROJ. ENGR.:	
PROJ. NO.:	
PREPARED BY:	PWS
DRAFTED BY:	PWS
CHECKED BY:	
APPROVED BY:	
DATUM:	
CONTOUR INTERVAL =	20 FEET

0 100 200 400 800

1" = 400'

EXISTING OR POTENTIAL GROUNDWATER CONTAMINATION THREATS MAP

SHEFFIELD GARDENS

NYS ROUTE 17K

TOWN OF MONTGOMERY ORANGE CO., NY.

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road • Latham, New York 12110

DATE: 05/02/2024 | SCALE: 1" = 400' | DWG. NO.2023-76003 | SHEET 1 OF 1

S:\Sterling\Projects\2023 Projects\Sheffield Gardens - Montgomery - 2023-76\Drawings-Maps-Figures\ACAD\2023-76003 F4 Possible Contamination.dwg 5/2/2024 1:43 PM PAUL.SCHULER

TABLE 4

Summary of Water Quality Results (3/14/2024 and 4/1/2024)
Sheffield Gardens Montgomery, New York

ANALYTE	Units	NY-DWP5	Well-1	Well-2	Well-3
			4/1/2024	3/14/2024	3/14/2024
Miscellaneous/Inorganics					
Alkalinity-CaCO3	mg/L	---	204	142	117
Chloride	mg/L	250	< 5.0	< 5.0	< 5.0
Color, Apparent	Color Units	15	< 1	< 1	3
Escherichia Coli	/100 mls	1	Absent	Absent	Absent
Fluoride	mg/L	2.2	0.22	0.18	< 0.10
Glyphosate	ug/L	---	< 5.0	< 5.0	< 5.0
Gross Alpha Water	pci/L	15	< 3.00	< 3.00	< 3.00
Gross Beta Water	pci/L	---	< 4.00	< 4.00	< 4.00
Nitrate as Nitrogen	mg/L	10	0.01	0.02	0.03
Nitrite as Nitrogen	mg/L	1	< 0.004	< 0.004	< 0.004
Odor at 60 Degrees C	T.O.N.	3	1.3	1.3	< 1
pH	pH Units	---	8.03	8.11	7.93
Radium 226	pci/L	5	< 1.00	< 1.00	< 1.00
Radium 228	pci/L	5	< 1.00	< 1.00	< 1.00
Radon	pCi/l	---	40	44	192
Sulfate	mg/L	250	41.3	21	18.2
Tot. Diss. Solids	mg/L	---	290	180	170
Total Coliforms	/100 mls	1	Absent	Absent	**Present**
Total Cyanide (Drinking water)	mg/L	0.2	< 0.005	< 0.005	< 0.005
Turbidity	NTU	5	0.9	0.55	3.4
Metals, Total					
Arsenic	mg/L	0.01	< 0.0005	< 0.0004	< 0.0004
Antimony	mg/L	0.006	< 0.0004	< 0.0005	< 0.0005
Barium	mg/L	2	0.077	0.05	0.019
Beryllium	mg/L	0.004	< 0.0003	< 0.0003	< 0.0003
Cadmium	mg/L	0.005	< 0.001	< 0.001	< 0.001
Calcium	mg/L	---	40	41.1	43.7
Chromium	mg/L	0.1	0.002	< 0.001	< 0.001
Copper	mg/L	1.3	0.005	< 0.002	0.007
Hardness (CaCO3)	mg/L	---	157	136	136
Iron	mg/L	0.3**	**1.12**	0.11	0.157
Lead	mg/L	0.015	< 0.0010	< 0.0010	< 0.0010
Magnesium	mg/L	---	13.8	8.19	6.43
Manganese	mg/L	0.3**	**0.099**	0.131	0.035
Mercury	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002
Nickel	mg/L	---	0.003	< 0.001	< 0.001
Selenium	mg/L	0.05	< 0.001	< 0.001	< 0.001
Silver	mg/L	0.1	< 0.001	< 0.001	< 0.001
Sodium	mg/L	***	42	21.9	8.3
Thallium	mg/L	0.002	< 0.0003	< 0.0003	< 0.0003
Uranium	mg/L	0.03	< 0.0010	< 0.0010	< 0.0010
Zinc	mg/L	5	0.007	0.004	0.011

Summary of Water Quality Results (3/14/2024 and 4/1/2024)
Sheffield Gardens Montgomery, New York

ANALYTE	Units	NY-DWP5	Well-1	Well-2	Well-3
			4/1/2024	3/14/2024	3/14/2024
PCBs By E508					
PCB-1016 (screen)	ug/l	0.5	< 0.076	< 0.076	< 0.075
PCB-1221 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1232 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1242 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1248 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1254 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1260 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1262 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
PCB-1268 (screen)	ug/l	0.5	< 0.095	< 0.095	< 0.094
Volatiles By E524.2					
1,1,1,2-Tetrachloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
1,1,1-Trichloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
1,1,2,2-Tetrachloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
1,1,2-Trichlorotrifluoroethane	ug/L	---	< 0.50	< 0.50	< 0.50
1,1-Dichloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
1,1-Dichloroethene	ug/L	5	< 0.50	< 0.50	< 0.50
1,1-Dichloropropene	ug/L	5	< 0.50	< 0.50	< 0.50
1,2,3-Trichlorobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
1,2,3-Trichloropropane	ug/L	5	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
1,2,4-Trimethylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
1,2-Dichloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
1,2-Dichloropropane	ug/L	5	< 0.50	< 0.50	< 0.50
1,3,5-Trimethylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
1,3-Dichloropropane	ug/L	5	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
2,2-Dichloropropane	ug/L	5	< 0.50	< 0.50	< 0.50
2-Chlorotoluene	ug/L	5	< 0.50	< 0.50	< 0.50
4-Chlorotoluene	ug/L	5	< 0.50	< 0.50	< 0.50
Benzene	ug/L	5	< 0.50	< 0.50	< 0.50
Bromobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
Bromochloromethane	ug/L	5	< 0.50	< 0.50	< 0.50
Bromodichloromethane	ug/L	---	< 0.50	< 0.50	< 0.50
Bromoform	ug/L	---	< 0.50	< 0.50	< 0.50
Bromomethane	ug/L	5	< 0.50	< 0.50	< 0.50
Carbon tetrachloride	ug/L	5	< 0.50	< 0.50	< 0.50
Chlorobenzene	ug/L	5	< 0.50	< 0.50	< 0.50
Chloroethane	ug/L	5	< 0.50	< 0.50	< 0.50
Chloroform	ug/L	---	< 0.50	< 0.50	< 0.50
Chloromethane	ug/L	5	< 0.50	< 0.50	< 0.50
cis-1,2-Dichloroethene	ug/L	5	< 0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	ug/L	5	< 0.40	< 0.40	< 0.40
Dibromochloromethane	ug/L	---	< 0.50	< 0.50	< 0.50
Dibromomethane	ug/L	5	< 0.50	< 0.50	< 0.50

Summary of Water Quality Results (3/14/2024 and 4/1/2024)
Sheffield Gardens Montgomery, New York

ANALYTE	Units	NY-DWP5	Well-1	Well-2	Well-3
			4/1/2024	3/14/2024	3/14/2024
Dichlorodifluoromethane	ug/L	5	< 0.50	< 0.50	< 0.50
Ethylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	ug/L	5	< 0.50	< 0.50	< 0.50
Isopropylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
m&p-Xylene	ug/L	---	< 0.50	< 0.50	< 0.50
Methyl t-butyl ether (MTBE)	ug/L	10	< 0.50	< 0.50	< 0.50
Methylene chloride	ug/L	5	< 0.50	< 0.50	< 0.50
Naphthalene	ug/L	---	< 0.50	< 0.50	< 0.50
n-Butylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
n-Propylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
o-Xylene	ug/L	5	< 0.50	< 0.50	< 0.50
p-Isopropyltoluene	ug/L	5	< 0.50	< 0.50	< 0.50
sec-Butylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
Styrene	ug/L	5	< 0.50	< 0.50	< 0.50
tert-Butylbenzene	ug/L	5	< 0.50	< 0.50	< 0.50
Tetrachloroethene	ug/L	5	< 0.50	< 0.50	< 0.50
Toluene	ug/L	5	< 0.50	< 0.50	< 0.50
Total 1,3-Dichloropropene	ug/L	---	< 0.40	< 0.40	< 0.40
Total Trihalomethanes	ug/L	80	< 0.50	< 0.50	< 0.50
Total Xylenes	ug/L	---	< 0.50	< 0.50	< 0.50
trans-1,2-Dichloroethene	ug/L	5	< 0.50	< 0.50	< 0.50
trans-1,3-Dichloropropene	ug/L	5	< 0.40	< 0.40	< 0.40
Trichloroethene	ug/L	5	< 0.50	< 0.50	< 0.50
Trichlorofluoromethane	ug/L	5	< 0.50	< 0.50	< 0.50
Vinyl chloride	ug/L	2	< 0.50	< 0.50	< 0.50
Semivolatile Organic By E525.3					
Benzo(a)pyrene	ug/L	0.2	< 0.02	< 0.02	< 0.02
Bis(2-ethylhexyl)adipate	ug/L	400	< 0.57	< 0.57	< 0.57
Bis(2-ethylhexyl)phthalate	ug/L	6	< 0.57	< 0.57	< 0.57
Pesticides By E525.3					
Aldrin	ug/L	---	< 0.10	< 0.10	< 0.10
Chlordane	ug/L	2	< 0.19	< 0.19	< 0.19
Dieldrin	ug/L	---	< 0.03	< 0.03	< 0.03
Endrin	ug/L	2	< 0.01	< 0.01	< 0.01
Heptachlor	ug/L	0.4	< 0.04	< 0.04	< 0.04
Heptachlor Epoxide	ug/L	0.2	< 0.02	< 0.02	< 0.02
Hexachlorobenzene	ug/L	1	< 0.05	< 0.05	< 0.05
Hexachlorocyclopentadiene	ug/L	---	< 0.05	< 0.05	< 0.05
Lindane	ug/L	0.2	< 0.02	< 0.02	< 0.02
Methoxychlor	ug/L	40	< 0.05	< 0.05	< 0.05
Propachlor	ug/L	---	< 0.05	< 0.05	< 0.05
Toxaphene	ug/L	3	< 0.95	<0.95	<0.95
Organophosphorus Pesticides By E525.3					
Alachlor	ug/L	2	< 0.05	< 0.05	< 0.05
Atrazine	ug/L	3	< 0.05	< 0.05	< 0.05
Butachlor	ug/L	---	< 0.05	< 0.05	< 0.05
Metolachlor	ug/L	---	< 0.05	< 0.05	< 0.05
Metribuzin	ug/L	---	< 0.05	< 0.05	< 0.05
Simazine	ug/L	4	< 0.05	< 0.05	< 0.05

Summary of Water Quality Results (3/14/2024 and 4/1/2024)
Sheffield Gardens Montgomery, New York

ANALYTE	Units	NY-DWP5	Well-1	Well-2	Well-3
			4/1/2024	3/14/2024	3/14/2024
Herbicides By E515.3					
2,4,5-T	ug/L	---	< 0.50	< 0.50	< 0.50
2,4,5-TP	ug/L	10	< 0.20	< 0.20	< 0.20
2,4-D	ug/L	50	< 0.10	< 0.10	< 0.10
Dalapon	ug/L	---	< 1.0	< 1.0	< 1.0
Dicamba	ug/L	---	< 0.50	< 0.50	< 0.50
Dichloroprop	ug/L	---	< 0.50	< 0.50	< 0.50
Dinoseb	ug/L	7	< 0.20	< 0.20	< 0.20
Pentachlorophenol	ug/L	1	< 0.040	< 0.040	< 0.040
Picloram	ug/L	---	< 0.10	< 0.10	< 0.10
Endothall By E548.1					
Endothall	ug/L	---	<5.0	<5.0	<5.0
EDB and DBCP Analysis By E504.1					
1,2-Dibromo-3-Chloropropane (DBCP)	ug/L	0.2	< 0.02	< 0.02	< 0.02
1,2-Dibromoethane (EDB)	ug/L	0.05	< 0.01	< 0.01	< 0.01
Diquat By E549.2					
Diquat	ug/L	20	< 0.40	< 0.40	< 0.40
Carbamates HPLC By E531.2					
3-Hydroxycarbofuran	ug/L	---	< 0.50	< 0.50	< 0.50
Aldicarb	ug/L	3	< 0.50	< 0.50	< 0.50
Aldicarb Sulfone	ug/L	2	< 0.80	< 0.80	< 0.80
Aldicarb Sulfoxide	ug/L	4	< 0.50	< 0.50	< 0.50
Carbaryl	ug/L	---	< 0.50	< 0.50	< 0.50
Carbofuran	ug/L	40	< 0.90	< 0.90	< 0.90
Methomyl	ug/L	---	< 0.50	< 0.50	< 0.50
Oxamyl	ug/L	200	< 2.0	< 2.0	< 2.0
Asbestos in Water By E100.1/100.2					
Asbestos fibers (>0.5u and <10u)	MFL		<1.75	<1.75	<1.75
Asbestos fibers (>10u)	MFL		<0.218	<0.218	<0.218
1,4-dioxane By EPA522					
1,4-dioxane	ug/L	1	< 0.20	< 0.20	< 0.20

Summary of Water Quality Results (3/14/2024 and 4/1/2024)
Sheffield Gardens Montgomery, New York

ANALYTE	Units	NY-DWP5	Well-1	Well-2	Well-3
			4/1/2024	3/14/2024	3/14/2024
PFAS By EPA 533					
(11Cl-PF3OUdS)	ng/L	---	< 0.926	< 0.926	< 0.926
(9Cl-PF3ONS)	ng/L		< 0.926	< 0.926	< 0.926
(HFPO-DA)	ng/L		< 0.926	< 0.926	< 0.926
1H,1H,2H,2H-Perfluorodecane (8:2FTS)	ng/L		< 1.85	< 1.85	< 1.85
1H,1H,2H,2H-Perfluorohexane (4:2FTS)	ng/L		< 0.926	< 0.926	< 0.926
1H,1H,2H,2H-Perfluorooctane (6:2FTS)	ng/L		< 1.85	< 1.85	< 1.85
4,8-Dioxa-3h-Perfluorononanoic (ADONA)	ng/L		< 0.926	< 0.926	< 0.926
Nonafluoro-3,6-Dioxaheptanoic (NFDHA)	ng/L		< 0.926	< 0.926	< 0.926
Perfluoro(2-Ethoxyethane) (PFEESA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluoro-3-Methoxypropanoic (PFMPA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorobutanesulfonic Acid (PFBS)	ng/L	10*	< 0.926	< 0.926	< 0.926
Perfluorobutanoic Acid (PFBA)	ng/L	10*	< 0.926	< 0.926	< 0.926
Perfluorodecanoic Acid (PFDA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorododecanoic Acid (PFDoA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	---	< 1.85	< 1.85	< 1.85
Perfluoroheptanoic Acid (PFHpA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorohexanesulfonic Acid (PFHxS)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorohexanoic Acid (PFHxA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorononanoic Acid (PFNA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorooctanesulfonic Acid (PFOS)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluorooctanoic Acid (PFOA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluoropentanesulfonic Acid (PFPeS)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluoropentanoic Acid (PFPeA)	ng/L	---	< 0.926	< 0.926	< 0.926
Perfluoroundecanoic Acid (PFUnA)	ng/L	---	< 0.926	< 0.926	< 0.926

Notes:

NYDP5 = NY DOH Part 5-SubPart 5-1 Public Water Supply Stds.: MCLs Tables 1-7; Eff. 1 October 2007/ USEPA MCLs: USEPA - Primary Drinking Water Standards (Part 5-1).

* = Standard from Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021.

Results in **Bold** and Highlighted represent exceedance of NY DOH Part 5-SubPart 5-1 Public Water Supply Stds or Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021.

--- = No applicable standard or guidance value available for this analyte.

** = If iron and manganese are present, the total concentration of both should not exceed 0.5 mg/L.

*** = There is no drinking water standard for sodium, state and federal agencies recommend sodium levels in water not exceed 20 milligrams per liter (mg/L) for people on very low sodium diets and 270 mg/L for people on moderately restricted sodium diets.

< = Result is not detected above the associated laboratory reporting limit.

NA = Not Applicable.

APPENDIX A

PUMPING TEST PROTOCOL FOR WATER WITHDRAWAL APPLICATIONS

Included as DEIS Appendix D1

APPENDIX B

BORING LOGS / CAMERA INSPECTION LOGS

Included as DEIS Appendix D1

APPENDIX C

WATER WELL COMPLETION REPORTS

(1) COUNTY Orange

(2) TOWN Montgomery town

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATER WELL COMPLETION REPORT

(3) DEC Well Number

(4) OWNER
Engineering & Surveying Properties, PC
☐ Same as owner address

(5) ADDRESS **71 Clinton St.**
Montgomery, NY 12549

(6) LOCATION OF WELL (See Instructions on Reverse)
Montgomery Hgts. well 1 **Montgomery, NY**

(7) LATITUDE.LONGITUDE AND METHOD USED
☐ GPS ☐ Map Lat: Long:

(8) TAX MAP NO.

(9) DEPTH OF WELL BELOW LAND SURFACE (feet) **500+**

(10) DEPTH TO GROUNDWATER LAND SURFACE (feet)

DATE MEASURED **3/27/2023**

(12) FLOWING? **NO**

CASINGS

(13) DIAMETER	**8** in.	in.	in.	in.
(14) LENGTH	**50** ft.	ft.	ft.	ft.

(15) GROUT TYPE / SEALING

(16) GROUT / SEALING INTERVAL (feet)

SCREENS

(17) MAKE & MATERIAL

(18) SLOT SIZE

(19) DIAMETER	in.	in.	in.	in.
(20) LENGTH	ft.	ft.	ft.	ft.

(21) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(22) DATE **3/27/2023**

(23) DURATION OF TEST **72Hr 0 Min**

(24) LIFT METHOD ☒ Pump ☐ Air Lift ☐ Bail

(25) STABILIZED DISCHARGE (GPM) **80**

(26) STATIC LEVEL PRIOR TO TEST **8**

(27) MAXIMUM DRAWDOWN (Stabilized)

(28) RECOVERY (Time in Hours/minutes) **24Hr 0 Min**

(29) Was the water produced during the test discharged away from the immediate area? YES ☑ NO ☐

DRILLER INFORMATION

(30) METHOD OF DRILLING ☒ Rotary ☐ Cable Tool Other

(31) USE OF WATER **Residential**

(32) DATE DRILLING WORK STARTED **3/27/2023**

(33) DATE DRILLING WORK COMPLETED **3/27/2023**

(34) DATE REPORT FILED **5/23/2024**

(35) REGISTERED COMPANY **Roarke Well Drilling, Inc.**

(35) DEC REGISTRATION NO. NYRD **10012**

(37) REGISTERED COMPANY ADDRESS
431 Scotchtown Ave. Goshen NY 10924

(38) CERTIFIED DRILLER (Print name)

(44) CERTIFIED DRILLER SIGNATURE*

PUMP INSTALLATION

(40) PUMP INSTALLED Yes ☐ No ☑

(41) DATE

(42) TYPE

(43) MAKE

(44) MODEL

(45) MAXIMUM CAPACITY (GPM)

(46) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet)

(47) DATE REPORT FILED

(48) REGISTERED COMPANY

(49) DEC REGISTRATION NO. NYRD

(37) REGISTERED COMPANY ADDRESS

(51) CERTIFIED PUMP INSTALLER (Print name)

(52) CERTIFIED PUMP INSTALLER SIGNATURE

*By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as defined by the Evironmental Conservation Law 15-1502; (2) this water well was constructed in accordance with water well standards promulgated by the New York State Department of Health; (3) under the penalty of perjury the information provided in this Well Completion Report is ture, accurate and complete, and I understand that any false statement made herein in punishable as a Class A Misdemeanor under Penal Law §210.45.

WELL LOG

DEPTH TO BEDROCK
ft. below land surface

GROUND ELEVATION
ft. above sea level

TOP OF CASING
ft. above (+) or below (-) ground surface

TOP OF WELL

BOTTOM OF HOLE

NYSDEC COPY

LOCATION SKETCH- Indicate north

(1) COUNTY Orange

(2) TOWN Montgomery town

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATER WELL COMPLETION REPORT

(3) DEC Well Number

(4) OWNER
Engineering & Surveying Properties, PC
☐ Same as owner address

(5) ADDRESS **71 Clinton St.**
Montgomery, NY 12549

(6) LOCATION OF WELL (See Instructions on Reverse)
Montgomery Hgts. Well 2 **Montgomery, NY**

(7) LATITUDE.LONGITUDE AND METHOD USED
☐ GPS ☐ Map Lat: Long:

(8) TAX MAP NO.

(9) DEPTH OF WELL BELOW LAND SURFACE (feet)	(10) DEPTH TO GROUNDWATER LAND SURFACE (feet)	DATE MEASURED	(12) FLOWING?
569		**3/27/2023**	**NO**

CASINGS

(13) DIAMETER	**8** in.	in.	in.	in.
(14) LENGTH	**32** ft.	ft.	ft.	ft.

(15) GROUT TYPE / SEALING

(16) GROUT / SEALING INTERVAL (feet)

SCREENS

(17) MAKE & MATERIAL

(18) SLOT SIZE

(19) DIAMETER	in.	in.	in.	in.
(20) LENGTH	ft.	ft.	ft.	ft.

(21) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(22) DATE **3/27/2023**

(23) DURATION OF TEST **72Hr 0 Min**

(24) LIFT METHOD ☒ Pump ☐ Air Lift ☐ Bail

(25) STABILIZED DISCHARGE (GPM) **40**

(26) STATIC LEVEL PRIOR TO TEST **2**

(27) MAXIMUM DRAWDOWN (Stabilized)

(28) RECOVERY (Time in Hours/minutes) **24Hr 0 Min**

(29) Was the water produced during the test discharged away from the immediate area? YES ☑ NO ☐

DRILLER INFORMATION

(30) METHOD OF DRILLING ☒ Rotary ☐ Cable Tool Other

(31) USE OF WATER **Residential**

(32) DATE DRILLING WORK STARTED **3/27/2023**

(33) DATE DRILLING WORK COMPLETED **3/27/2023**

(34) DATE REPORT FILED	(35) REGISTERED COMPANY	(35) DEC REGISTRATION NO.
5/23/2024	**Roarke Well Drilling, Inc.**	NYRD **10012**

(37) REGISTERED COMPANY ADDRESS
431 Scotchtown Ave. Goshen NY 10924

(38) CERTIFIED DRILLER (Print name)

(44) CERTIFIED DRILLER SIGNATURE*

PUMP INSTALLATION

(40) PUMP INSTALLED Yes ☐ No ☑

(41) DATE

(42) TYPE

(43) MAKE

(44) MODEL

(45) MAXIMUM CAPACITY (GPM)

(46) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet)

(47) DATE REPORT FILED	(48) REGISTERED COMPANY	(49) DEC REGISTRATION NO.
		NYRD

(37) REGISTERED COMPANY ADDRESS

(51) CERTIFIED PUMP INSTALLER (Print name)

(52) CERTIFIED PUMP INSTALLER SIGNATURE

*By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as defined by the Evironmental Conservation Law 15-1502; (2) this water well was constructed in accordance with water well standards promulgated by the New York State Department of Health; (3) under the penalty of perjury the information provided in this Well Completion Report is ture, accurate and complete, and I understand that any false statement made herein in punishable as a Class A Misdemeanor under Penal Law §210.45.

WELL LOG

DEPTH TO BEDROCK
ft. below land surface

GROUND ELEVATION
ft. above sea level

TOP OF CASING **1**
ft. above (+) or below (-) ground surface

TOP OF WELL

BOTTOM OF HOLE

NYSDEC COPY

LOCATION SKETCH- Indicate north

(1) COUNTY Orange

(2) TOWN Montgomery town

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATER WELL COMPLETION REPORT

(3) DEC Well Number

(4) OWNER **Engineering & Surveying Properties, PC**
☐ Same as owner address

(5) ADDRESS **71 Clinton St.**
Montgomery, NY 12549

(6) LOCATION OF WELL (See Instructions on Reverse
Montgomery Hgts. Well #3 **Montgomery, NY**

(7) LATITUDE.LONGITUDE AND METHOD USED
☐ GPS ☐ Map Lat: Long:

(8) TAX MAP NO.

(9) DEPTH OF WELL BELOW LAND SURFACE (feet)	(10) DEPTH TO GROUNDWATER LAND SURFACE (feet)	DATE MEASURED	(12) FLOWING?
310	**0**	**3/17/2023**	**NO**

CASINGS

(13) DIAMETER	**8** in.	in.	in.	in.
(14) LENGTH	**21** ft.	ft.	ft.	ft.

(15) GROUT TYPE / SEALING

(16) GROUT / SEALING INTERVAL (feet)

SCREENS

(17) MAKE & MATERIAL

(18) SLOT SIZE

(19) DIAMETER	in.	in.	in.	in.
(20) LENGTH	ft.	ft.	ft.	ft.

(21) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(22) DATE **3/27/2023**

(23) DURATION OF TEST **72Hr 0 Min**

(24) LIFT METHOD ☒ Pump ☐ Air Lift ☐ Bail

(25) STABILIZED DISCHARGE (GPM) **40**

(26) STATIC LEVEL PRIOR TO TEST **4**

(27) MAXIMUM DRAWDOWN (Stabilized)

(28) RECOVERY (Time in Hours/minutes) **24Hr 0 Min**

(29) Was the water produced during the test discharged away from the immediate area? YES ☑ NO ☐

DRILLER INFORMATION

(30) METHOD OF DRILLING ☒ Rotary ☐ Cable Tool Other

(31) USE OF WATER **Residential**

(32) DATE DRILLING WORK STARTED **3/17/2023**

(33) DATE DRILLING WORK COMPLETED **3/27/2023**

(34) DATE REPORT FILED	(35) REGISTERED COMPANY	(35) DEC REGISTRATION NO.
5/23/2024	**Roarke Well Drilling, Inc.**	NYRD **10012**

(37) REGISTERED COMPANY ADDRESS
431 Scotchtown Ave. Goshen NY 10924

(38) CERTIFIED DRILLER (Print name) **Charles W. Crover**

(44) CERTIFIED DRILLER SIGNATURE*

PUMP INSTALLATION

(40) PUMP INSTALLED Yes ☐ No ☑

(41) DATE

(42) TYPE

(43) MAKE

(44) MODEL

(45) MAXIMUM CAPACITY (GPM)

(46) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet)

(47) DATE REPORT FILED	(48) REGISTERED COMPANY	(49) DEC REGISTRATION NO.
		NYRD

(37) REGISTERED COMPANY ADDRESS

(51) CERTIFIED PUMP INSTALLER (Print name)

(52) CERTIFIED PUMP INSTALLER SIGNATURE

*By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as defined by the Evironmental Conservation Law 15-1502; (2) this water well was constructed in accordance with water well standards promulgated by the New York State Department of Health; (3) under the penalty of perjury the information provided in this Well Completion Report is ture, accurate and complete, and I understand that any false statement made herein in punishable as a Class A Misdemeanor under Penal Law §210.45.

WELL LOG

DEPTH TO BEDROCK ft. below land surface **245**

GROUND ELEVATION ft. above sea level

TOP OF CASING ft. above (+) or below (-) ground surface **1**

TOP OF WELL

0	245	existing 50 GPM
245	310	Medium Shale

BOTTOM OF HOLE

NYSDEC COPY

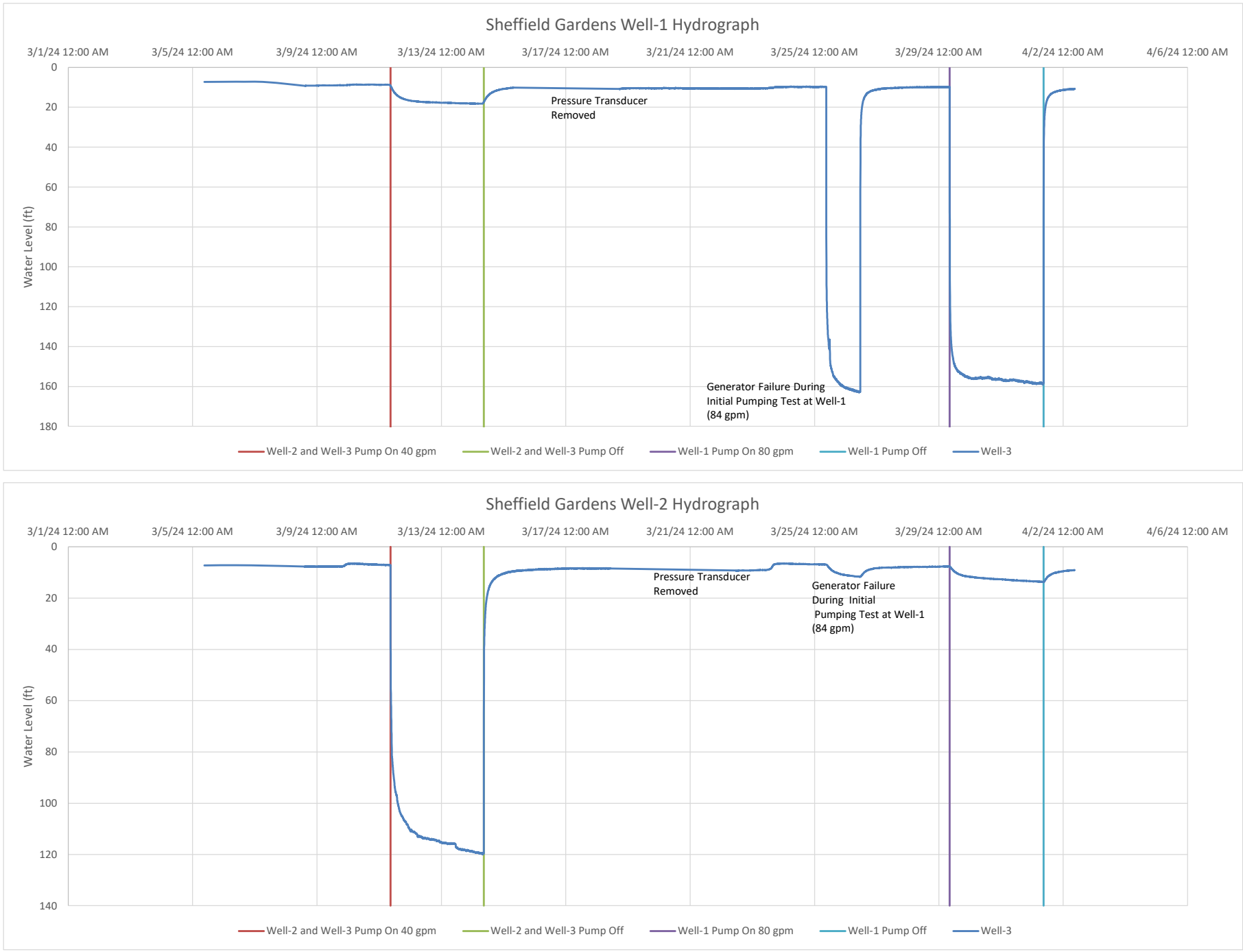
LOCATION SKETCH- Indicate north

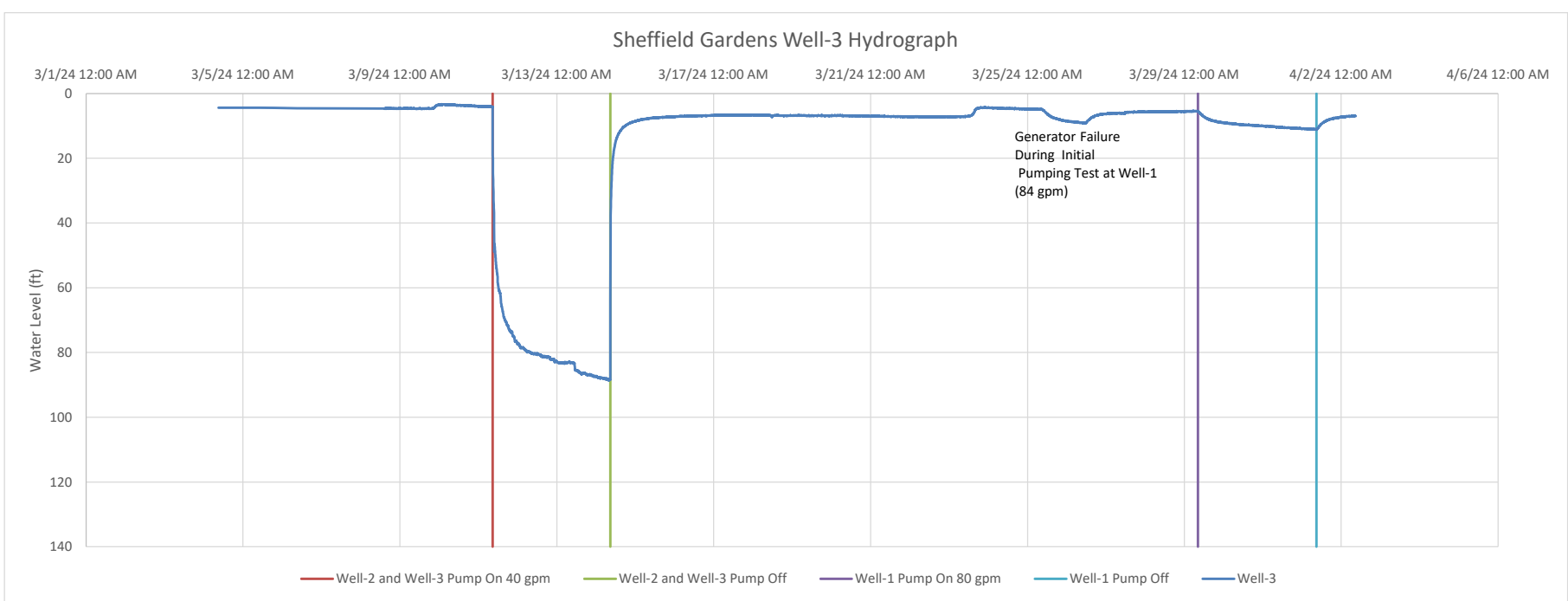
APPENDIX D

WATER LEVEL DATA AND HYDROGRAPHS

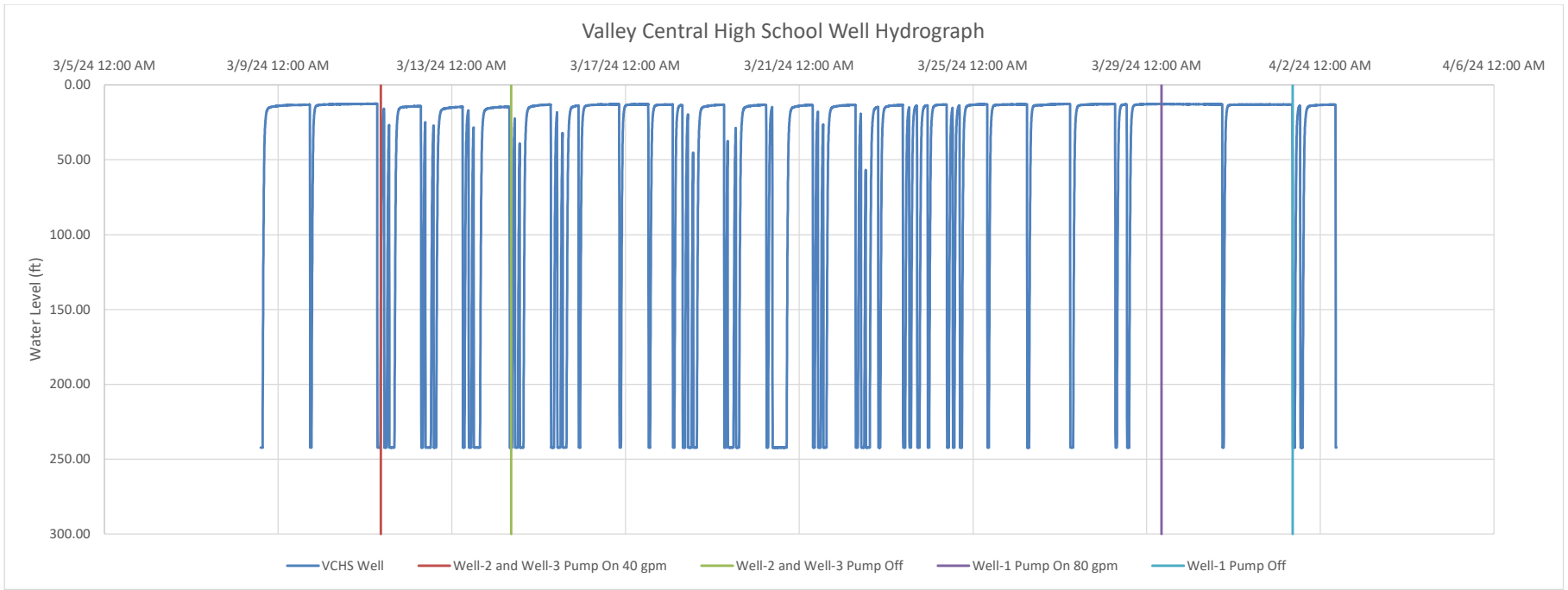
(800 pages of Data Available Upon Request)

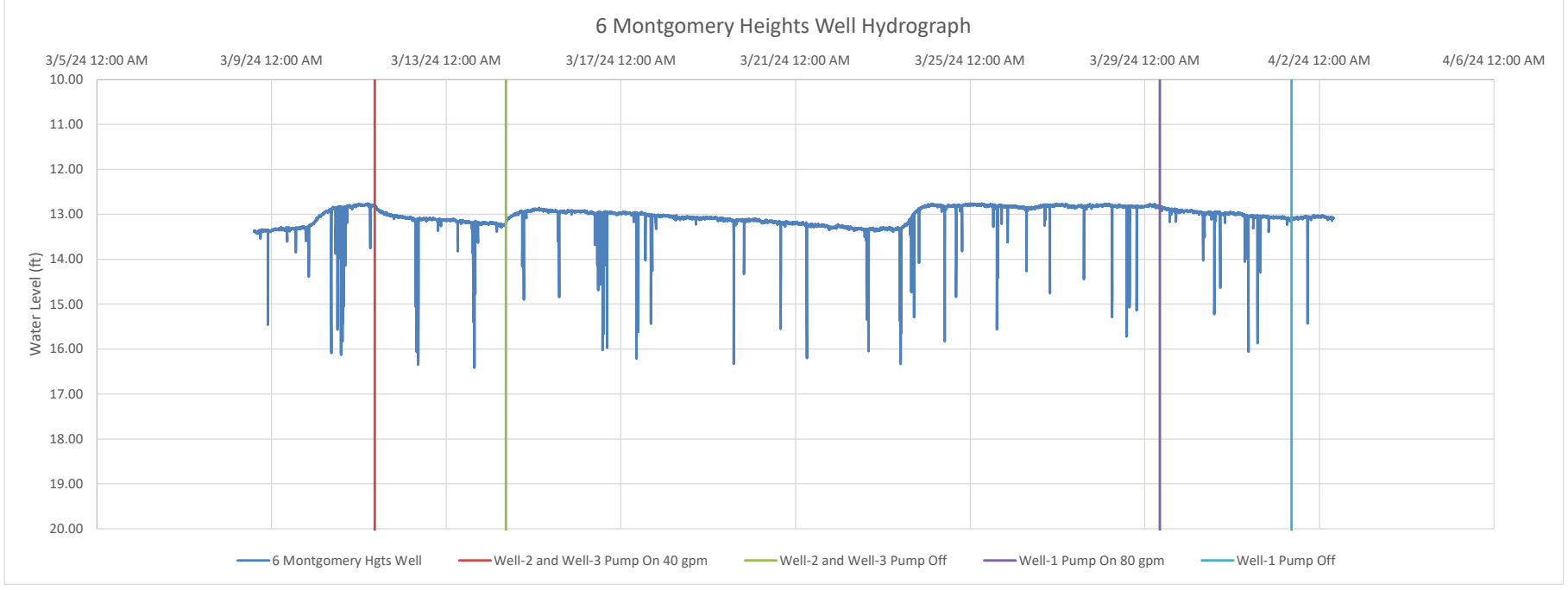
Sheffield Gardens Hydrographs (3/5/2024 - 4/2/2024)

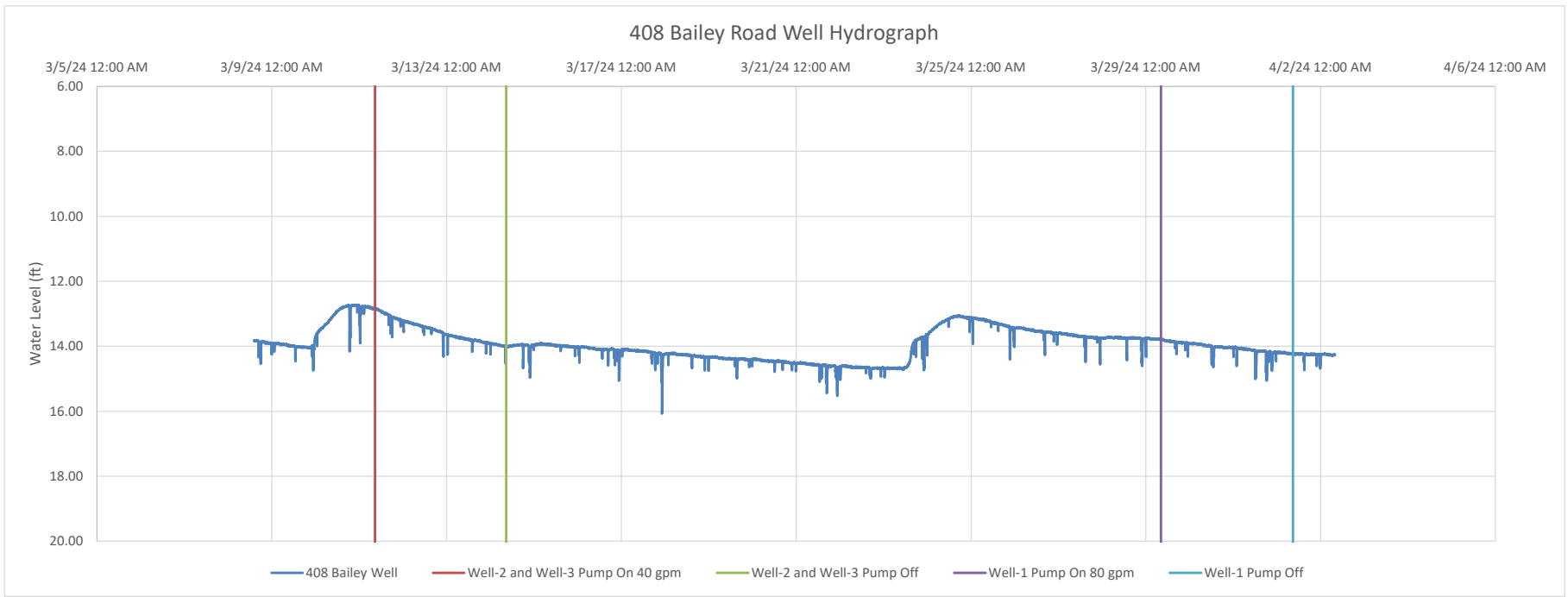




Sheffield Gardens Hydrographs (3/5/2024 - 4/2/2024)



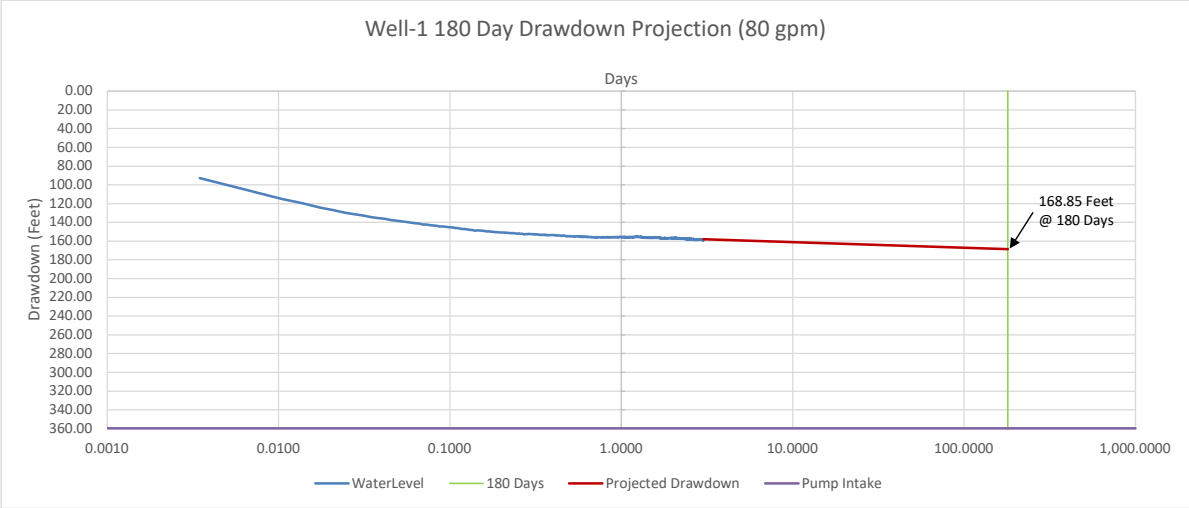


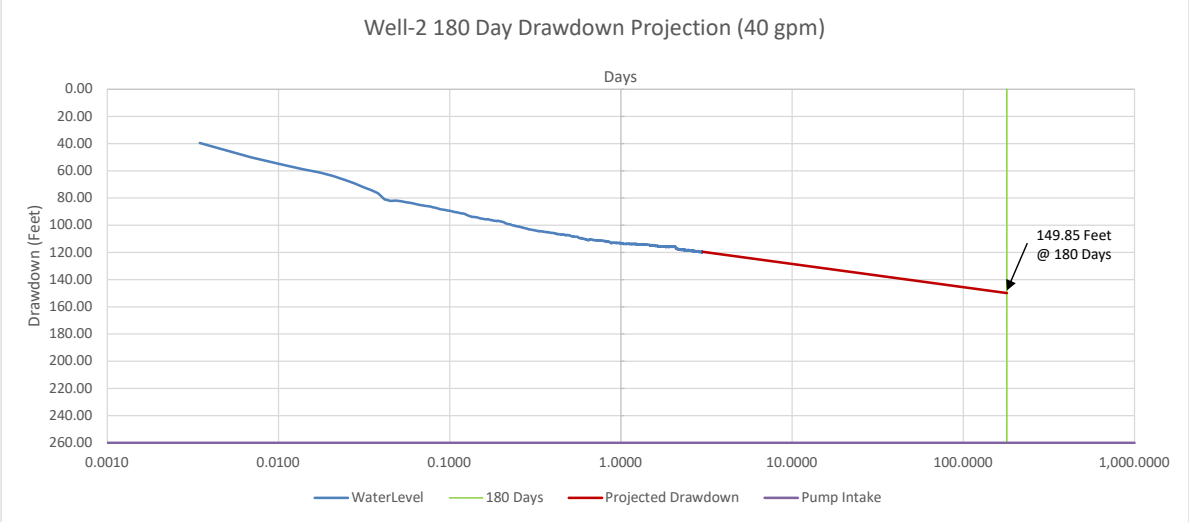


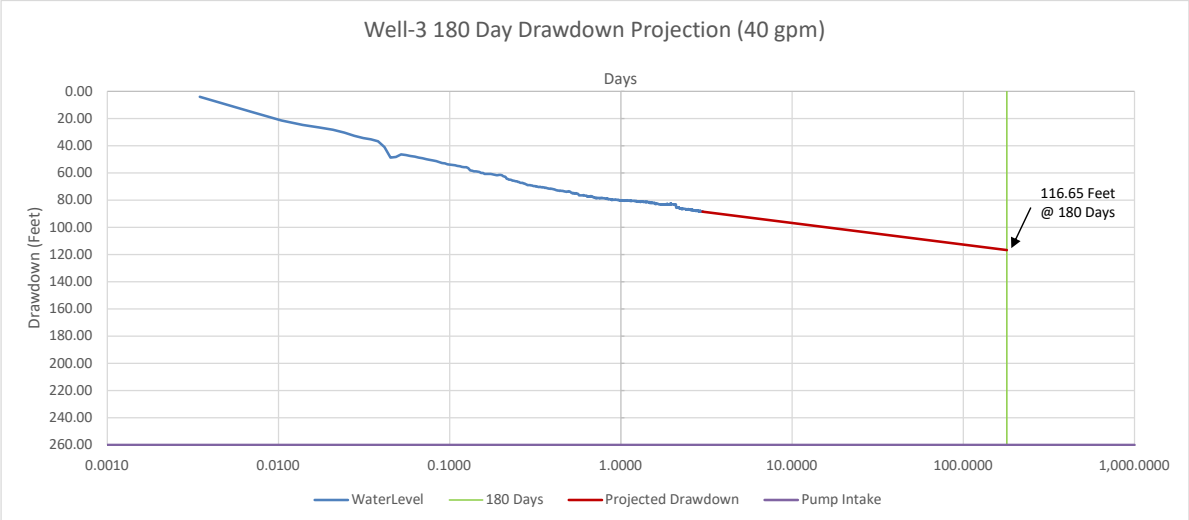
APPENDIX E

180-DAY DRAWDOWN HYDROGRAPHS

Sheffield Gardens Hypothetical 180-Day Drawdown Graphs



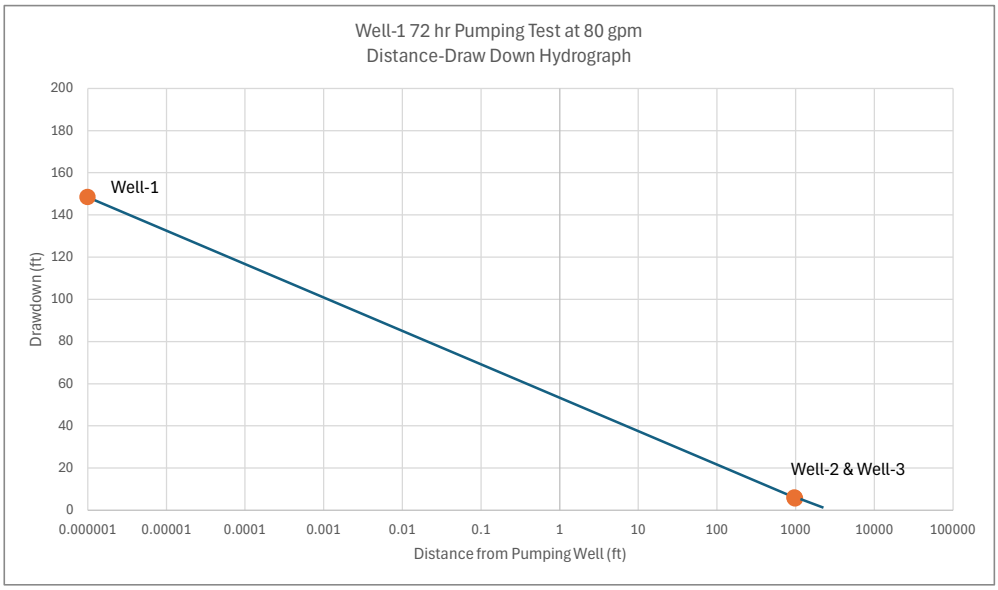


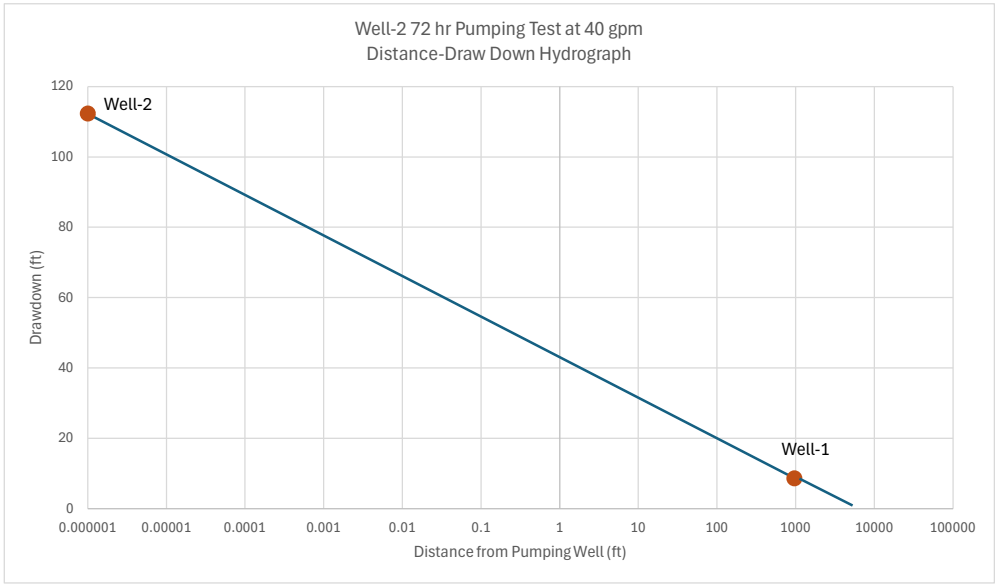


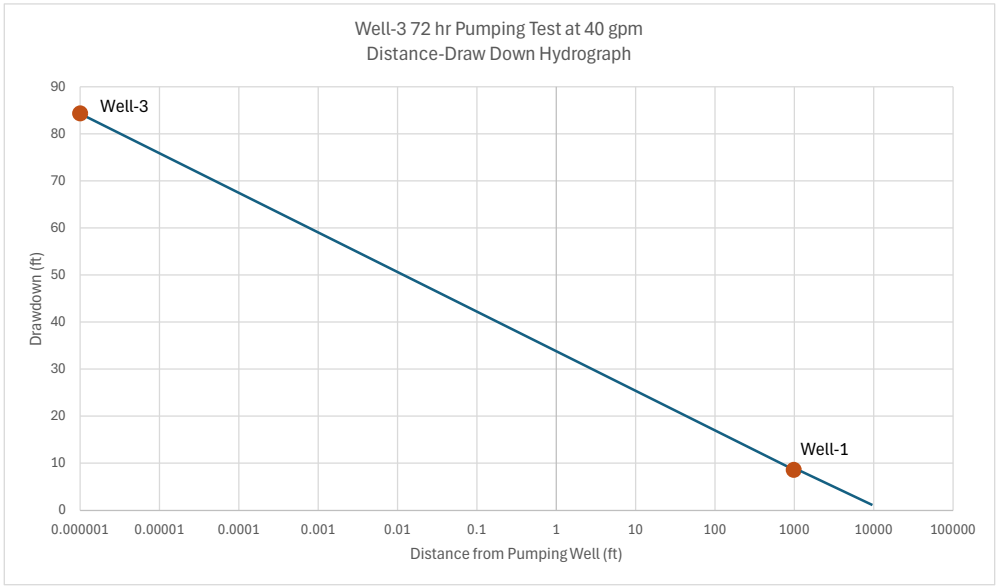
APPENDIX F

DISTANCE-DRAWDOWN GRAPHS, WELL LOCATIONS AND SEPARATION DISTANCES

Sheffield Gardens Distance-Drawdown Hydrographs







WELL & WATER LEVEL MONITORING LOCATION SEPARATION DISTANCES	
Well-1 to Well-2	968.05'
Well-1 to Well-3	986.07'
Well-1 to VCHS Well	1819.19'
Well-1 to 6 Montgomery Hgts. Well	1,401.26'
Well-1 to 408 Bailey Road Well	1,827.94'
Well-1 to Wetlands West	1,058.03'
Well-1 to Wetlands East	228.58'
Well-2 to Well-3	20.13'
Well-2 to VCHS Well	1,120.20'
Well-2 to 6 Montgomery Hgts. Well	1,230.63'
Well-2 to 408 Bailey Road Well	1,874.30
Well-2 to Wetlands West	254.13'
Well-2 to Wetlands East	1,046.72'
Well-3 to VCHS Well	1,103.94'
Well-3 to 6 Montgomery Hgts. Well	1,226.12'
Well-3 to 408 Bailey Road Well	1,871.49'
Well-3 to Wetlands West	245.10'
Well-3 to Wetlands East	1,074.62'

WELL & WATER LEVEL MONITORING LOCATION COORDINANTS

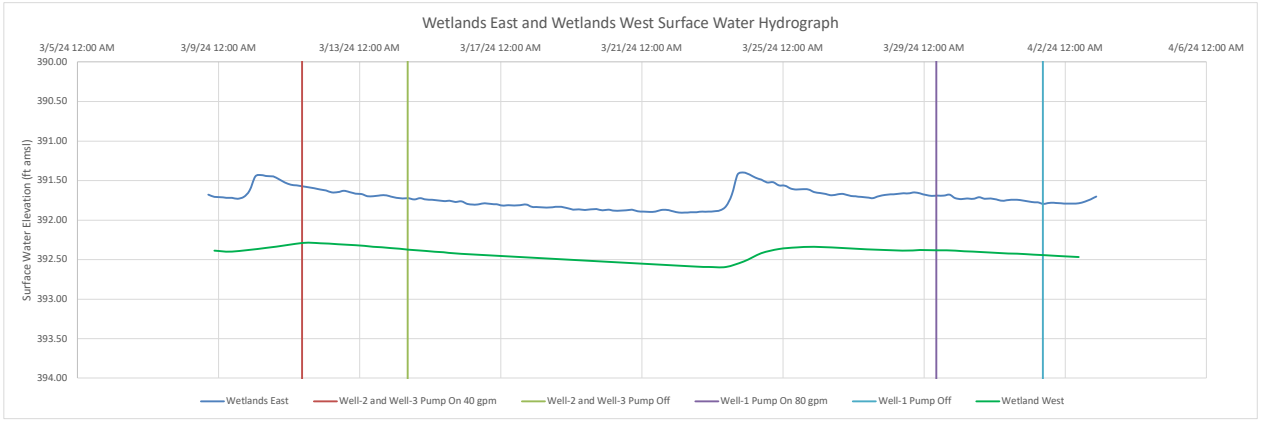
Location	X	Y	Z (Top of Casing)	Z (Grade)
Well-1	571612.488	979786.220	401.40	400.68
Well-2	570694.234	979479.725	402.48	400.83
Well-3	570674.316	979482.633	399.93	399.17
VCHS Wells	569870.470	980124.761	402.51	400.27
6 Montgomery Hgts. Well	570574.358	980635.085	406.49	406.26
408 Bailey Road Well	570687.142	981309.706	406.51	405.09
Wetlands West	571697.758	979704.088	NA	394.40
Wetlands East	570588.904	979603.247	NA	391.34

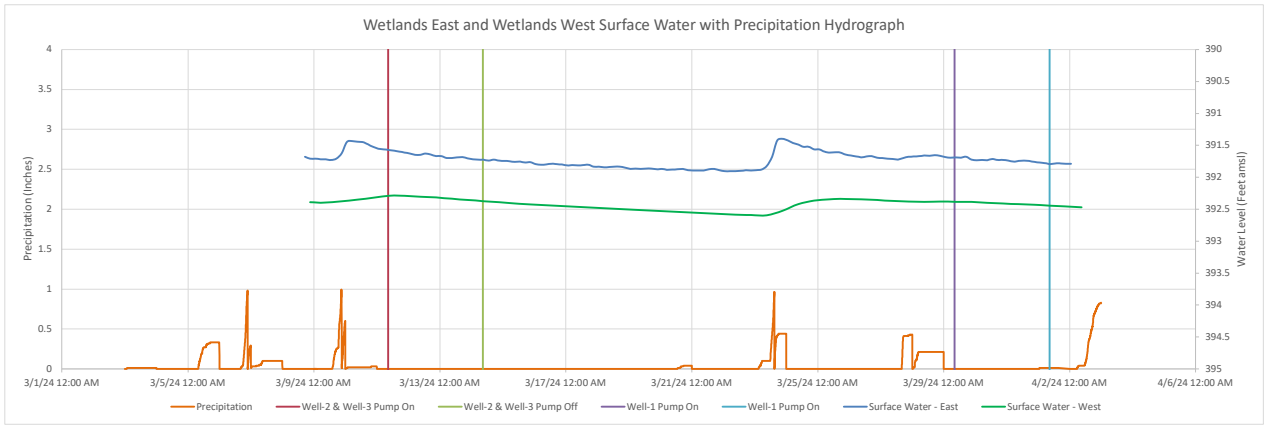
Coordinates in NAD 1983 State Plane New York East FIPS 3101 (US Feet)

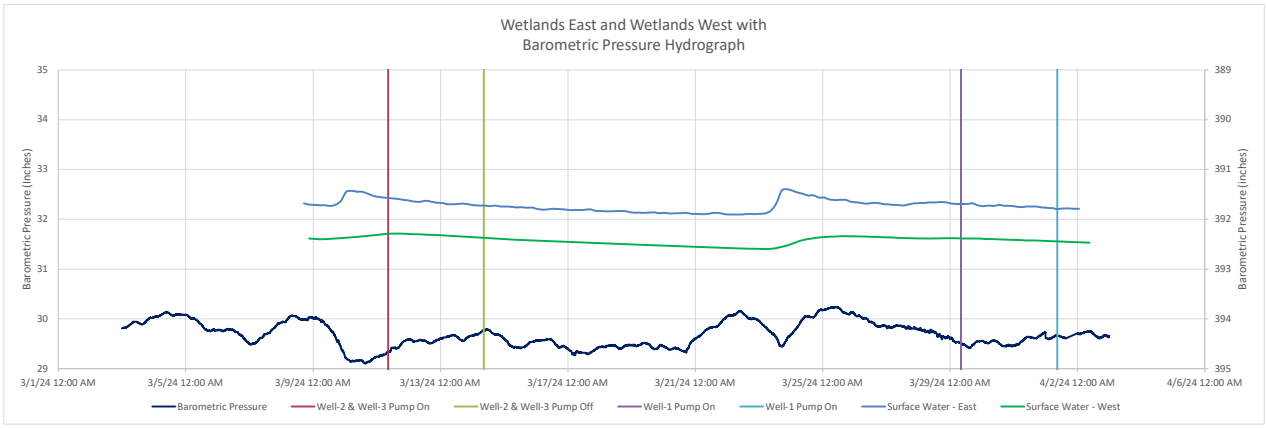
APPENDIX G

SURFACE WATER LEVEL GRAPH

Sheffield Gardens Surface Water Hydrographs



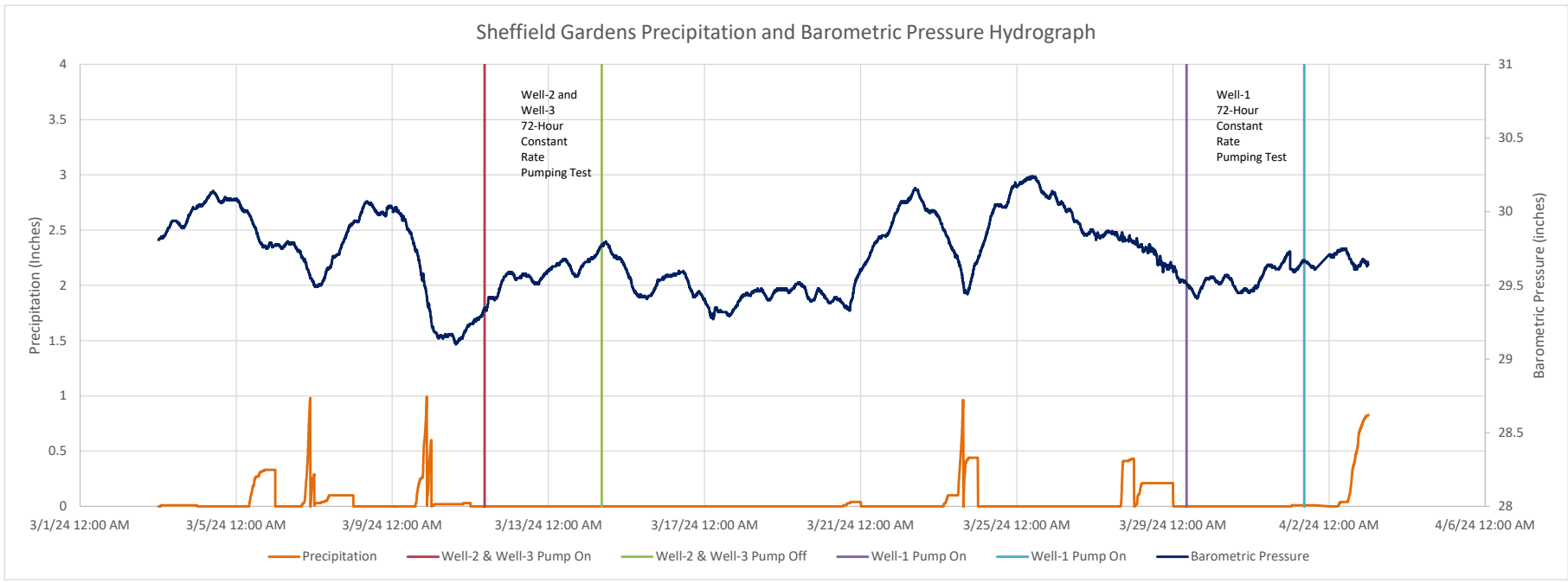


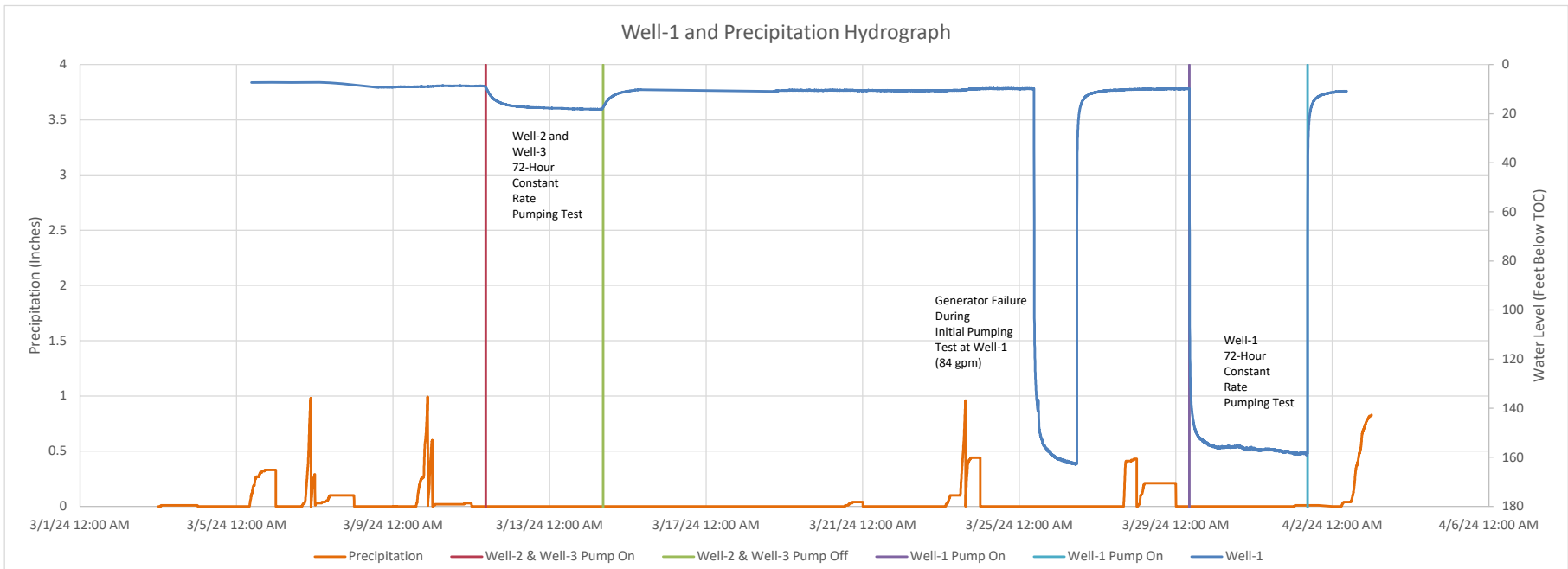


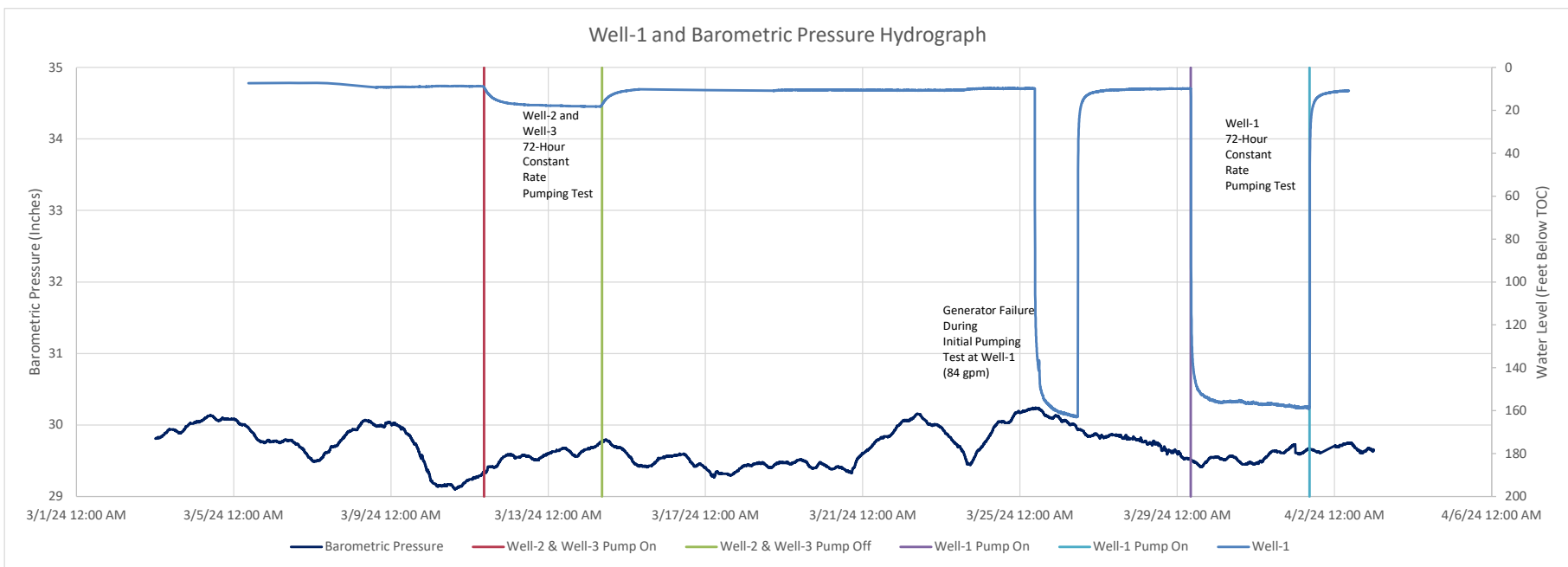
APPENDIX H

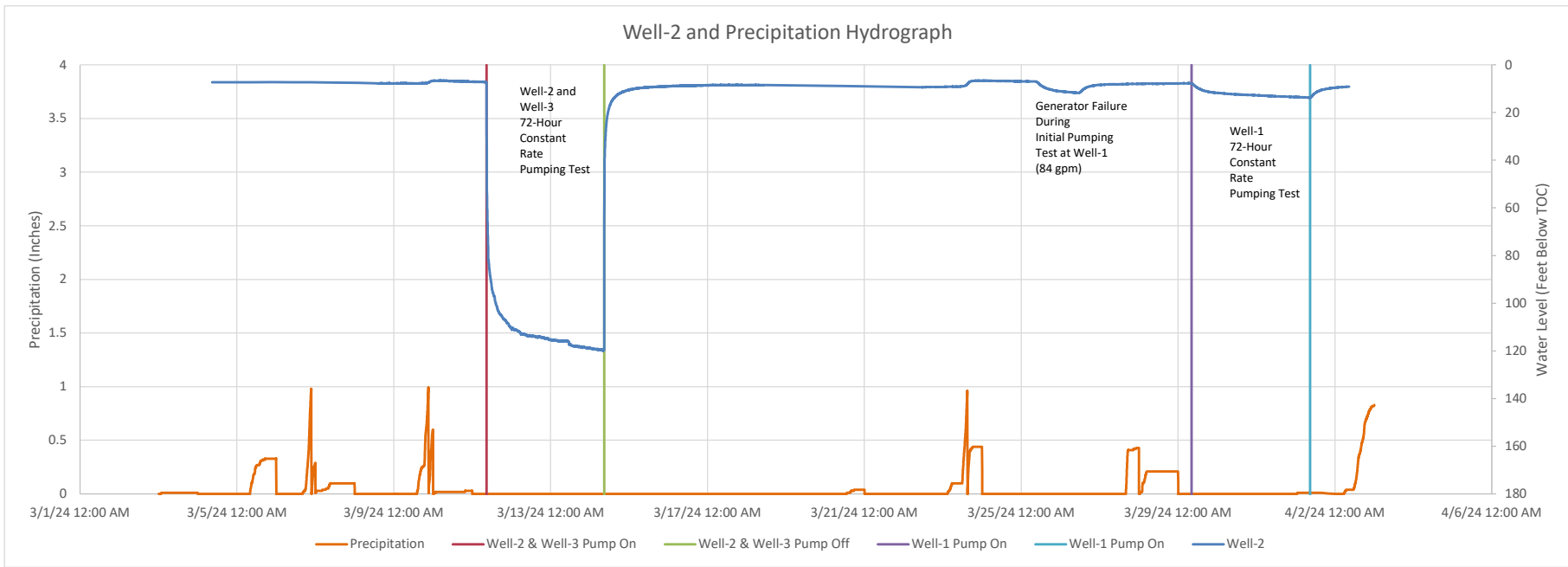
PRECIPITATION AND BAROMETRIC PRESSURE GRAPHS

Callicoon Precipitation and Barometric Pressure Hydrographs (2/19/2024 - 3/8/2024)

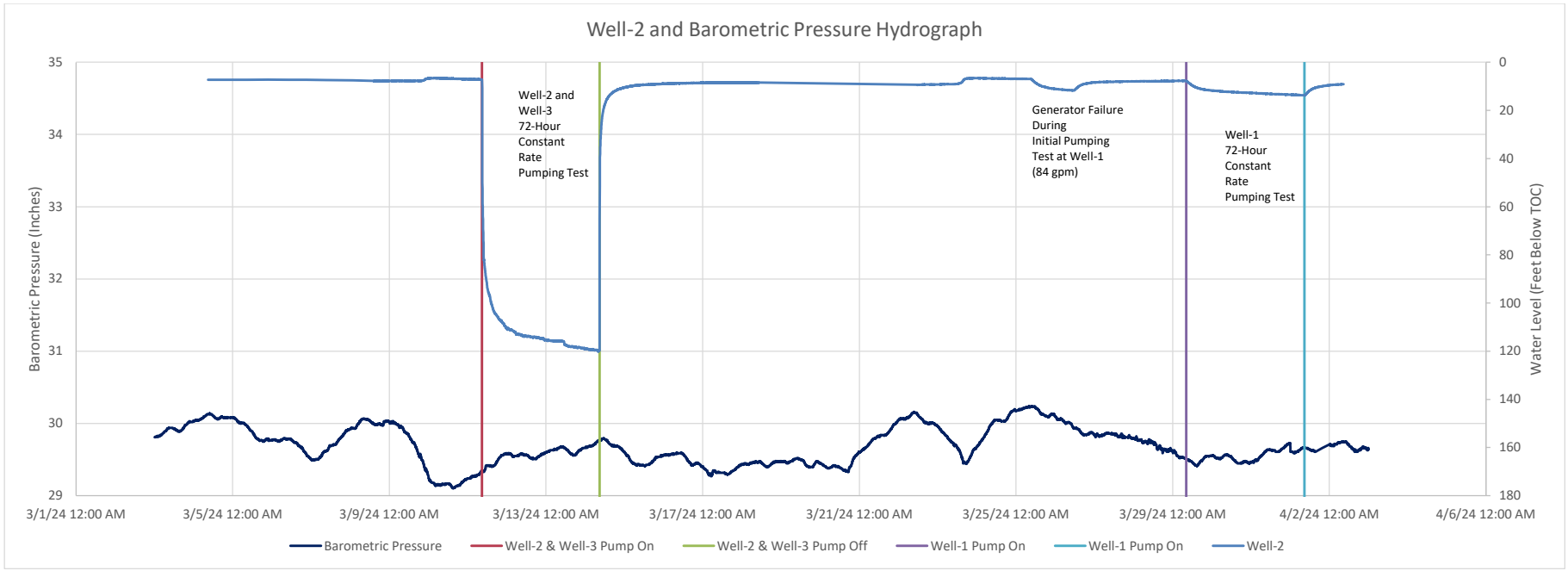


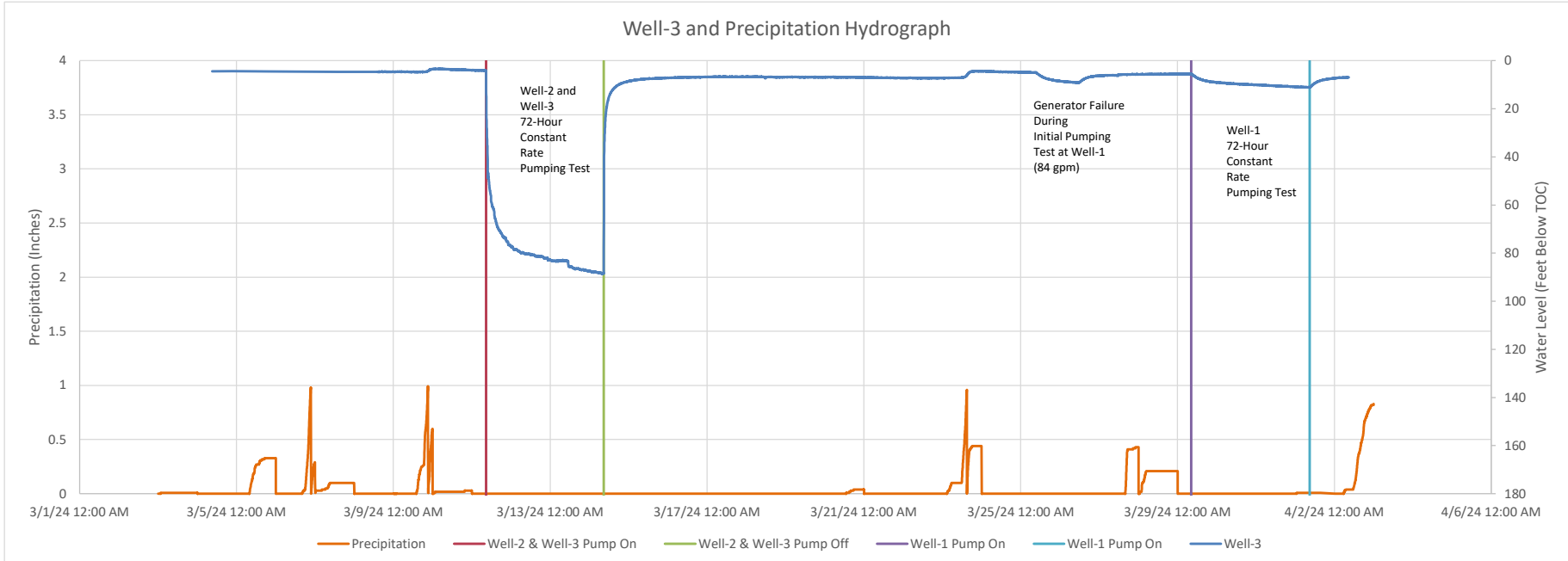


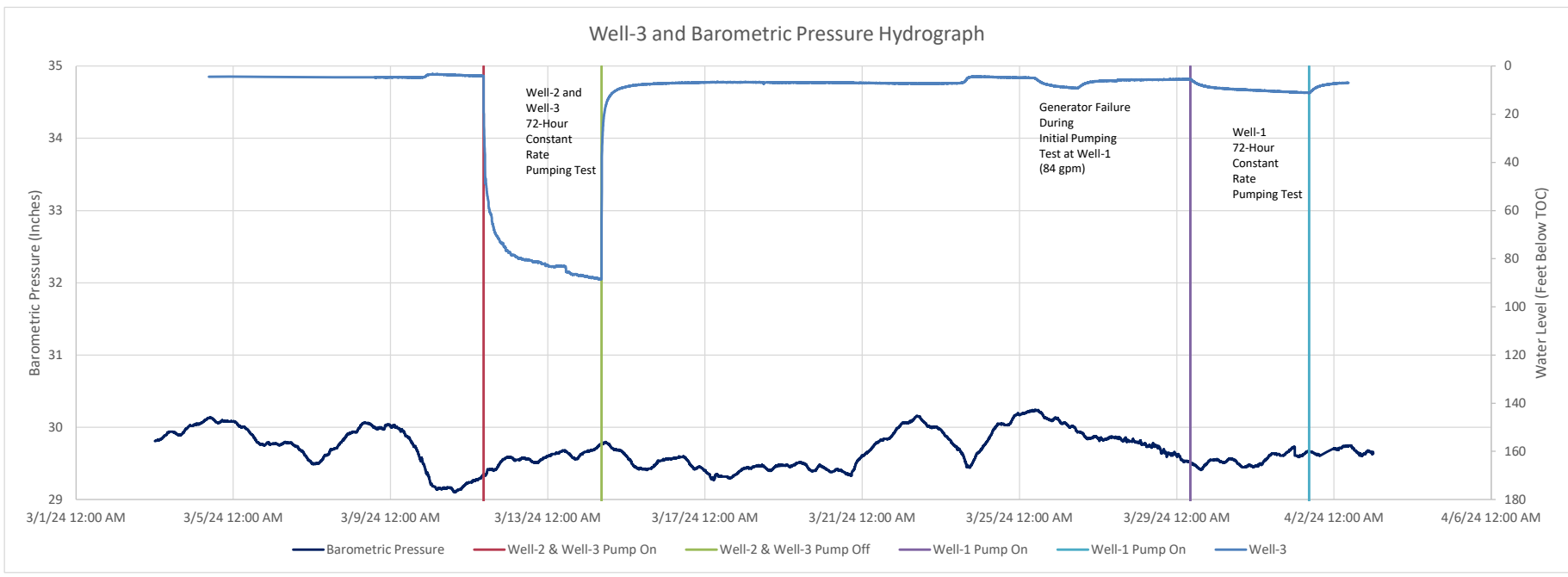


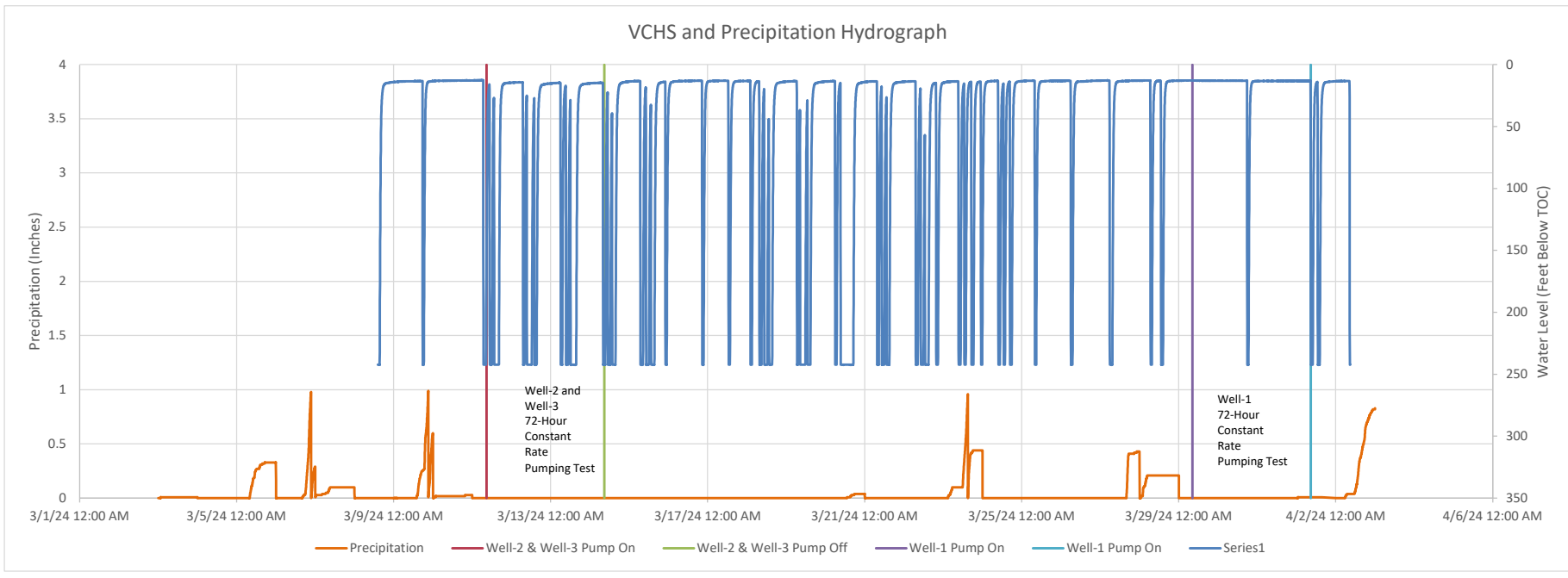


Callicoon Precipitation and Barometric Pressure Hydrographs (2/19/2024 - 3/8/2024)

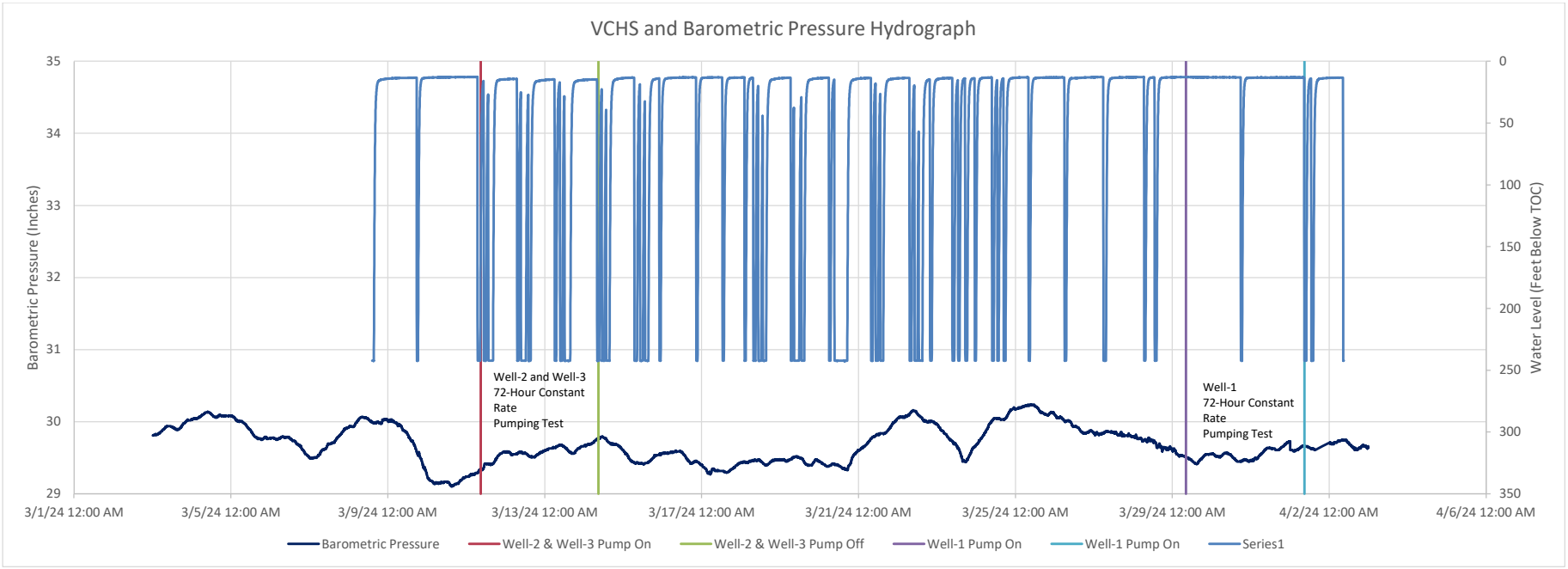


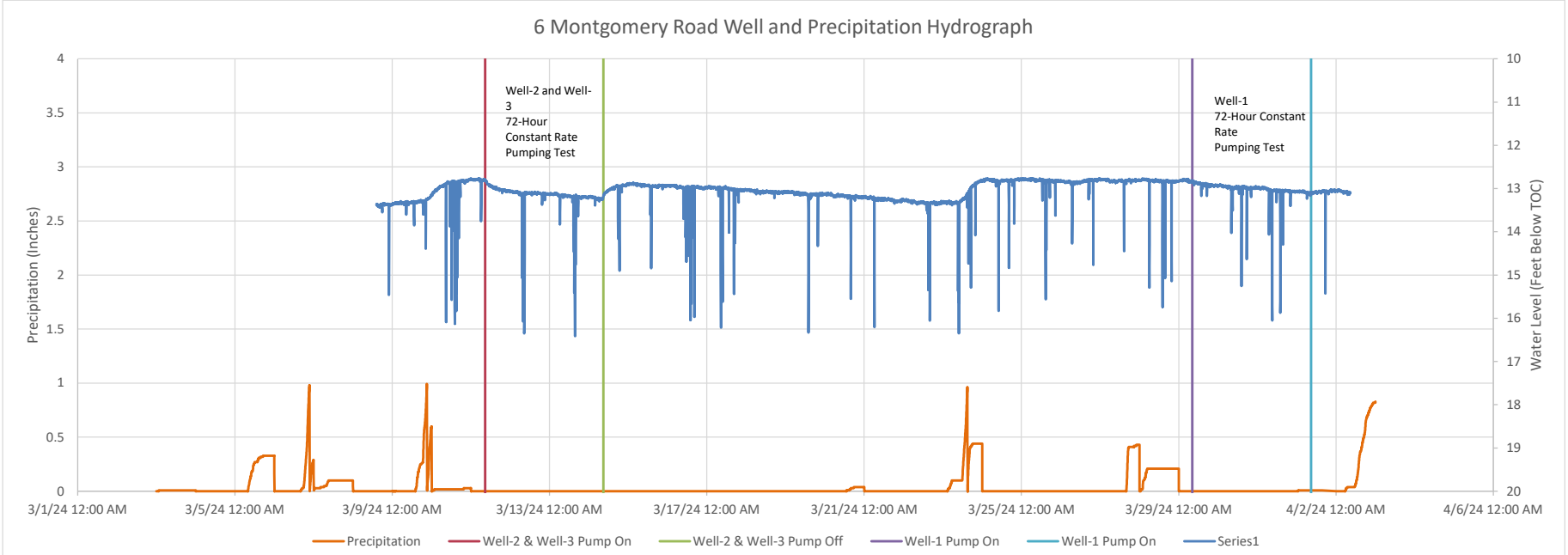


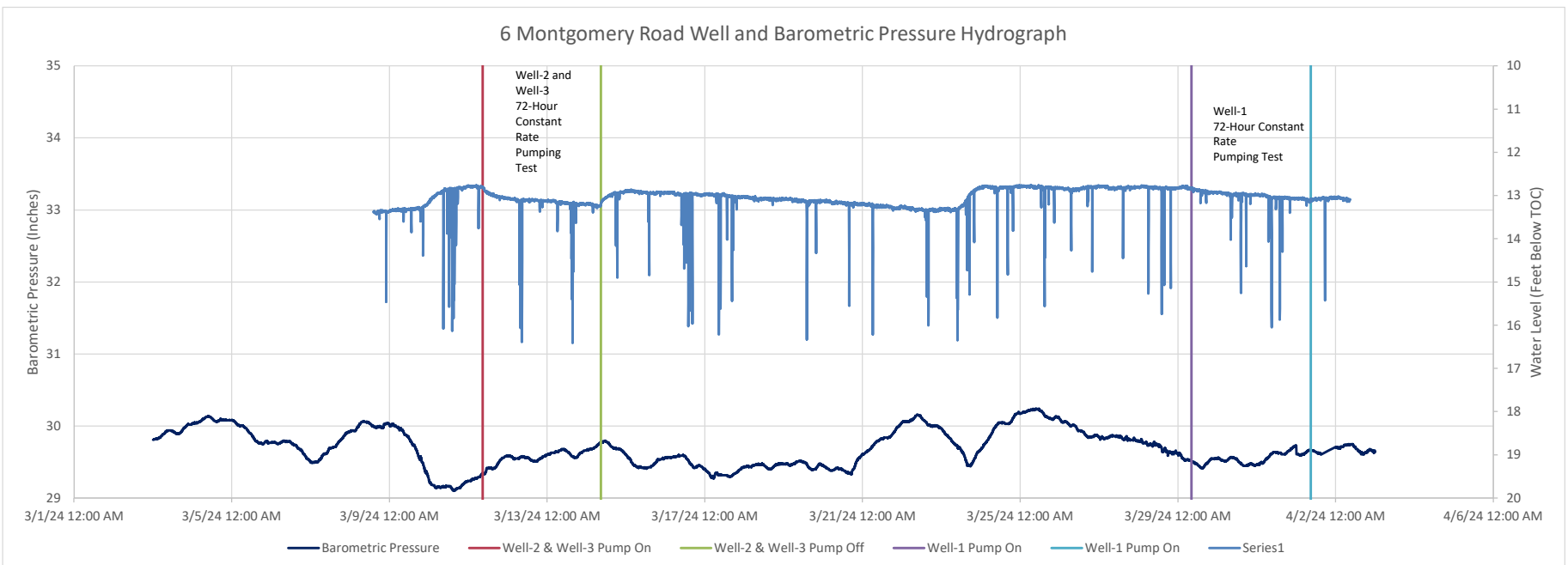


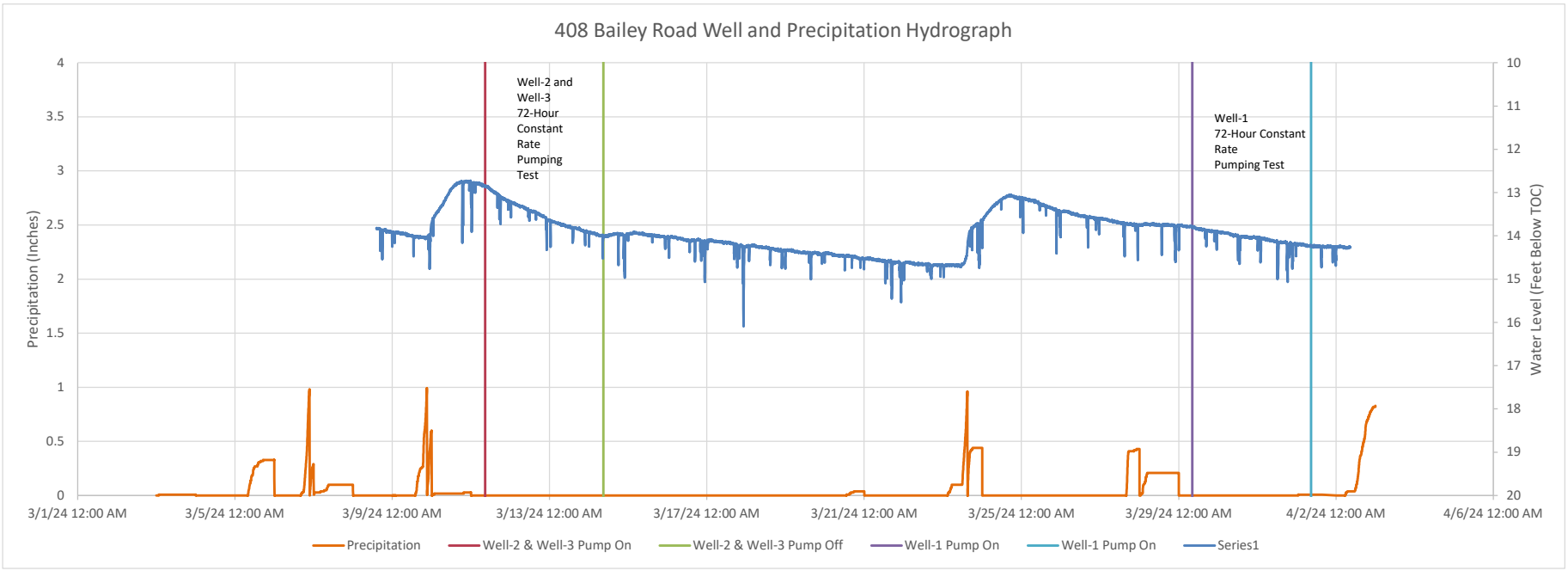


Callicoon Precipitation and Barometric Pressure Hydrographs (2/19/2024 - 3/8/2024)

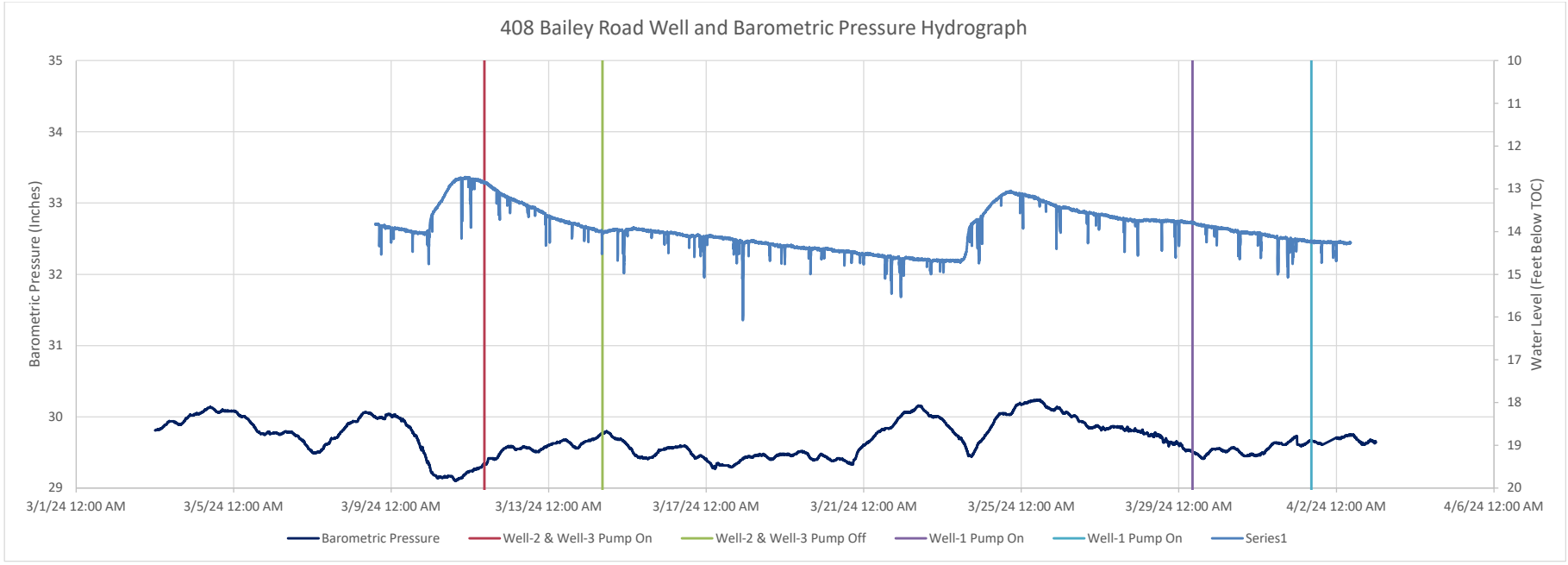






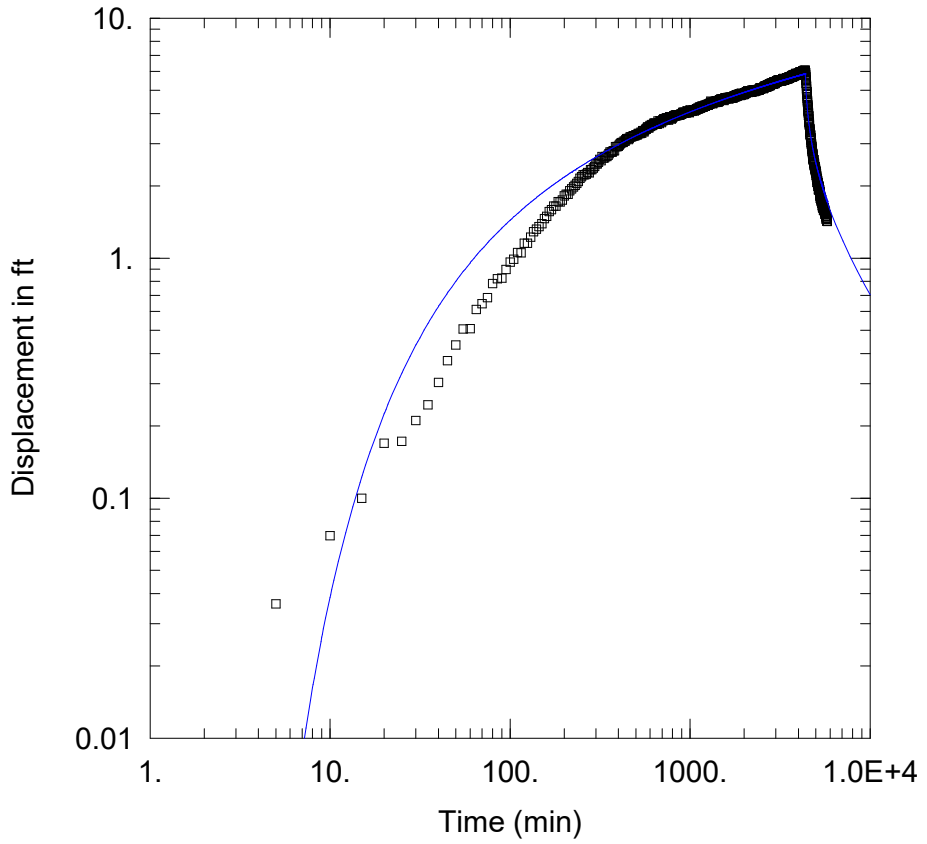


Callicoon Precipitation and Barometric Pressure Hydrographs (2/19/2024 - 3/8/2024)



APPENDIX I

AQTESOLV REPORTS AND GRAPHS



SHEFFIELD GARDENS WELL-1 CONSTANT RATE PUMPING TEST

Data Set: S:\...\Well-1.aqt
Date: 05/01/24 Time: 09:50:31

PROJECT INFORMATION

Company: Sterling
Client: Sheffield Gardens
Project: 2023-76
Location: Montgomery, NY
Test Well: Well-1
Test Date: 3/29/2024

SOLUTION

Aquifer Model: Fractured
Solution Method: Moench w/slab blocks

K = 0.001379 ft/min
Ss = 2.23E-8 ft^{-1}
K' = 1. ft/min
Ss' = 1.029E-7 ft^{-1}
Sw = 0.
Sf = 1.
r(w) = 0.5 ft
r(c) = 0.5 ft

AQUIFER DATA

Saturated Thickness: 500. ft

Slab Block Thickness: 5. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
Well-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
▫ Well-2	968.05	0

Data Set: S:\Sterling\Projects\2023 Projects\Sheffield Gardens - Montgomery - 2023-76\Field Data & Logs\Well-1.aqt
Title: Sheffield Gardens Well-1 Constant Rate Pumping Test
Date: 05/01/24
Time: 09:50:53

PROJECT INFORMATION

Company: Sterling
Client: Sheffield Gardens
Project: 2023-76
Location: Montgomery, NY
Test Date: 3/29/2024
Test Well: Well-1

AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 1.
Slab Block Thickness: 5. ft
Spherical Block Diameter: 1. ft
Fracture Length: 1. ft
Fracture Radius: 1. ft

PUMPING WELL DATA

No. of pumping wells: 1

Pumping Well No. 1: Well-1

X Location: 0. ft
Y Location: 0. ft

Casing Radius: 0.5 ft
Well Radius: 0.5 ft

Fully Penetrating Well

No. of pumping periods: 1167

Pumping Period Data

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
0.	80.	1905.	80.	3850.	80.
1.	80.	1910.	80.	3855.	80.
2.	80.	1915.	80.	3860.	80.
3.	80.	1920.	80.	3865.	80.
4.	80.	1925.	80.	3870.	80.
5.	80.	1930.	80.	3875.	80.
6.	80.	1935.	80.	3880.	80.
7.	80.	1940.	80.	3885.	80.
8.	80.	1945.	80.	3890.	80.
9.	80.	1950.	80.	3895.	80.
10.	80.	1955.	80.	3900.	80.
15.	80.	1960.	80.	3905.	80.
20.	80.	1965.	80.	3910.	80.
25.	80.	1970.	80.	3915.	80.
30.	80.	1975.	80.	3920.	80.
35.	80.	1980.	80.	3925.	80.
40.	80.	1985.	80.	3930.	80.
45.	80.	1990.	80.	3935.	80.
50.	80.	1995.	80.	3940.	80.
55.	80.	2000.	80.	3945.	80.
60.	80.	2005.	80.	3950.	80.
65.	80.	2010.	80.	3955.	80.
70.	80.	2015.	80.	3960.	80.
75.	80.	2020.	80.	3965.	80.
80.	80.	2025.	80.	3970.	80.
85.	80.	2030.	80.	3975.	80.
90.	80.	2035.	80.	3980.	80.
95.	80.	2040.	80.	3985.	80.
100.	80.	2045.	80.	3990.	80.
105.	80.	2050.	80.	3995.	80.
110.	80.	2055.	80.	4000.	80.
115.	80.	2060.	80.	4005.	80.
120.	80.	2065.	80.	4010.	80.
125.	80.	2070.	80.	4015.	80.
130.	80.	2075.	80.	4020.	80.
135.	80.	2080.	80.	4025.	80.
140.	80.	2085.	80.	4030.	80.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
145.	80.	2090.	80.	4035.	80.
150.	80.	2095.	80.	4040.	80.
155.	80.	2100.	80.	4045.	80.
160.	80.	2105.	80.	4050.	80.
165.	80.	2110.	80.	4055.	80.
170.	80.	2115.	80.	4060.	80.
175.	80.	2120.	80.	4065.	80.
180.	80.	2125.	80.	4070.	80.
185.	80.	2130.	80.	4075.	80.
190.	80.	2135.	80.	4080.	80.
195.	80.	2140.	80.	4085.	80.
200.	80.	2145.	80.	4090.	80.
205.	80.	2150.	80.	4095.	80.
210.	80.	2155.	80.	4100.	80.
215.	80.	2160.	80.	4105.	80.
220.	80.	2165.	80.	4110.	80.
225.	80.	2170.	80.	4115.	80.
230.	80.	2175.	80.	4120.	80.
235.	80.	2180.	80.	4125.	80.
240.	80.	2185.	80.	4130.	80.
245.	80.	2190.	80.	4135.	80.
250.	80.	2195.	80.	4140.	80.
255.	80.	2200.	80.	4145.	80.
260.	80.	2205.	80.	4150.	80.
265.	80.	2210.	80.	4155.	80.
270.	80.	2215.	80.	4160.	80.
275.	80.	2220.	80.	4165.	80.
280.	80.	2225.	80.	4170.	80.
285.	80.	2230.	80.	4175.	80.
290.	80.	2235.	80.	4180.	80.
295.	80.	2240.	80.	4185.	80.
300.	80.	2245.	80.	4190.	80.
305.	80.	2250.	80.	4195.	80.
310.	80.	2255.	80.	4200.	80.
315.	80.	2260.	80.	4205.	80.
320.	80.	2265.	80.	4210.	80.
325.	80.	2270.	80.	4215.	80.
330.	80.	2275.	80.	4220.	80.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
335.	80.	2280.	80.	4225.	80.
340.	80.	2285.	80.	4230.	80.
345.	80.	2290.	80.	4235.	80.
350.	80.	2295.	80.	4240.	80.
355.	80.	2300.	80.	4245.	80.
360.	80.	2305.	80.	4250.	80.
365.	80.	2310.	80.	4255.	80.
370.	80.	2315.	80.	4260.	80.
375.	80.	2320.	80.	4265.	80.
380.	80.	2325.	80.	4270.	80.
385.	80.	2330.	80.	4275.	80.
390.	80.	2335.	80.	4280.	80.
395.	80.	2340.	80.	4285.	80.
400.	80.	2345.	80.	4290.	80.
405.	80.	2350.	80.	4295.	80.
410.	80.	2355.	80.	4300.	80.
415.	80.	2360.	80.	4305.	80.
420.	80.	2365.	80.	4310.	80.
425.	80.	2370.	80.	4315.	80.
430.	80.	2375.	80.	4320.	80.
435.	80.	2380.	80.	4325.	80.
440.	80.	2385.	80.	4330.	80.
445.	80.	2390.	80.	4335.	80.
450.	80.	2395.	80.	4340.	80.
455.	80.	2400.	80.	4345.	80.
460.	80.	2405.	80.	4350.	80.
465.	80.	2410.	80.	4355.	0.
470.	80.	2415.	80.	4360.	0.
475.	80.	2420.	80.	4365.	0.
480.	80.	2425.	80.	4370.	0.
485.	80.	2430.	80.	4375.	0.
490.	80.	2435.	80.	4380.	0.
495.	80.	2440.	80.	4385.	0.
500.	80.	2445.	80.	4390.	0.
505.	80.	2450.	80.	4395.	0.
510.	80.	2455.	80.	4400.	0.
515.	80.	2460.	80.	4405.	0.
520.	80.	2465.	80.	4410.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
525.	80.	2470.	80.	4415.	0.
530.	80.	2475.	80.	4420.	0.
535.	80.	2480.	80.	4425.	0.
540.	80.	2485.	80.	4430.	0.
545.	80.	2490.	80.	4435.	0.
550.	80.	2495.	80.	4440.	0.
555.	80.	2500.	80.	4445.	0.
560.	80.	2505.	80.	4450.	0.
565.	80.	2510.	80.	4455.	0.
570.	80.	2515.	80.	4460.	0.
575.	80.	2520.	80.	4465.	0.
580.	80.	2525.	80.	4470.	0.
585.	80.	2530.	80.	4475.	0.
590.	80.	2535.	80.	4480.	0.
595.	80.	2540.	80.	4485.	0.
600.	80.	2545.	80.	4490.	0.
605.	80.	2550.	80.	4495.	0.
610.	80.	2555.	80.	4500.	0.
615.	80.	2560.	80.	4505.	0.
620.	80.	2565.	80.	4510.	0.
625.	80.	2570.	80.	4515.	0.
630.	80.	2575.	80.	4520.	0.
635.	80.	2580.	80.	4525.	0.
640.	80.	2585.	80.	4530.	0.
645.	80.	2590.	80.	4535.	0.
650.	80.	2595.	80.	4540.	0.
655.	80.	2600.	80.	4545.	0.
660.	80.	2605.	80.	4550.	0.
665.	80.	2610.	80.	4555.	0.
670.	80.	2615.	80.	4560.	0.
675.	80.	2620.	80.	4565.	0.
680.	80.	2625.	80.	4570.	0.
685.	80.	2630.	80.	4575.	0.
690.	80.	2635.	80.	4580.	0.
695.	80.	2640.	80.	4585.	0.
700.	80.	2645.	80.	4590.	0.
705.	80.	2650.	80.	4595.	0.
710.	80.	2655.	80.	4600.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
715.	80.	2660.	80.	4605.	0.
720.	80.	2665.	80.	4610.	0.
725.	80.	2670.	80.	4615.	0.
730.	80.	2675.	80.	4620.	0.
735.	80.	2680.	80.	4625.	0.
740.	80.	2685.	80.	4630.	0.
745.	80.	2690.	80.	4635.	0.
750.	80.	2695.	80.	4640.	0.
755.	80.	2700.	80.	4645.	0.
760.	80.	2705.	80.	4650.	0.
765.	80.	2710.	80.	4655.	0.
770.	80.	2715.	80.	4660.	0.
775.	80.	2720.	80.	4665.	0.
780.	80.	2725.	80.	4670.	0.
785.	80.	2730.	80.	4675.	0.
790.	80.	2735.	80.	4680.	0.
795.	80.	2740.	80.	4685.	0.
800.	80.	2745.	80.	4690.	0.
805.	80.	2750.	80.	4695.	0.
810.	80.	2755.	80.	4700.	0.
815.	80.	2760.	80.	4705.	0.
820.	80.	2765.	80.	4710.	0.
825.	80.	2770.	80.	4715.	0.
830.	80.	2775.	80.	4720.	0.
835.	80.	2780.	80.	4725.	0.
840.	80.	2785.	80.	4730.	0.
845.	80.	2790.	80.	4735.	0.
850.	80.	2795.	80.	4740.	0.
855.	80.	2800.	80.	4745.	0.
860.	80.	2805.	80.	4750.	0.
865.	80.	2810.	80.	4755.	0.
870.	80.	2815.	80.	4760.	0.
875.	80.	2820.	80.	4765.	0.
880.	80.	2825.	80.	4770.	0.
885.	80.	2830.	80.	4775.	0.
890.	80.	2835.	80.	4780.	0.
895.	80.	2840.	80.	4785.	0.
900.	80.	2845.	80.	4790.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
905.	80.	2850.	80.	4795.	0.
910.	80.	2855.	80.	4800.	0.
915.	80.	2860.	80.	4805.	0.
920.	80.	2865.	80.	4810.	0.
925.	80.	2870.	80.	4815.	0.
930.	80.	2875.	80.	4820.	0.
935.	80.	2880.	80.	4825.	0.
940.	80.	2885.	80.	4830.	0.
945.	80.	2890.	80.	4835.	0.
950.	80.	2895.	80.	4840.	0.
955.	80.	2900.	80.	4845.	0.
960.	80.	2905.	80.	4850.	0.
965.	80.	2910.	80.	4855.	0.
970.	80.	2915.	80.	4860.	0.
975.	80.	2920.	80.	4865.	0.
980.	80.	2925.	80.	4870.	0.
985.	80.	2930.	80.	4875.	0.
990.	80.	2935.	80.	4880.	0.
995.	80.	2940.	80.	4885.	0.
1000.	80.	2945.	80.	4890.	0.
1005.	80.	2950.	80.	4895.	0.
1010.	80.	2955.	80.	4900.	0.
1015.	80.	2960.	80.	4905.	0.
1020.	80.	2965.	80.	4910.	0.
1025.	80.	2970.	80.	4915.	0.
1030.	80.	2975.	80.	4920.	0.
1035.	80.	2980.	80.	4925.	0.
1040.	80.	2985.	80.	4930.	0.
1045.	80.	2990.	80.	4935.	0.
1050.	80.	2995.	80.	4940.	0.
1055.	80.	3000.	80.	4945.	0.
1060.	80.	3005.	80.	4950.	0.
1065.	80.	3010.	80.	4955.	0.
1070.	80.	3015.	80.	4960.	0.
1075.	80.	3020.	80.	4965.	0.
1080.	80.	3025.	80.	4970.	0.
1085.	80.	3030.	80.	4975.	0.
1090.	80.	3035.	80.	4980.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1095.	80.	3040.	80.	4985.	0.
1100.	80.	3045.	80.	4990.	0.
1105.	80.	3050.	80.	4995.	0.
1110.	80.	3055.	80.	5000.	0.
1115.	80.	3060.	80.	5005.	0.
1120.	80.	3065.	80.	5010.	0.
1125.	80.	3070.	80.	5015.	0.
1130.	80.	3075.	80.	5020.	0.
1135.	80.	3080.	80.	5025.	0.
1140.	80.	3085.	80.	5030.	0.
1145.	80.	3090.	80.	5035.	0.
1150.	80.	3095.	80.	5040.	0.
1155.	80.	3100.	80.	5045.	0.
1160.	80.	3105.	80.	5050.	0.
1165.	80.	3110.	80.	5055.	0.
1170.	80.	3115.	80.	5060.	0.
1175.	80.	3120.	80.	5065.	0.
1180.	80.	3125.	80.	5070.	0.
1185.	80.	3130.	80.	5075.	0.
1190.	80.	3135.	80.	5080.	0.
1195.	80.	3140.	80.	5085.	0.
1200.	80.	3145.	80.	5090.	0.
1205.	80.	3150.	80.	5095.	0.
1210.	80.	3155.	80.	5100.	0.
1215.	80.	3160.	80.	5105.	0.
1220.	80.	3165.	80.	5110.	0.
1225.	80.	3170.	80.	5115.	0.
1230.	80.	3175.	80.	5120.	0.
1235.	80.	3180.	80.	5125.	0.
1240.	80.	3185.	80.	5130.	0.
1245.	80.	3190.	80.	5135.	0.
1250.	80.	3195.	80.	5140.	0.
1255.	80.	3200.	80.	5145.	0.
1260.	80.	3205.	80.	5150.	0.
1265.	80.	3210.	80.	5155.	0.
1270.	80.	3215.	80.	5160.	0.
1275.	80.	3220.	80.	5165.	0.
1280.	80.	3225.	80.	5170.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1285.	80.	3230.	80.	5175.	0.
1290.	80.	3235.	80.	5180.	0.
1295.	80.	3240.	80.	5185.	0.
1300.	80.	3245.	80.	5190.	0.
1305.	80.	3250.	80.	5195.	0.
1310.	80.	3255.	80.	5200.	0.
1315.	80.	3260.	80.	5205.	0.
1320.	80.	3265.	80.	5210.	0.
1325.	80.	3270.	80.	5215.	0.
1330.	80.	3275.	80.	5220.	0.
1335.	80.	3280.	80.	5225.	0.
1340.	80.	3285.	80.	5230.	0.
1345.	80.	3290.	80.	5235.	0.
1350.	80.	3295.	80.	5240.	0.
1355.	80.	3300.	80.	5245.	0.
1360.	80.	3305.	80.	5250.	0.
1365.	80.	3310.	80.	5255.	0.
1370.	80.	3315.	80.	5260.	0.
1375.	80.	3320.	80.	5265.	0.
1380.	80.	3325.	80.	5270.	0.
1385.	80.	3330.	80.	5275.	0.
1390.	80.	3335.	80.	5280.	0.
1395.	80.	3340.	80.	5285.	0.
1400.	80.	3345.	80.	5290.	0.
1405.	80.	3350.	80.	5295.	0.
1410.	80.	3355.	80.	5300.	0.
1415.	80.	3360.	80.	5305.	0.
1420.	80.	3365.	80.	5310.	0.
1425.	80.	3370.	80.	5315.	0.
1430.	80.	3375.	80.	5320.	0.
1435.	80.	3380.	80.	5325.	0.
1440.	80.	3385.	80.	5330.	0.
1445.	80.	3390.	80.	5335.	0.
1450.	80.	3395.	80.	5340.	0.
1455.	80.	3400.	80.	5345.	0.
1460.	80.	3405.	80.	5350.	0.
1465.	80.	3410.	80.	5355.	0.
1470.	80.	3415.	80.	5360.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1475.	80.	3420.	80.	5365.	0.
1480.	80.	3425.	80.	5370.	0.
1485.	80.	3430.	80.	5375.	0.
1490.	80.	3435.	80.	5380.	0.
1495.	80.	3440.	80.	5385.	0.
1500.	80.	3445.	80.	5390.	0.
1505.	80.	3450.	80.	5395.	0.
1510.	80.	3455.	80.	5400.	0.
1515.	80.	3460.	80.	5405.	0.
1520.	80.	3465.	80.	5410.	0.
1525.	80.	3470.	80.	5415.	0.
1530.	80.	3475.	80.	5420.	0.
1535.	80.	3480.	80.	5425.	0.
1540.	80.	3485.	80.	5430.	0.
1545.	80.	3490.	80.	5435.	0.
1550.	80.	3495.	80.	5440.	0.
1555.	80.	3500.	80.	5445.	0.
1560.	80.	3505.	80.	5450.	0.
1565.	80.	3510.	80.	5455.	0.
1570.	80.	3515.	80.	5460.	0.
1575.	80.	3520.	80.	5465.	0.
1580.	80.	3525.	80.	5470.	0.
1585.	80.	3530.	80.	5475.	0.
1590.	80.	3535.	80.	5480.	0.
1595.	80.	3540.	80.	5485.	0.
1600.	80.	3545.	80.	5490.	0.
1605.	80.	3550.	80.	5495.	0.
1610.	80.	3555.	80.	5500.	0.
1615.	80.	3560.	80.	5505.	0.
1620.	80.	3565.	80.	5510.	0.
1625.	80.	3570.	80.	5515.	0.
1630.	80.	3575.	80.	5520.	0.
1635.	80.	3580.	80.	5525.	0.
1640.	80.	3585.	80.	5530.	0.
1645.	80.	3590.	80.	5535.	0.
1650.	80.	3595.	80.	5540.	0.
1655.	80.	3600.	80.	5545.	0.
1660.	80.	3605.	80.	5550.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1665.	80.	3610.	80.	5555.	0.
1670.	80.	3615.	80.	5560.	0.
1675.	80.	3620.	80.	5565.	0.
1680.	80.	3625.	80.	5570.	0.
1685.	80.	3630.	80.	5575.	0.
1690.	80.	3635.	80.	5580.	0.
1695.	80.	3640.	80.	5585.	0.
1700.	80.	3645.	80.	5590.	0.
1705.	80.	3650.	80.	5595.	0.
1710.	80.	3655.	80.	5600.	0.
1715.	80.	3660.	80.	5605.	0.
1720.	80.	3665.	80.	5610.	0.
1725.	80.	3670.	80.	5615.	0.
1730.	80.	3675.	80.	5620.	0.
1735.	80.	3680.	80.	5625.	0.
1740.	80.	3685.	80.	5630.	0.
1745.	80.	3690.	80.	5635.	0.
1750.	80.	3695.	80.	5640.	0.
1755.	80.	3700.	80.	5645.	0.
1760.	80.	3705.	80.	5650.	0.
1765.	80.	3710.	80.	5655.	0.
1770.	80.	3715.	80.	5660.	0.
1775.	80.	3720.	80.	5665.	0.
1780.	80.	3725.	80.	5670.	0.
1785.	80.	3730.	80.	5675.	0.
1790.	80.	3735.	80.	5680.	0.
1795.	80.	3740.	80.	5685.	0.
1800.	80.	3745.	80.	5690.	0.
1805.	80.	3750.	80.	5695.	0.
1810.	80.	3755.	80.	5700.	0.
1815.	80.	3760.	80.	5705.	0.
1820.	80.	3765.	80.	5710.	0.
1825.	80.	3770.	80.	5715.	0.
1830.	80.	3775.	80.	5720.	0.
1835.	80.	3780.	80.	5725.	0.
1840.	80.	3785.	80.	5730.	0.
1845.	80.	3790.	80.	5735.	0.
1850.	80.	3795.	80.	5740.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1855.	80.	3800.	80.	5745.	0.
1860.	80.	3805.	80.	5750.	0.
1865.	80.	3810.	80.	5755.	0.
1870.	80.	3815.	80.	5760.	0.
1875.	80.	3820.	80.	5765.	0.
1880.	80.	3825.	80.	5770.	0.
1885.	80.	3830.	80.	5775.	0.
1890.	80.	3835.	80.	5780.	0.
1895.	80.	3840.	80.	5785.	0.
1900.	80.	3845.	80.	5790.	0.

OBSERVATION WELL DATA

No. of observation wells: 1

Observation Well No. 1: Well-2

X Location: 968.05 ft
Y Location: 0. ft

Radial distance from Well-1: 968.05 ft

Fully Penetrating Well

No. of Observations: 1157

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
5.	0.03625	1935.	4.805	3865.	5.818
10.	0.06965	1940.	4.842	3870.	5.858
15.	0.09997	1945.	4.807	3875.	5.894
20.	0.1691	1950.	4.841	3880.	5.787
25.	0.1722	1955.	4.842	3885.	5.82
30.	0.2104	1960.	4.841	3890.	5.815
35.	0.2444	1965.	4.804	3895.	5.809
40.	0.3032	1970.	4.806	3900.	5.812
45.	0.3733	1975.	4.847	3905.	5.813
50.	0.4349	1980.	4.809	3910.	5.807

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
55.	0.507	1985.	4.807	3915.	5.802
60.	0.5084	1990.	4.839	3920.	5.842
65.	0.6111	1995.	4.808	3925.	5.875
70.	0.6454	2000.	4.81	3930.	5.808
75.	0.6838	2005.	4.845	3935.	5.809
80.	0.7843	2010.	4.886	3940.	5.809
85.	0.8208	2015.	4.884	3945.	5.878
90.	0.8249	2020.	4.849	3950.	5.803
95.	0.8976	2025.	4.85	3955.	5.801
100.	0.9636	2030.	4.885	3960.	5.807
105.	0.9886	2035.	4.885	3965.	5.84
110.	1.056	2040.	4.85	3970.	5.875
115.	1.053	2045.	4.919	3975.	5.874
120.	1.154	2050.	4.888	3980.	5.872
125.	1.153	2055.	4.891	3985.	5.904
130.	1.221	2060.	4.925	3990.	5.867
135.	1.288	2065.	4.923	3995.	5.824
140.	1.322	2070.	4.927	4000.	5.857
145.	1.354	2075.	4.93	4005.	5.891
150.	1.389	2080.	4.934	4010.	5.858
155.	1.46	2085.	4.932	4015.	5.854
160.	1.493	2090.	4.969	4020.	5.851
165.	1.562	2095.	4.933	4025.	5.852
170.	1.59	2100.	4.965	4030.	5.819
175.	1.646	2105.	4.893	4035.	5.815
180.	1.646	2110.	4.93	4040.	5.852
185.	1.717	2115.	4.964	4045.	5.82
190.	1.715	2120.	4.925	4050.	5.821
195.	1.745	2125.	4.924	4055.	5.862
200.	1.816	2130.	4.927	4060.	5.908
205.	1.847	2135.	4.96	4065.	5.84
210.	1.846	2140.	4.925	4070.	5.848
215.	1.91	2145.	4.93	4075.	5.886
220.	1.945	2150.	4.927	4080.	5.893
225.	1.981	2155.	4.925	4085.	5.935
230.	2.011	2160.	4.956	4090.	5.934
235.	2.047	2165.	4.923	4095.	5.972
240.	2.086	2170.	4.956	4100.	5.905

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
245.	2.152	2175.	4.957	4105.	5.937
250.	2.186	2180.	4.92	4110.	5.975
255.	2.223	2185.	4.951	4115.	5.945
260.	2.222	2190.	4.916	4120.	5.943
265.	2.24	2195.	4.952	4125.	5.872
270.	2.274	2200.	4.95	4130.	5.976
275.	2.267	2205.	4.983	4135.	5.865
280.	2.338	2210.	5.018	4140.	5.902
285.	2.336	2215.	4.941	4145.	5.908
290.	2.373	2220.	4.978	4150.	5.906
295.	2.407	2225.	4.943	4155.	5.909
300.	2.473	2230.	4.943	4160.	5.98
305.	2.471	2235.	4.946	4165.	5.948
310.	2.511	2240.	4.98	4170.	5.947
315.	2.581	2245.	4.975	4175.	5.871
320.	2.544	2250.	5.011	4180.	5.94
325.	2.648	2255.	4.976	4185.	5.945
330.	2.61	2260.	5.014	4190.	5.951
335.	2.616	2265.	4.976	4195.	5.945
340.	2.653	2270.	4.975	4200.	5.944
345.	2.65	2275.	4.98	4205.	5.974
350.	2.686	2280.	4.982	4210.	5.968
355.	2.725	2285.	4.945	4215.	5.964
360.	2.767	2290.	4.979	4220.	5.963
365.	2.764	2295.	4.986	4225.	5.958
370.	2.765	2300.	4.988	4230.	6.003
375.	2.803	2305.	4.988	4235.	6.008
380.	2.805	2310.	4.986	4240.	5.97
385.	2.919	2315.	5.021	4245.	5.972
390.	2.92	2320.	5.024	4250.	6.008
395.	2.918	2325.	4.99	4255.	6.015
400.	2.924	2330.	5.023	4260.	6.017
405.	2.959	2335.	4.993	4265.	6.017
410.	2.994	2340.	5.029	4270.	5.981
415.	3.027	2345.	5.028	4275.	6.017
420.	3.029	2350.	4.992	4280.	6.046
425.	3.034	2355.	5.026	4285.	6.039
430.	3.074	2360.	5.023	4290.	6.038

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
435.	3.075	2365.	5.023	4295.	6.034
440.	3.111	2370.	5.028	4300.	6.037
445.	3.152	2375.	5.028	4305.	6.033
450.	3.152	2380.	5.032	4310.	5.996
455.	3.123	2385.	5.035	4315.	6.034
460.	3.158	2390.	5.032	4320.	5.995
465.	3.198	2395.	5.036	4325.	5.994
470.	3.202	2400.	5.	4330.	6.03
475.	3.21	2405.	5.034	4335.	6.029
480.	3.212	2410.	5.03	4340.	6.032
485.	3.239	2415.	5.024	4345.	6.033
490.	3.238	2420.	5.025	4350.	6.037
495.	3.236	2425.	5.064	4355.	6.078
500.	3.27	2430.	5.065	4360.	6.046
505.	3.267	2435.	5.033	4365.	6.047
510.	3.27	2440.	5.11	4370.	6.013
515.	3.306	2445.	5.048	4375.	5.94
520.	3.305	2450.	5.082	4380.	5.904
525.	3.309	2455.	5.049	4385.	5.824
530.	3.31	2460.	5.084	4390.	5.791
535.	3.347	2465.	5.123	4395.	5.718
540.	3.319	2470.	5.125	4400.	5.646
545.	3.396	2475.	5.092	4405.	5.549
550.	3.393	2480.	5.127	4410.	5.515
555.	3.359	2485.	5.124	4415.	5.481
560.	3.397	2490.	5.089	4420.	5.375
565.	3.438	2495.	5.125	4425.	5.336
570.	3.441	2500.	5.123	4430.	5.26
575.	3.478	2505.	5.123	4435.	5.19
580.	3.517	2510.	5.123	4440.	5.084
585.	3.517	2515.	5.117	4445.	5.017
590.	3.486	2520.	5.115	4450.	4.947
595.	3.521	2525.	5.115	4455.	4.922
600.	3.565	2530.	5.116	4460.	4.908
605.	3.532	2535.	5.119	4465.	4.836
610.	3.576	2540.	5.117	4470.	4.8
615.	3.606	2545.	5.118	4475.	4.706
620.	3.573	2550.	5.119	4480.	4.629

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
625.	3.608	2555.	5.087	4485.	4.556
630.	3.646	2560.	5.124	4490.	4.518
635.	3.644	2565.	5.127	4495.	4.477
640.	3.645	2570.	5.125	4500.	4.437
645.	3.645	2575.	5.168	4505.	4.362
650.	3.613	2580.	5.136	4510.	4.323
655.	3.619	2585.	5.142	4515.	4.283
660.	3.621	2590.	5.186	4520.	4.244
665.	3.731	2595.	5.15	4525.	4.168
670.	3.668	2600.	5.189	4530.	4.123
675.	3.637	2605.	5.155	4535.	4.086
680.	3.738	2610.	5.155	4540.	4.057
685.	3.743	2615.	5.195	4545.	4.033
690.	3.706	2620.	5.23	4550.	4.001
695.	3.669	2625.	5.197	4555.	3.932
700.	3.739	2630.	5.2	4560.	3.924
705.	3.768	2635.	5.202	4565.	3.891
710.	3.737	2640.	5.202	4570.	3.819
715.	3.806	2645.	5.209	4575.	3.781
720.	3.809	2650.	5.172	4580.	3.673
725.	3.809	2655.	5.176	4585.	3.675
730.	3.774	2660.	5.216	4590.	3.71
735.	3.774	2665.	5.182	4595.	3.669
740.	3.842	2670.	5.184	4600.	3.63
745.	3.771	2675.	5.183	4605.	3.587
750.	3.842	2680.	5.187	4610.	3.582
755.	3.806	2685.	5.26	4615.	3.47
760.	3.767	2690.	5.224	4620.	3.463
765.	3.84	2695.	5.228	4625.	3.424
770.	3.873	2700.	5.267	4630.	3.353
775.	3.873	2705.	5.197	4635.	3.423
780.	3.837	2710.	5.198	4640.	3.35
785.	3.873	2715.	5.24	4645.	3.352
790.	3.802	2720.	5.245	4650.	3.285
795.	3.835	2725.	5.209	4655.	3.288
800.	3.872	2730.	5.201	4660.	3.29
805.	3.877	2735.	5.234	4665.	3.259
810.	3.916	2740.	5.277	4670.	3.24

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
815.	3.914	2745.	5.281	4675.	3.239
820.	3.91	2750.	5.248	4680.	3.263
825.	3.912	2755.	5.25	4685.	3.17
830.	3.945	2760.	5.326	4690.	3.176
835.	3.911	2765.	5.258	4695.	3.138
840.	3.946	2770.	5.225	4700.	3.133
845.	3.936	2775.	5.298	4705.	3.097
850.	3.93	2780.	5.266	4710.	3.026
855.	3.933	2785.	5.238	4715.	3.023
860.	3.935	2790.	5.277	4720.	3.02
865.	3.95	2795.	5.274	4725.	2.982
870.	3.947	2800.	5.344	4730.	2.945
875.	3.951	2805.	5.315	4735.	2.987
880.	3.952	2810.	5.32	4740.	2.914
885.	3.973	2815.	5.325	4745.	2.872
890.	3.978	2820.	5.293	4750.	2.908
895.	3.977	2825.	5.328	4755.	2.873
900.	3.976	2830.	5.367	4760.	2.839
905.	4.008	2835.	5.3	4765.	2.841
910.	4.047	2840.	5.3	4770.	2.843
915.	4.012	2845.	5.299	4775.	2.808
920.	4.049	2850.	5.3	4780.	2.772
925.	4.047	2855.	5.338	4785.	2.771
930.	4.008	2860.	5.307	4790.	2.734
935.	4.045	2865.	5.31	4795.	2.732
940.	4.043	2870.	5.309	4800.	2.732
945.	4.042	2875.	5.348	4805.	2.7
950.	4.042	2880.	5.347	4810.	2.699
955.	4.042	2885.	5.311	4815.	2.665
960.	4.041	2890.	5.35	4820.	2.666
965.	4.108	2895.	5.318	4825.	2.593
970.	4.072	2900.	5.323	4830.	2.596
975.	4.067	2905.	5.395	4835.	2.595
980.	4.067	2910.	5.36	4840.	2.593
985.	4.069	2915.	5.398	4845.	2.559
990.	4.033	2920.	5.406	4850.	2.56
995.	4.098	2925.	5.333	4855.	2.563
1000.	4.132	2930.	5.37	4860.	2.566

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1005.	4.135	2935.	5.405	4865.	2.567
1010.	4.097	2940.	5.404	4870.	2.567
1015.	4.093	2945.	5.405	4875.	2.498
1020.	4.097	2950.	5.334	4880.	2.479
1025.	4.092	2955.	5.402	4885.	2.506
1030.	4.124	2960.	5.401	4890.	2.484
1035.	4.118	2965.	5.366	4895.	2.503
1040.	4.12	2970.	5.404	4900.	2.442
1045.	4.123	2975.	5.337	4905.	2.447
1050.	4.156	2980.	5.408	4910.	2.449
1055.	4.114	2985.	5.409	4915.	2.483
1060.	4.11	2990.	5.407	4920.	2.413
1065.	4.143	2995.	5.403	4925.	2.418
1070.	4.145	3000.	5.401	4930.	2.388
1075.	4.146	3005.	5.441	4935.	2.355
1080.	4.149	3010.	5.404	4940.	2.357
1085.	4.19	3015.	5.437	4945.	2.395
1090.	4.188	3020.	5.472	4950.	2.397
1095.	4.189	3025.	5.436	4955.	2.362
1100.	4.187	3030.	5.401	4960.	2.328
1105.	4.216	3035.	5.433	4965.	2.401
1110.	4.185	3040.	5.467	4970.	2.366
1115.	4.183	3045.	5.466	4975.	2.331
1120.	4.217	3050.	5.467	4980.	2.302
1125.	4.258	3055.	5.467	4985.	2.339
1130.	4.223	3060.	5.464	4990.	2.272
1135.	4.255	3065.	5.431	4995.	2.313
1140.	4.259	3070.	5.469	5000.	2.283
1145.	4.22	3075.	5.474	5005.	2.283
1150.	4.251	3080.	5.458	5010.	2.285
1155.	4.252	3085.	5.523	5015.	2.285
1160.	4.286	3090.	5.46	5020.	2.25
1165.	4.255	3095.	5.516	5025.	2.215
1170.	4.254	3100.	5.459	5030.	2.245
1175.	4.292	3105.	5.493	5035.	2.175
1180.	4.289	3110.	5.457	5040.	2.243
1185.	4.253	3115.	5.499	5045.	2.204
1190.	4.291	3120.	5.463	5050.	2.2

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1195.	4.292	3125.	5.498	5055.	2.169
1200.	4.295	3130.	5.462	5060.	2.132
1205.	4.329	3135.	5.483	5065.	2.132
1210.	4.293	3140.	5.462	5070.	2.135
1215.	4.292	3145.	5.494	5075.	2.137
1220.	4.33	3150.	5.489	5080.	2.067
1225.	4.329	3155.	5.493	5085.	2.105
1230.	4.328	3160.	5.499	5090.	2.101
1235.	4.33	3165.	5.525	5095.	2.141
1240.	4.334	3170.	5.523	5100.	2.068
1245.	4.368	3175.	5.519	5105.	2.065
1250.	4.334	3180.	5.518	5110.	2.062
1255.	4.335	3185.	5.516	5115.	2.097
1260.	4.338	3190.	5.519	5120.	2.063
1265.	4.342	3195.	5.492	5125.	2.065
1270.	4.375	3200.	5.511	5130.	2.063
1275.	4.379	3205.	5.51	5135.	2.064
1280.	4.382	3210.	5.541	5140.	2.027
1285.	4.389	3215.	5.502	5145.	1.994
1290.	4.39	3220.	5.496	5150.	2.029
1295.	4.424	3225.	5.49	5155.	1.996
1300.	4.426	3230.	5.49	5160.	1.99
1305.	4.502	3235.	5.493	5165.	1.99
1310.	4.433	3240.	5.489	5170.	1.923
1315.	4.471	3245.	5.496	5175.	1.96
1320.	4.408	3250.	5.501	5180.	1.999
1325.	4.442	3255.	5.501	5185.	1.993
1330.	4.439	3260.	5.502	5190.	1.992
1335.	4.405	3265.	5.538	5195.	1.991
1340.	4.442	3270.	5.538	5200.	1.925
1345.	4.483	3275.	5.573	5205.	1.924
1350.	4.449	3280.	5.572	5210.	1.959
1355.	4.452	3285.	5.57	5215.	1.957
1360.	4.451	3290.	5.568	5220.	1.925
1365.	4.486	3295.	5.568	5225.	1.93
1370.	4.488	3300.	5.606	5230.	1.932
1375.	4.49	3305.	5.57	5235.	1.934
1380.	4.457	3310.	5.534	5240.	1.927

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1385.	4.494	3315.	5.572	5245.	1.887
1390.	4.492	3320.	5.573	5250.	1.919
1395.	4.456	3325.	5.539	5255.	1.886
1400.	4.524	3330.	5.54	5260.	1.887
1405.	4.488	3335.	5.503	5265.	1.89
1410.	4.488	3340.	5.573	5270.	1.824
1415.	4.519	3345.	5.577	5275.	1.856
1420.	4.481	3350.	5.543	5280.	1.854
1425.	4.481	3355.	5.578	5285.	1.848
1430.	4.484	3360.	5.544	5290.	1.808
1435.	4.486	3365.	5.542	5295.	1.814
1440.	4.521	3370.	5.581	5300.	1.774
1445.	4.523	3375.	5.549	5305.	1.805
1450.	4.49	3380.	5.583	5310.	1.812
1455.	4.561	3385.	5.549	5315.	1.783
1460.	4.559	3390.	5.589	5320.	1.786
1465.	4.559	3395.	5.554	5325.	1.781
1470.	4.559	3400.	5.594	5330.	1.78
1475.	4.557	3405.	5.595	5335.	1.78
1480.	4.59	3410.	5.56	5340.	1.785
1485.	4.587	3415.	5.566	5345.	1.756
1490.	4.586	3420.	5.601	5350.	1.754
1495.	4.584	3425.	5.566	5355.	1.718
1500.	4.583	3430.	5.571	5360.	1.747
1505.	4.576	3435.	5.607	5365.	1.748
1510.	4.612	3440.	5.649	5370.	1.755
1515.	4.574	3445.	5.649	5375.	1.757
1520.	4.572	3450.	5.609	5380.	1.725
1525.	4.572	3455.	5.609	5385.	1.729
1530.	4.607	3460.	5.616	5390.	1.7
1535.	4.572	3465.	5.618	5395.	1.7
1540.	4.574	3470.	5.581	5400.	1.701
1545.	4.534	3475.	5.617	5405.	1.7
1550.	4.575	3480.	5.621	5410.	1.701
1555.	4.607	3485.	5.62	5415.	1.7
1560.	4.606	3490.	5.586	5420.	1.696
1565.	4.642	3495.	5.624	5425.	1.695
1570.	4.644	3500.	5.623	5430.	1.653

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1575.	4.644	3505.	5.591	5435.	1.692
1580.	4.607	3510.	5.63	5440.	1.655
1585.	4.637	3515.	5.635	5445.	1.69
1590.	4.632	3520.	5.6	5450.	1.62
1595.	4.654	3525.	5.603	5455.	1.656
1600.	4.654	3530.	5.639	5460.	1.623
1605.	4.647	3535.	5.639	5465.	1.623
1610.	4.621	3540.	5.673	5470.	1.625
1615.	4.645	3545.	5.675	5475.	1.632
1620.	4.643	3550.	5.644	5480.	1.67
1625.	4.673	3555.	5.648	5485.	1.636
1630.	4.632	3560.	5.615	5490.	1.641
1635.	4.629	3565.	5.666	5495.	1.641
1640.	4.599	3570.	5.69	5500.	1.642
1645.	4.623	3575.	5.69	5505.	1.611
1650.	4.658	3580.	5.693	5510.	1.58
1655.	4.652	3585.	5.694	5515.	1.614
1660.	4.683	3590.	5.655	5520.	1.651
1665.	4.684	3595.	5.659	5525.	1.614
1670.	4.647	3600.	5.698	5530.	1.622
1675.	4.646	3605.	5.665	5535.	1.623
1680.	4.679	3610.	5.701	5540.	1.622
1685.	4.645	3615.	5.669	5545.	1.582
1690.	4.676	3620.	5.671	5550.	1.619
1695.	4.673	3625.	5.673	5555.	1.59
1700.	4.634	3630.	5.676	5560.	1.59
1705.	4.672	3635.	5.715	5565.	1.589
1710.	4.67	3640.	5.679	5570.	1.589
1715.	4.669	3645.	5.678	5575.	1.586
1720.	4.665	3650.	5.718	5580.	1.587
1725.	4.666	3655.	5.691	5585.	1.588
1730.	4.663	3660.	5.725	5590.	1.586
1735.	4.667	3665.	5.693	5595.	1.582
1740.	4.701	3670.	5.723	5600.	1.548
1745.	4.663	3675.	5.721	5605.	1.549
1750.	4.693	3680.	5.689	5610.	1.549
1755.	4.728	3685.	5.727	5615.	1.551
1760.	4.688	3690.	5.761	5620.	1.557

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1765.	4.721	3695.	5.761	5625.	1.557
1770.	4.757	3700.	5.73	5630.	1.559
1775.	4.721	3705.	5.694	5635.	1.524
1780.	4.721	3710.	5.694	5640.	1.522
1785.	4.712	3715.	5.691	5645.	1.521
1790.	4.748	3720.	5.729	5650.	1.564
1795.	4.711	3725.	5.73	5655.	1.53
1800.	4.742	3730.	5.729	5660.	1.523
1805.	4.775	3735.	5.804	5665.	1.489
1810.	4.774	3740.	5.767	5670.	1.52
1815.	4.776	3745.	5.763	5675.	1.488
1820.	4.768	3750.	5.765	5680.	1.522
1825.	4.764	3755.	5.803	5685.	1.488
1830.	4.764	3760.	5.809	5690.	1.456
1835.	4.728	3765.	5.769	5695.	1.491
1840.	4.767	3770.	5.77	5700.	1.492
1845.	4.805	3775.	5.768	5705.	1.492
1850.	4.766	3780.	5.774	5710.	1.494
1855.	4.765	3785.	5.777	5715.	1.499
1860.	4.767	3790.	5.743	5720.	1.496
1865.	4.801	3795.	5.81	5725.	1.493
1870.	4.799	3800.	5.774	5730.	1.454
1875.	4.834	3805.	5.777	5735.	1.456
1880.	4.797	3810.	5.813	5740.	1.455
1885.	4.796	3815.	5.74	5745.	1.46
1890.	4.834	3820.	5.812	5750.	1.464
1895.	4.799	3825.	5.775	5755.	1.458
1900.	4.761	3830.	5.809	5760.	1.424
1905.	4.761	3835.	5.773	5765.	1.457
1910.	4.763	3840.	5.809	5770.	1.463
1915.	4.8	3845.	5.814	5775.	1.426
1920.	4.762	3850.	5.815	5780.	1.425
1925.	4.872	3855.	5.785	5785.	1.423
1930.	4.838	3860.	5.82		

SOLUTION

Pumping Test

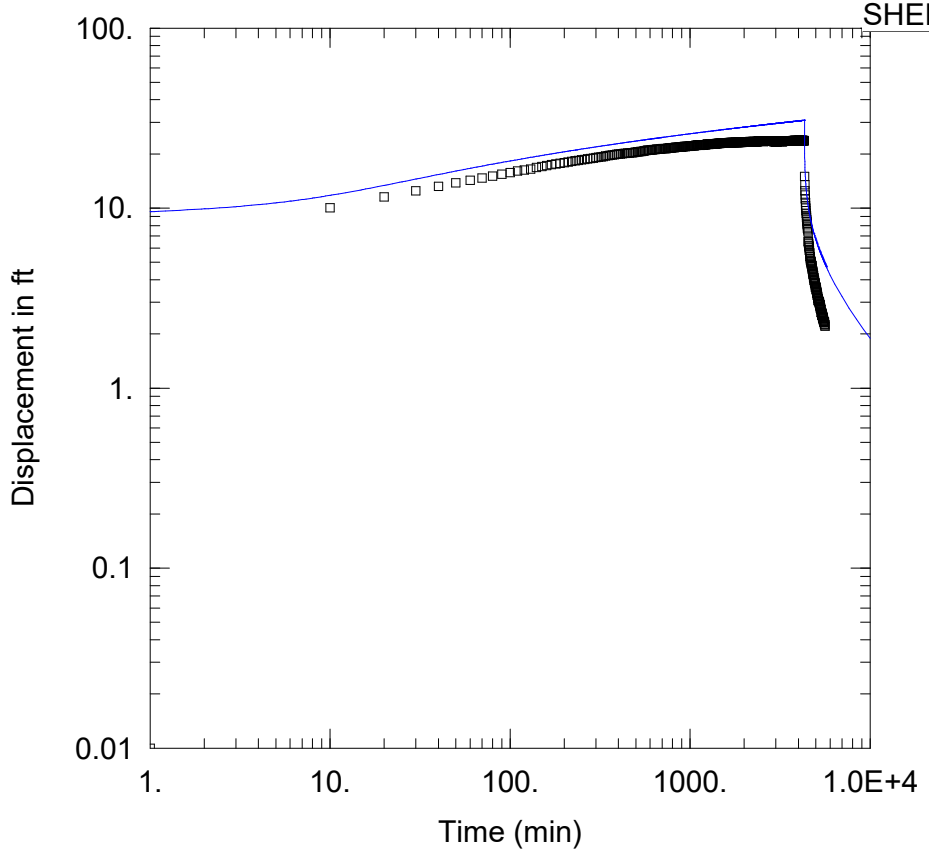
Aquifer Model: Fractured
Solution Method: Moench w/slab blocks

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001379	ft/min
Ss	2.23E-8	ft^{-1}
K'	1.	ft/min
Ss'	1.029E-7	ft^{-1}
Sw	0.	
Sf	1.	
r(w)	0.5	ft
r(c)	0.5	ft

K = 0.0007007 cm/sec
T = K*b = 0.6897 ft²/min (10.68 sq. cm/sec)



SHEFFIELD GARDENS WELL-2 & WELL-3 CONSTANT RATE PUMPING TEST

Data Set: S:\...\Well-2&3.aqt
Date: 05/01/24 Time: 10:13:15

PROJECT INFORMATION

Company: Sterling
Client: Sheffield Gardens
Project: 2023-76
Location: Montgomery, NY
Test Well: Well-2
Test Date: 3/11/2024

SOLUTION

Aquifer Model: Fractured
Solution Method: Moench w/slab blocks

K = 0.0002544 ft/min
Ss = 5.748E-11 ft^{-1}
K' = 0.001 ft/min
Ss' = 0.001 ft^{-1}
Sw = 0.
Sf = 1.
r(w) = 0.5 ft
r(c) = 0.5 ft

AQUIFER DATA

Saturated Thickness: 500. ft

Slab Block Thickness: 5. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
Well-2	968.05	0
Well-3	986.07	0

Observation Wells

Well Name	X (ft)	Y (ft)
Well-1	0	0

Data Set: S:\Sterling\Projects\2023 Projects\Sheffield Gardens - Montgomery - 2023-76\Field Data & Logs\Well-2&3.aqt
Title: Sheffield Gardens Well-2 and Well-3 Constant Rate Pumping Test
Date: 05/01/24
Time: 11:16:33

PROJECT INFORMATION

Company: Sterling
Client: Sheffield Gardens
Project: 2023-76
Location: Montgomery, NY
Test Date: 3/11/2024
Test Well: Well-2

AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 1.
Slab Block Thickness: 5. ft
Spherical Block Diameter: 1. ft
Fracture Length: 1. ftFracture
Radius: 1. ft

PUMPING WELL DATA

No. of pumping wells: 2

Pumping Well No. 1: Well-2

X Location: 0. ft
Y Location: 20. ft

Casing Radius: 0.5 ft
Well Radius: 0.5 ft

Fully Penetrating Well

No. of pumping periods: 1154

Pumping Period Data

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
0.	40.	1885.	40.	3810.	40.
1.	40.	1890.	40.	3815.	40.
2.	40.	1895.	40.	3820.	40.
3.	40.	1900.	40.	3825.	40.
4.	40.	1905.	40.	3830.	40.
5.	40.	1910.	40.	3835.	40.
6.	40.	1915.	40.	3840.	40.
7.	40.	1920.	40.	3845.	40.
8.	40.	1925.	40.	3850.	40.
9.	40.	1930.	40.	3855.	40.
10.	40.	1935.	40.	3860.	40.
15.	40.	1940.	40.	3865.	40.
20.	40.	1945.	40.	3870.	40.
25.	40.	1950.	40.	3875.	40.
30.	40.	1955.	40.	3880.	40.
35.	40.	1960.	40.	3885.	40.
40.	40.	1965.	40.	3890.	40.
45.	40.	1970.	40.	3895.	40.
50.	40.	1975.	40.	3900.	40.
55.	40.	1980.	40.	3905.	40.
60.	40.	1985.	40.	3910.	40.
65.	40.	1990.	40.	3915.	40.
70.	40.	1995.	40.	3920.	40.
75.	40.	2000.	40.	3925.	40.
80.	40.	2005.	40.	3930.	40.
85.	40.	2010.	40.	3935.	40.
90.	40.	2015.	40.	3940.	40.
95.	40.	2020.	40.	3945.	40.
100.	40.	2025.	40.	3950.	40.
105.	40.	2030.	40.	3955.	40.
110.	40.	2035.	40.	3960.	40.
115.	40.	2040.	40.	3965.	40.
120.	40.	2045.	40.	3970.	40.
125.	40.	2050.	40.	3975.	40.
130.	40.	2055.	40.	3980.	40.
135.	40.	2060.	40.	3985.	40.
140.	40.	2065.	40.	3990.	40.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
145.	40.	2070.	40.	3995.	40.
150.	40.	2075.	40.	4000.	40.
155.	40.	2080.	40.	4005.	40.
160.	40.	2085.	40.	4010.	40.
165.	40.	2090.	40.	4015.	40.
170.	40.	2095.	40.	4020.	40.
175.	40.	2100.	40.	4025.	40.
180.	40.	2105.	40.	4030.	40.
185.	40.	2110.	40.	4035.	40.
190.	40.	2115.	40.	4040.	40.
195.	40.	2120.	40.	4045.	40.
200.	40.	2125.	40.	4050.	40.
205.	40.	2130.	40.	4055.	40.
210.	40.	2135.	40.	4060.	40.
215.	40.	2140.	40.	4065.	40.
220.	40.	2145.	40.	4070.	40.
225.	40.	2150.	40.	4075.	40.
230.	40.	2155.	40.	4080.	40.
235.	40.	2160.	40.	4085.	40.
240.	40.	2165.	40.	4090.	40.
245.	40.	2170.	40.	4095.	40.
250.	40.	2175.	40.	4100.	40.
255.	40.	2180.	40.	4105.	40.
260.	40.	2185.	40.	4110.	40.
265.	40.	2190.	40.	4115.	40.
270.	40.	2195.	40.	4120.	40.
275.	40.	2200.	40.	4125.	40.
280.	40.	2205.	40.	4130.	40.
285.	40.	2210.	40.	4135.	40.
290.	40.	2215.	40.	4140.	40.
295.	40.	2220.	40.	4145.	40.
300.	40.	2225.	40.	4150.	40.
305.	40.	2230.	40.	4155.	40.
310.	40.	2235.	40.	4160.	40.
315.	40.	2240.	40.	4165.	40.
320.	40.	2245.	40.	4170.	40.
325.	40.	2250.	40.	4175.	40.
330.	40.	2255.	40.	4180.	40.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
335.	40.	2260.	40.	4185.	40.
340.	40.	2265.	40.	4190.	40.
345.	40.	2270.	40.	4195.	40.
350.	40.	2275.	40.	4200.	40.
355.	40.	2280.	40.	4205.	40.
360.	40.	2285.	40.	4210.	40.
365.	40.	2290.	40.	4215.	40.
370.	40.	2295.	40.	4220.	40.
375.	40.	2300.	40.	4225.	40.
380.	40.	2305.	40.	4230.	40.
385.	40.	2310.	40.	4235.	40.
390.	40.	2315.	40.	4240.	40.
395.	40.	2320.	40.	4245.	40.
400.	40.	2325.	40.	4250.	40.
405.	40.	2330.	40.	4255.	40.
410.	40.	2335.	40.	4260.	40.
415.	40.	2340.	40.	4265.	40.
420.	40.	2345.	40.	4270.	40.
425.	40.	2350.	40.	4275.	40.
430.	40.	2355.	40.	4280.	40.
435.	40.	2360.	40.	4285.	40.
440.	40.	2365.	40.	4290.	40.
445.	40.	2370.	40.	4295.	40.
450.	40.	2375.	40.	4300.	40.
455.	40.	2380.	40.	4305.	40.
460.	40.	2385.	40.	4310.	40.
465.	40.	2390.	40.	4315.	40.
470.	40.	2395.	40.	4320.	40.
475.	40.	2400.	40.	4325.	0.
480.	40.	2405.	40.	4330.	0.
485.	40.	2410.	40.	4335.	0.
490.	40.	2415.	40.	4340.	0.
495.	40.	2420.	40.	4345.	0.
500.	40.	2425.	40.	4350.	0.
505.	40.	2430.	40.	4355.	0.
510.	40.	2435.	40.	4360.	0.
515.	40.	2440.	40.	4365.	0.
520.	40.	2445.	40.	4370.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
525.	40.	2450.	40.	4375.	0.
530.	40.	2455.	40.	4380.	0.
535.	40.	2460.	40.	4385.	0.
540.	40.	2465.	40.	4390.	0.
545.	40.	2470.	40.	4395.	0.
550.	40.	2475.	40.	4400.	0.
555.	40.	2480.	40.	4405.	0.
560.	40.	2485.	40.	4410.	0.
565.	40.	2490.	40.	4415.	0.
570.	40.	2495.	40.	4420.	0.
575.	40.	2500.	40.	4425.	0.
580.	40.	2505.	40.	4430.	0.
585.	40.	2510.	40.	4435.	0.
590.	40.	2515.	40.	4440.	0.
595.	40.	2520.	40.	4445.	0.
600.	40.	2525.	40.	4450.	0.
605.	40.	2530.	40.	4455.	0.
610.	40.	2535.	40.	4460.	0.
615.	40.	2540.	40.	4465.	0.
620.	40.	2545.	40.	4470.	0.
625.	40.	2550.	40.	4475.	0.
630.	40.	2555.	40.	4480.	0.
635.	40.	2560.	40.	4485.	0.
640.	40.	2565.	40.	4490.	0.
645.	40.	2570.	40.	4495.	0.
650.	40.	2575.	40.	4500.	0.
655.	40.	2580.	40.	4505.	0.
660.	40.	2585.	40.	4510.	0.
665.	40.	2590.	40.	4515.	0.
670.	40.	2595.	40.	4520.	0.
675.	40.	2600.	40.	4525.	0.
680.	40.	2605.	40.	4530.	0.
685.	40.	2610.	40.	4535.	0.
690.	40.	2615.	40.	4540.	0.
695.	40.	2620.	40.	4545.	0.
700.	40.	2625.	40.	4550.	0.
705.	40.	2630.	40.	4555.	0.
710.	40.	2635.	40.	4560.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
715.	40.	2640.	40.	4565.	0.
720.	40.	2645.	40.	4570.	0.
725.	40.	2650.	40.	4575.	0.
730.	40.	2655.	40.	4580.	0.
735.	40.	2660.	40.	4585.	0.
740.	40.	2665.	40.	4590.	0.
745.	40.	2670.	40.	4595.	0.
750.	40.	2675.	40.	4600.	0.
755.	40.	2680.	40.	4605.	0.
760.	40.	2685.	40.	4610.	0.
765.	40.	2690.	40.	4615.	0.
770.	40.	2695.	40.	4620.	0.
775.	40.	2700.	40.	4625.	0.
780.	40.	2705.	40.	4630.	0.
785.	40.	2710.	40.	4635.	0.
790.	40.	2715.	40.	4640.	0.
795.	40.	2720.	40.	4645.	0.
800.	40.	2725.	40.	4650.	0.
805.	40.	2730.	40.	4655.	0.
810.	40.	2735.	40.	4660.	0.
815.	40.	2740.	40.	4665.	0.
820.	40.	2745.	40.	4670.	0.
825.	40.	2750.	40.	4675.	0.
830.	40.	2755.	40.	4680.	0.
835.	40.	2760.	40.	4685.	0.
840.	40.	2765.	40.	4690.	0.
845.	40.	2770.	40.	4695.	0.
850.	40.	2775.	40.	4700.	0.
855.	40.	2780.	40.	4705.	0.
860.	40.	2785.	40.	4710.	0.
865.	40.	2790.	40.	4715.	0.
870.	40.	2795.	40.	4720.	0.
875.	40.	2800.	40.	4725.	0.
880.	40.	2805.	40.	4730.	0.
885.	40.	2810.	40.	4735.	0.
890.	40.	2815.	40.	4740.	0.
895.	40.	2820.	40.	4745.	0.
900.	40.	2825.	40.	4750.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
905.	40.	2830.	40.	4755.	0.
910.	40.	2835.	40.	4760.	0.
915.	40.	2840.	40.	4765.	0.
920.	40.	2845.	40.	4770.	0.
925.	40.	2850.	40.	4775.	0.
930.	40.	2855.	40.	4780.	0.
935.	40.	2860.	40.	4785.	0.
940.	40.	2865.	40.	4790.	0.
945.	40.	2870.	40.	4795.	0.
950.	40.	2875.	40.	4800.	0.
955.	40.	2880.	40.	4805.	0.
960.	40.	2885.	40.	4810.	0.
965.	40.	2890.	40.	4815.	0.
970.	40.	2895.	40.	4820.	0.
975.	40.	2900.	40.	4825.	0.
980.	40.	2905.	40.	4830.	0.
985.	40.	2910.	40.	4835.	0.
990.	40.	2915.	40.	4840.	0.
995.	40.	2920.	40.	4845.	0.
1000.	40.	2925.	40.	4850.	0.
1005.	40.	2930.	40.	4855.	0.
1010.	40.	2935.	40.	4860.	0.
1015.	40.	2940.	40.	4865.	0.
1020.	40.	2945.	40.	4870.	0.
1025.	40.	2950.	40.	4875.	0.
1030.	40.	2955.	40.	4880.	0.
1035.	40.	2960.	40.	4885.	0.
1040.	40.	2965.	40.	4890.	0.
1045.	40.	2970.	40.	4895.	0.
1050.	40.	2975.	40.	4900.	0.
1055.	40.	2980.	40.	4905.	0.
1060.	40.	2985.	40.	4910.	0.
1065.	40.	2990.	40.	4915.	0.
1070.	40.	2995.	40.	4920.	0.
1075.	40.	3000.	40.	4925.	0.
1080.	40.	3005.	40.	4930.	0.
1085.	40.	3010.	40.	4935.	0.
1090.	40.	3015.	40.	4940.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1095.	40.	3020.	40.	4945.	0.
1100.	40.	3025.	40.	4950.	0.
1105.	40.	3030.	40.	4955.	0.
1110.	40.	3035.	40.	4960.	0.
1115.	40.	3040.	40.	4965.	0.
1120.	40.	3045.	40.	4970.	0.
1125.	40.	3050.	40.	4975.	0.
1130.	40.	3055.	40.	4980.	0.
1135.	40.	3060.	40.	4985.	0.
1140.	40.	3065.	40.	4990.	0.
1145.	40.	3070.	40.	4995.	0.
1150.	40.	3075.	40.	5000.	0.
1155.	40.	3080.	40.	5005.	0.
1160.	40.	3085.	40.	5010.	0.
1165.	40.	3090.	40.	5015.	0.
1170.	40.	3095.	40.	5020.	0.
1175.	40.	3100.	40.	5025.	0.
1180.	40.	3105.	40.	5030.	0.
1185.	40.	3110.	40.	5035.	0.
1190.	40.	3115.	40.	5040.	0.
1195.	40.	3120.	40.	5045.	0.
1200.	40.	3125.	40.	5050.	0.
1205.	40.	3130.	40.	5055.	0.
1210.	40.	3135.	40.	5060.	0.
1215.	40.	3140.	40.	5065.	0.
1220.	40.	3145.	40.	5070.	0.
1225.	40.	3150.	40.	5075.	0.
1230.	40.	3155.	40.	5080.	0.
1235.	40.	3160.	40.	5085.	0.
1240.	40.	3165.	40.	5090.	0.
1245.	40.	3170.	40.	5095.	0.
1250.	40.	3175.	40.	5100.	0.
1255.	40.	3180.	40.	5105.	0.
1260.	40.	3185.	40.	5110.	0.
1265.	40.	3190.	40.	5115.	0.
1270.	40.	3195.	40.	5120.	0.
1275.	40.	3200.	40.	5125.	0.
1280.	40.	3205.	40.	5130.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1285.	40.	3210.	40.	5135.	0.
1290.	40.	3215.	40.	5140.	0.
1295.	40.	3220.	40.	5145.	0.
1300.	40.	3225.	40.	5150.	0.
1305.	40.	3230.	40.	5155.	0.
1310.	40.	3235.	40.	5160.	0.
1315.	40.	3240.	40.	5165.	0.
1320.	40.	3245.	40.	5170.	0.
1325.	40.	3250.	40.	5175.	0.
1330.	40.	3255.	40.	5180.	0.
1335.	40.	3260.	40.	5185.	0.
1340.	40.	3265.	40.	5190.	0.
1345.	40.	3270.	40.	5195.	0.
1350.	40.	3275.	40.	5200.	0.
1355.	40.	3280.	40.	5205.	0.
1360.	40.	3285.	40.	5210.	0.
1365.	40.	3290.	40.	5215.	0.
1370.	40.	3295.	40.	5220.	0.
1375.	40.	3300.	40.	5225.	0.
1380.	40.	3305.	40.	5230.	0.
1385.	40.	3310.	40.	5235.	0.
1390.	40.	3315.	40.	5240.	0.
1395.	40.	3320.	40.	5245.	0.
1400.	40.	3325.	40.	5250.	0.
1405.	40.	3330.	40.	5255.	0.
1410.	40.	3335.	40.	5260.	0.
1415.	40.	3340.	40.	5265.	0.
1420.	40.	3345.	40.	5270.	0.
1425.	40.	3350.	40.	5275.	0.
1430.	40.	3355.	40.	5280.	0.
1435.	40.	3360.	40.	5285.	0.
1440.	40.	3365.	40.	5290.	0.
1445.	40.	3370.	40.	5295.	0.
1450.	40.	3375.	40.	5300.	0.
1455.	40.	3380.	40.	5305.	0.
1460.	40.	3385.	40.	5310.	0.
1465.	40.	3390.	40.	5315.	0.
1470.	40.	3395.	40.	5320.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1475.	40.	3400.	40.	5325.	0.
1480.	40.	3405.	40.	5330.	0.
1485.	40.	3410.	40.	5335.	0.
1490.	40.	3415.	40.	5340.	0.
1495.	40.	3420.	40.	5345.	0.
1500.	40.	3425.	40.	5350.	0.
1505.	40.	3430.	40.	5355.	0.
1510.	40.	3435.	40.	5360.	0.
1515.	40.	3440.	40.	5365.	0.
1520.	40.	3445.	40.	5370.	0.
1525.	40.	3450.	40.	5375.	0.
1530.	40.	3455.	40.	5380.	0.
1535.	40.	3460.	40.	5385.	0.
1540.	40.	3465.	40.	5390.	0.
1545.	40.	3470.	40.	5395.	0.
1550.	40.	3475.	40.	5400.	0.
1555.	40.	3480.	40.	5405.	0.
1560.	40.	3485.	40.	5410.	0.
1565.	40.	3490.	40.	5415.	0.
1570.	40.	3495.	40.	5420.	0.
1575.	40.	3500.	40.	5425.	0.
1580.	40.	3505.	40.	5430.	0.
1585.	40.	3510.	40.	5435.	0.
1590.	40.	3515.	40.	5440.	0.
1595.	40.	3520.	40.	5445.	0.
1600.	40.	3525.	40.	5450.	0.
1605.	40.	3530.	40.	5455.	0.
1610.	40.	3535.	40.	5460.	0.
1615.	40.	3540.	40.	5465.	0.
1620.	40.	3545.	40.	5470.	0.
1625.	40.	3550.	40.	5475.	0.
1630.	40.	3555.	40.	5480.	0.
1635.	40.	3560.	40.	5485.	0.
1640.	40.	3565.	40.	5490.	0.
1645.	40.	3570.	40.	5495.	0.
1650.	40.	3575.	40.	5500.	0.
1655.	40.	3580.	40.	5505.	0.
1660.	40.	3585.	40.	5510.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1665.	40.	3590.	40.	5515.	0.
1670.	40.	3595.	40.	5520.	0.
1675.	40.	3600.	40.	5525.	0.
1680.	40.	3605.	40.	5530.	0.
1685.	40.	3610.	40.	5535.	0.
1690.	40.	3615.	40.	5540.	0.
1695.	40.	3620.	40.	5545.	0.
1700.	40.	3625.	40.	5550.	0.
1705.	40.	3630.	40.	5555.	0.
1710.	40.	3635.	40.	5560.	0.
1715.	40.	3640.	40.	5565.	0.
1720.	40.	3645.	40.	5570.	0.
1725.	40.	3650.	40.	5575.	0.
1730.	40.	3655.	40.	5580.	0.
1735.	40.	3660.	40.	5585.	0.
1740.	40.	3665.	40.	5590.	0.
1745.	40.	3670.	40.	5595.	0.
1750.	40.	3675.	40.	5600.	0.
1755.	40.	3680.	40.	5605.	0.
1760.	40.	3685.	40.	5610.	0.
1765.	40.	3690.	40.	5615.	0.
1770.	40.	3695.	40.	5620.	0.
1775.	40.	3700.	40.	5625.	0.
1780.	40.	3705.	40.	5630.	0.
1785.	40.	3710.	40.	5635.	0.
1790.	40.	3715.	40.	5640.	0.
1795.	40.	3720.	40.	5645.	0.
1800.	40.	3725.	40.	5650.	0.
1805.	40.	3730.	40.	5655.	0.
1810.	40.	3735.	40.	5660.	0.
1815.	40.	3740.	40.	5665.	0.
1820.	40.	3745.	40.	5670.	0.
1825.	40.	3750.	40.	5675.	0.
1830.	40.	3755.	40.	5680.	0.
1835.	40.	3760.	40.	5685.	0.
1840.	40.	3765.	40.	5690.	0.
1845.	40.	3770.	40.	5695.	0.
1850.	40.	3775.	40.	5700.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1855.	40.	3780.	40.	5705.	0.
1860.	40.	3785.	40.	5710.	0.
1865.	40.	3790.	40.	5715.	0.
1870.	40.	3795.	40.	5720.	0.
1875.	40.	3800.	40.	5725.	0.
1880.	40.	3805.	40.		

Pumping Well No. 2: Well-3

X Location: 0. ft
Y Location: 0. ft

Casing Radius: 0.5 ft
Well Radius: 0.5 ft

Fully Penetrating Well

No. of pumping periods: 1161

Pumping Period Data

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
0.	40.	1895.	40.	3830.	40.
1.	40.	1900.	40.	3835.	40.
2.	40.	1905.	40.	3840.	40.
3.	40.	1910.	40.	3845.	40.
4.	40.	1915.	40.	3850.	40.
5.	40.	1920.	40.	3855.	40.
6.	40.	1925.	40.	3860.	40.
7.	40.	1930.	40.	3865.	40.
8.	40.	1935.	40.	3870.	40.
9.	40.	1940.	40.	3875.	40.
10.	40.	1945.	40.	3880.	40.
15.	40.	1950.	40.	3885.	40.
20.	40.	1955.	40.	3890.	40.
25.	40.	1960.	40.	3895.	40.
30.	40.	1965.	40.	3900.	40.
35.	40.	1970.	40.	3905.	40.
40.	40.	1975.	40.	3910.	40.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
45.	40.	1980.	40.	3915.	40.
50.	40.	1985.	40.	3920.	40.
55.	40.	1990.	40.	3925.	40.
60.	40.	1995.	40.	3930.	40.
65.	40.	2000.	40.	3935.	40.
70.	40.	2005.	40.	3940.	40.
75.	40.	2010.	40.	3945.	40.
80.	40.	2015.	40.	3950.	40.
85.	40.	2020.	40.	3955.	40.
90.	40.	2025.	40.	3960.	40.
95.	40.	2030.	40.	3965.	40.
100.	40.	2035.	40.	3970.	40.
105.	40.	2040.	40.	3975.	40.
110.	40.	2045.	40.	3980.	40.
115.	40.	2050.	40.	3985.	40.
120.	40.	2055.	40.	3990.	40.
125.	40.	2060.	40.	3995.	40.
130.	40.	2065.	40.	4000.	40.
135.	40.	2070.	40.	4005.	40.
140.	40.	2075.	40.	4010.	40.
145.	40.	2080.	40.	4015.	40.
150.	40.	2085.	40.	4020.	40.
155.	40.	2090.	40.	4025.	40.
160.	40.	2095.	40.	4030.	40.
165.	40.	2100.	40.	4035.	40.
170.	40.	2105.	40.	4040.	40.
175.	40.	2110.	40.	4045.	40.
180.	40.	2115.	40.	4050.	40.
185.	40.	2120.	40.	4055.	40.
190.	40.	2125.	40.	4060.	40.
195.	40.	2130.	40.	4065.	40.
200.	40.	2135.	40.	4070.	40.
205.	40.	2140.	40.	4075.	40.
210.	40.	2145.	40.	4080.	40.
215.	40.	2150.	40.	4085.	40.
220.	40.	2155.	40.	4090.	40.
225.	40.	2160.	40.	4095.	40.
230.	40.	2165.	40.	4100.	40.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
235.	40.	2170.	40.	4105.	40.
240.	40.	2175.	40.	4110.	40.
245.	40.	2180.	40.	4115.	40.
250.	40.	2185.	40.	4120.	40.
255.	40.	2190.	40.	4125.	40.
260.	40.	2195.	40.	4130.	40.
265.	40.	2200.	40.	4135.	40.
270.	40.	2205.	40.	4140.	40.
275.	40.	2210.	40.	4145.	40.
280.	40.	2215.	40.	4150.	40.
285.	40.	2220.	40.	4155.	40.
290.	40.	2225.	40.	4160.	40.
295.	40.	2230.	40.	4165.	40.
300.	40.	2235.	40.	4170.	40.
305.	40.	2240.	40.	4175.	40.
310.	40.	2245.	40.	4180.	40.
315.	40.	2250.	40.	4185.	40.
320.	40.	2255.	40.	4190.	40.
325.	40.	2260.	40.	4195.	40.
330.	40.	2265.	40.	4200.	40.
335.	40.	2270.	40.	4205.	40.
340.	40.	2275.	40.	4210.	40.
345.	40.	2280.	40.	4215.	40.
350.	40.	2285.	40.	4220.	40.
355.	40.	2290.	40.	4225.	40.
360.	40.	2295.	40.	4230.	40.
365.	40.	2300.	40.	4235.	40.
370.	40.	2305.	40.	4240.	40.
375.	40.	2310.	40.	4245.	40.
380.	40.	2315.	40.	4250.	40.
385.	40.	2320.	40.	4255.	40.
390.	40.	2325.	40.	4260.	40.
395.	40.	2330.	40.	4265.	40.
400.	40.	2335.	40.	4270.	40.
405.	40.	2340.	40.	4275.	40.
410.	40.	2345.	40.	4280.	40.
415.	40.	2350.	40.	4285.	40.
420.	40.	2355.	40.	4290.	40.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
425.	40.	2360.	40.	4295.	40.
430.	40.	2365.	40.	4300.	40.
435.	40.	2370.	40.	4305.	40.
440.	40.	2375.	40.	4310.	40.
445.	40.	2380.	40.	4315.	40.
450.	40.	2385.	40.	4320.	40.
455.	40.	2390.	40.	4325.	0.
460.	40.	2395.	40.	4330.	0.
465.	40.	2400.	40.	4335.	0.
470.	40.	2405.	40.	4340.	0.
475.	40.	2410.	40.	4345.	0.
480.	40.	2415.	40.	4350.	0.
485.	40.	2420.	40.	4355.	0.
490.	40.	2425.	40.	4360.	0.
495.	40.	2430.	40.	4365.	0.
500.	40.	2435.	40.	4370.	0.
505.	40.	2440.	40.	4375.	0.
510.	40.	2445.	40.	4380.	0.
515.	40.	2450.	40.	4385.	0.
520.	40.	2455.	40.	4390.	0.
525.	40.	2460.	40.	4395.	0.
530.	40.	2465.	40.	4400.	0.
535.	40.	2470.	40.	4405.	0.
540.	40.	2475.	40.	4410.	0.
545.	40.	2480.	40.	4415.	0.
550.	40.	2485.	40.	4420.	0.
555.	40.	2490.	40.	4425.	0.
560.	40.	2495.	40.	4430.	0.
565.	40.	2500.	40.	4435.	0.
570.	40.	2505.	40.	4440.	0.
575.	40.	2510.	40.	4445.	0.
580.	40.	2515.	40.	4450.	0.
585.	40.	2520.	40.	4455.	0.
590.	40.	2525.	40.	4460.	0.
595.	40.	2530.	40.	4465.	0.
600.	40.	2535.	40.	4470.	0.
605.	40.	2540.	40.	4475.	0.
610.	40.	2545.	40.	4480.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
615.	40.	2550.	40.	4485.	0.
620.	40.	2555.	40.	4490.	0.
625.	40.	2560.	40.	4495.	0.
630.	40.	2565.	40.	4500.	0.
635.	40.	2570.	40.	4505.	0.
640.	40.	2575.	40.	4510.	0.
645.	40.	2580.	40.	4515.	0.
650.	40.	2585.	40.	4520.	0.
655.	40.	2590.	40.	4525.	0.
660.	40.	2595.	40.	4530.	0.
665.	40.	2600.	40.	4535.	0.
670.	40.	2605.	40.	4540.	0.
675.	40.	2610.	40.	4545.	0.
680.	40.	2615.	40.	4550.	0.
685.	40.	2620.	40.	4555.	0.
690.	40.	2625.	40.	4560.	0.
695.	40.	2630.	40.	4565.	0.
700.	40.	2635.	40.	4570.	0.
705.	40.	2640.	40.	4575.	0.
710.	40.	2645.	40.	4580.	0.
715.	40.	2650.	40.	4585.	0.
720.	40.	2655.	40.	4590.	0.
725.	40.	2660.	40.	4595.	0.
730.	40.	2665.	40.	4600.	0.
735.	40.	2670.	40.	4605.	0.
740.	40.	2675.	40.	4610.	0.
745.	40.	2680.	40.	4615.	0.
750.	40.	2685.	40.	4620.	0.
755.	40.	2690.	40.	4625.	0.
760.	40.	2695.	40.	4630.	0.
765.	40.	2700.	40.	4635.	0.
770.	40.	2705.	40.	4640.	0.
775.	40.	2710.	40.	4645.	0.
780.	40.	2715.	40.	4650.	0.
785.	40.	2720.	40.	4655.	0.
790.	40.	2725.	40.	4660.	0.
795.	40.	2730.	40.	4665.	0.
800.	40.	2735.	40.	4670.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
805.	40.	2740.	40.	4675.	0.
810.	40.	2745.	40.	4680.	0.
815.	40.	2750.	40.	4685.	0.
820.	40.	2755.	40.	4690.	0.
825.	40.	2760.	40.	4695.	0.
830.	40.	2765.	40.	4700.	0.
835.	40.	2770.	40.	4705.	0.
840.	40.	2775.	40.	4710.	0.
845.	40.	2780.	40.	4715.	0.
850.	40.	2785.	40.	4720.	0.
855.	40.	2790.	40.	4725.	0.
860.	40.	2795.	40.	4730.	0.
865.	40.	2800.	40.	4735.	0.
870.	40.	2805.	40.	4740.	0.
875.	40.	2810.	40.	4745.	0.
880.	40.	2815.	40.	4750.	0.
885.	40.	2820.	40.	4755.	0.
890.	40.	2825.	40.	4760.	0.
895.	40.	2830.	40.	4765.	0.
900.	40.	2835.	40.	4770.	0.
905.	40.	2840.	40.	4775.	0.
910.	40.	2845.	40.	4780.	0.
915.	40.	2850.	40.	4785.	0.
920.	40.	2855.	40.	4790.	0.
925.	40.	2860.	40.	4795.	0.
930.	40.	2865.	40.	4800.	0.
935.	40.	2870.	40.	4805.	0.
940.	40.	2875.	40.	4810.	0.
945.	40.	2880.	40.	4815.	0.
950.	40.	2885.	40.	4820.	0.
955.	40.	2890.	40.	4825.	0.
960.	40.	2895.	40.	4830.	0.
965.	40.	2900.	40.	4835.	0.
970.	40.	2905.	40.	4840.	0.
975.	40.	2910.	40.	4845.	0.
980.	40.	2915.	40.	4850.	0.
985.	40.	2920.	40.	4855.	0.
990.	40.	2925.	40.	4860.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
995.	40.	2930.	40.	4865.	0.
1000.	40.	2935.	40.	4870.	0.
1005.	40.	2940.	40.	4875.	0.
1010.	40.	2945.	40.	4880.	0.
1015.	40.	2950.	40.	4885.	0.
1020.	40.	2955.	40.	4890.	0.
1025.	40.	2960.	40.	4895.	0.
1030.	40.	2965.	40.	4900.	0.
1035.	40.	2970.	40.	4905.	0.
1040.	40.	2975.	40.	4910.	0.
1045.	40.	2980.	40.	4915.	0.
1050.	40.	2985.	40.	4920.	0.
1055.	40.	2990.	40.	4925.	0.
1060.	40.	2995.	40.	4930.	0.
1065.	40.	3000.	40.	4935.	0.
1070.	40.	3005.	40.	4940.	0.
1075.	40.	3010.	40.	4945.	0.
1080.	40.	3015.	40.	4950.	0.
1085.	40.	3020.	40.	4955.	0.
1090.	40.	3025.	40.	4960.	0.
1095.	40.	3030.	40.	4965.	0.
1100.	40.	3035.	40.	4970.	0.
1105.	40.	3040.	40.	4975.	0.
1110.	40.	3045.	40.	4980.	0.
1115.	40.	3050.	40.	4985.	0.
1120.	40.	3055.	40.	4990.	0.
1125.	40.	3060.	40.	4995.	0.
1130.	40.	3065.	40.	5000.	0.
1135.	40.	3070.	40.	5005.	0.
1140.	40.	3075.	40.	5010.	0.
1145.	40.	3080.	40.	5015.	0.
1150.	40.	3085.	40.	5020.	0.
1155.	40.	3090.	40.	5025.	0.
1160.	40.	3095.	40.	5030.	0.
1165.	40.	3100.	40.	5035.	0.
1170.	40.	3105.	40.	5040.	0.
1175.	40.	3110.	40.	5045.	0.
1180.	40.	3115.	40.	5050.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1185.	40.	3120.	40.	5055.	0.
1190.	40.	3125.	40.	5060.	0.
1195.	40.	3130.	40.	5065.	0.
1200.	40.	3135.	40.	5070.	0.
1205.	40.	3140.	40.	5075.	0.
1210.	40.	3145.	40.	5080.	0.
1215.	40.	3150.	40.	5085.	0.
1220.	40.	3155.	40.	5090.	0.
1225.	40.	3160.	40.	5095.	0.
1230.	40.	3165.	40.	5100.	0.
1235.	40.	3170.	40.	5105.	0.
1240.	40.	3175.	40.	5110.	0.
1245.	40.	3180.	40.	5115.	0.
1250.	40.	3185.	40.	5120.	0.
1255.	40.	3190.	40.	5125.	0.
1260.	40.	3195.	40.	5130.	0.
1265.	40.	3200.	40.	5135.	0.
1270.	40.	3205.	40.	5140.	0.
1275.	40.	3210.	40.	5145.	0.
1280.	40.	3215.	40.	5150.	0.
1285.	40.	3220.	40.	5155.	0.
1290.	40.	3225.	40.	5160.	0.
1295.	40.	3230.	40.	5165.	0.
1300.	40.	3235.	40.	5170.	0.
1305.	40.	3240.	40.	5175.	0.
1310.	40.	3245.	40.	5180.	0.
1315.	40.	3250.	40.	5185.	0.
1320.	40.	3255.	40.	5190.	0.
1325.	40.	3260.	40.	5195.	0.
1330.	40.	3265.	40.	5200.	0.
1335.	40.	3270.	40.	5205.	0.
1340.	40.	3275.	40.	5210.	0.
1345.	40.	3280.	40.	5215.	0.
1350.	40.	3285.	40.	5220.	0.
1355.	40.	3290.	40.	5225.	0.
1360.	40.	3295.	40.	5230.	0.
1365.	40.	3300.	40.	5235.	0.
1370.	40.	3305.	40.	5240.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1375.	40.	3310.	40.	5245.	0.
1380.	40.	3315.	40.	5250.	0.
1385.	40.	3320.	40.	5255.	0.
1390.	40.	3325.	40.	5260.	0.
1395.	40.	3330.	40.	5265.	0.
1400.	40.	3335.	40.	5270.	0.
1405.	40.	3340.	40.	5275.	0.
1410.	40.	3345.	40.	5280.	0.
1415.	40.	3350.	40.	5285.	0.
1420.	40.	3355.	40.	5290.	0.
1425.	40.	3360.	40.	5295.	0.
1430.	40.	3365.	40.	5300.	0.
1435.	40.	3370.	40.	5305.	0.
1440.	40.	3375.	40.	5310.	0.
1445.	40.	3380.	40.	5315.	0.
1450.	40.	3385.	40.	5320.	0.
1455.	40.	3390.	40.	5325.	0.
1460.	40.	3395.	40.	5330.	0.
1465.	40.	3400.	40.	5335.	0.
1470.	40.	3405.	40.	5340.	0.
1475.	40.	3410.	40.	5345.	0.
1480.	40.	3415.	40.	5350.	0.
1485.	40.	3420.	40.	5355.	0.
1490.	40.	3425.	40.	5360.	0.
1495.	40.	3430.	40.	5365.	0.
1500.	40.	3435.	40.	5370.	0.
1505.	40.	3440.	40.	5375.	0.
1510.	40.	3445.	40.	5380.	0.
1515.	40.	3450.	40.	5385.	0.
1520.	40.	3455.	40.	5390.	0.
1525.	40.	3460.	40.	5395.	0.
1530.	40.	3465.	40.	5400.	0.
1535.	40.	3470.	40.	5405.	0.
1540.	40.	3475.	40.	5410.	0.
1545.	40.	3480.	40.	5415.	0.
1550.	40.	3485.	40.	5420.	0.
1555.	40.	3490.	40.	5425.	0.
1560.	40.	3495.	40.	5430.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1565.	40.	3500.	40.	5435.	0.
1570.	40.	3505.	40.	5440.	0.
1575.	40.	3510.	40.	5445.	0.
1580.	40.	3515.	40.	5450.	0.
1585.	40.	3520.	40.	5455.	0.
1590.	40.	3525.	40.	5460.	0.
1595.	40.	3530.	40.	5465.	0.
1600.	40.	3535.	40.	5470.	0.
1605.	40.	3540.	40.	5475.	0.
1610.	40.	3545.	40.	5480.	0.
1615.	40.	3550.	40.	5485.	0.
1620.	40.	3555.	40.	5490.	0.
1625.	40.	3560.	40.	5495.	0.
1630.	40.	3565.	40.	5500.	0.
1635.	40.	3570.	40.	5505.	0.
1640.	40.	3575.	40.	5510.	0.
1645.	40.	3580.	40.	5515.	0.
1650.	40.	3585.	40.	5520.	0.
1655.	40.	3590.	40.	5525.	0.
1660.	40.	3595.	40.	5530.	0.
1665.	40.	3600.	40.	5535.	0.
1670.	40.	3605.	40.	5540.	0.
1675.	40.	3610.	40.	5545.	0.
1680.	40.	3615.	40.	5550.	0.
1685.	40.	3620.	40.	5555.	0.
1690.	40.	3625.	40.	5560.	0.
1695.	40.	3630.	40.	5565.	0.
1700.	40.	3635.	40.	5570.	0.
1705.	40.	3640.	40.	5575.	0.
1710.	40.	3645.	40.	5580.	0.
1715.	40.	3650.	40.	5585.	0.
1720.	40.	3655.	40.	5590.	0.
1725.	40.	3660.	40.	5595.	0.
1730.	40.	3665.	40.	5600.	0.
1735.	40.	3670.	40.	5605.	0.
1740.	40.	3675.	40.	5610.	0.
1745.	40.	3680.	40.	5615.	0.
1750.	40.	3685.	40.	5620.	0.

Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
1755.	40.	3690.	40.	5625.	0.
1760.	40.	3695.	40.	5630.	0.
1765.	40.	3700.	40.	5635.	0.
1770.	40.	3705.	40.	5640.	0.
1775.	40.	3710.	40.	5645.	0.
1780.	40.	3715.	40.	5650.	0.
1785.	40.	3720.	40.	5655.	0.
1790.	40.	3725.	40.	5660.	0.
1795.	40.	3730.	40.	5665.	0.
1800.	40.	3735.	40.	5670.	0.
1805.	40.	3740.	40.	5675.	0.
1810.	40.	3745.	40.	5680.	0.
1815.	40.	3750.	40.	5685.	0.
1820.	40.	3755.	40.	5690.	0.
1825.	40.	3760.	40.	5695.	0.
1830.	40.	3765.	40.	5700.	0.
1835.	40.	3770.	40.	5705.	0.
1840.	40.	3775.	40.	5710.	0.
1845.	40.	3780.	40.	5715.	0.
1850.	40.	3785.	40.	5720.	0.
1855.	40.	3790.	40.	5725.	0.
1860.	40.	3795.	40.	5730.	0.
1865.	40.	3800.	40.	5735.	0.
1870.	40.	3805.	40.	5740.	0.
1875.	40.	3810.	40.	5745.	0.
1880.	40.	3815.	40.	5750.	0.
1885.	40.	3820.	40.	5755.	0.
1890.	40.	3825.	40.	5760.	0.

OBSERVATION WELL DATA

No. of observation wells: 1

Observation Well No. 1: Well-1

X Location: 968.05 ft
Y Location: 0. ft

Radial distance from Well-2: 968.2565789 ft
Radial distance from Well-3: 968.05 ft

Fully Penetrating Well

No. of Observations: 563

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1.	0.01	1880.	23.18	3760.	23.69
10.	10.05	1890.	23.2	3770.	23.73
20.	11.54	1900.	23.19	3780.	23.74
30.	12.45	1910.	23.2	3790.	23.72
40.	13.2	1920.	23.24	3800.	23.73
50.	13.83	1930.	23.21	3810.	23.71
60.	14.28	1940.	23.17	3820.	23.72
70.	14.7	1950.	23.25	3830.	23.77
80.	15.05	1960.	23.22	3840.	23.73
90.	15.41	1970.	23.23	3850.	23.74
100.	15.74	1980.	23.2	3860.	23.74
110.	16.06	1990.	23.24	3870.	23.71
120.	16.29	2000.	23.21	3880.	23.75
130.	16.5	2010.	23.27	3890.	23.73
140.	16.81	2020.	23.27	3900.	23.73
150.	17.	2030.	23.27	3910.	23.7
160.	17.21	2040.	23.27	3920.	23.7
170.	17.42	2050.	23.3	3930.	23.71
180.	17.59	2060.	23.3	3940.	23.68
190.	17.72	2070.	23.3	3950.	23.68
200.	17.88	2080.	23.3	3960.	23.75
210.	18.06	2090.	23.34	3970.	23.72
220.	18.15	2100.	23.33	3980.	23.72
230.	18.33	2110.	23.29	3990.	23.76
240.	18.43	2120.	23.32	4000.	23.73
250.	18.56	2130.	23.35	4010.	23.74
260.	18.66	2140.	23.39	4020.	23.71
270.	18.8	2150.	23.39	4030.	23.75
280.	18.86	2160.	23.35	4040.	23.76
290.	18.96	2170.	23.36	4050.	23.76

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
300.	19.11	2180.	23.39	4060.	23.77
310.	19.2	2190.	23.32	4070.	23.75
320.	19.27	2200.	23.35	4080.	23.76
330.	19.35	2210.	23.42	4090.	23.76
340.	19.49	2220.	23.41	4100.	23.72
350.	19.59	2230.	23.41	4110.	23.73
360.	19.66	2240.	23.37	4120.	23.74
370.	19.73	2250.	23.4	4130.	23.78
380.	19.84	2260.	23.4	4140.	23.76
390.	19.91	2270.	23.4	4150.	23.76
400.	19.96	2280.	23.4	4160.	23.73
410.	19.99	2290.	23.39	4170.	23.74
420.	20.03	2300.	23.38	4180.	23.75
430.	20.1	2310.	23.38	4190.	23.72
440.	20.17	2320.	23.38	4200.	23.71
450.	20.25	2330.	23.41	4210.	23.77
460.	20.25	2340.	23.4	4220.	23.74
470.	20.31	2350.	23.44	4230.	23.75
480.	20.34	2360.	23.4	4240.	23.73
490.	20.4	2370.	23.45	4250.	23.74
500.	20.44	2380.	23.47	4260.	23.7
510.	20.55	2390.	23.51	4270.	23.68
520.	20.59	2400.	23.5	4280.	23.68
530.	20.63	2410.	23.51	4290.	23.7
540.	20.67	2420.	23.48	4300.	23.73
550.	20.75	2430.	23.5	4310.	23.76
560.	20.82	2440.	23.5	4320.	23.74
570.	20.87	2450.	23.48	4330.	14.97
580.	20.95	2460.	23.52	4340.	13.47
590.	20.98	2470.	23.52	4350.	12.47
600.	21.02	2480.	23.52	4360.	11.81
610.	21.06	2490.	23.51	4370.	11.25
620.	21.1	2500.	23.51	4380.	10.77
630.	21.14	2510.	23.55	4390.	10.33
640.	21.15	2520.	23.51	4400.	9.98
650.	21.22	2530.	23.49	4410.	9.69
660.	21.22	2540.	23.53	4420.	9.35
670.	21.25	2550.	23.46	4430.	9.08

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
680.	21.28	2560.	23.46	4440.	8.86
690.	21.36	2570.	23.49	4450.	8.61
700.	21.37	2580.	23.49	4460.	8.43
710.	21.4	2590.	23.48	4470.	8.26
720.	21.37	2600.	23.51	4480.	8.09
730.	21.4	2610.	23.51	4490.	7.85
740.	21.44	2620.	23.54	4500.	7.7
750.	21.48	2630.	23.5	4510.	7.56
760.	21.51	2640.	23.54	4520.	7.4
770.	21.56	2650.	23.59	4530.	6.51
780.	21.57	2660.	23.59	4540.	6.55
790.	21.6	2670.	23.58	4550.	6.41
800.	21.67	2680.	23.57	4560.	6.31
810.	21.67	2690.	23.56	4570.	6.17
820.	21.71	2700.	23.57	4580.	6.14
830.	21.74	2710.	23.57	4590.	6.03
840.	21.74	2720.	23.57	4600.	5.84
850.	21.78	2730.	23.54	4610.	5.82
860.	21.81	2740.	23.53	4620.	5.67
870.	21.85	2750.	23.52	4630.	5.56
880.	21.85	2760.	23.54	4640.	5.38
890.	21.88	2770.	23.52	4650.	5.36
900.	21.88	2780.	23.5	4660.	5.25
910.	21.92	2790.	23.49	4670.	5.15
920.	21.95	2800.	23.51	4680.	5.08
930.	21.99	2810.	23.52	4690.	5.05
940.	21.98	2820.	23.52	4700.	5.01
950.	22.02	2830.	23.52	4710.	4.92
960.	22.02	2840.	23.51	4720.	4.89
970.	22.04	2850.	23.5	4730.	4.78
980.	22.05	2860.	23.53	4740.	4.76
990.	22.08	2870.	23.5	4750.	4.7
1000.	22.11	2880.	23.52	4760.	4.8
1010.	22.11	2890.	23.52	4770.	4.63
1020.	22.19	2900.	23.47	4780.	4.57
1030.	22.18	2910.	23.47	4790.	4.5
1040.	22.18	2920.	23.5	4800.	4.45
1050.	22.25	2930.	23.5	4810.	4.41

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1060.	22.24	2940.	23.46	4820.	4.36
1070.	22.31	2950.	23.42	4830.	4.29
1080.	22.3	2960.	23.4	4840.	4.26
1090.	22.31	2970.	23.41	4850.	4.23
1100.	22.38	2980.	23.39	4860.	4.13
1110.	22.37	2990.	23.35	4870.	4.1
1120.	22.37	3000.	23.34	4880.	4.08
1130.	22.38	3010.	23.34	4890.	4.
1140.	22.34	3020.	23.28	4900.	3.97
1150.	22.41	3030.	23.29	4910.	3.95
1160.	22.38	3040.	23.31	4920.	3.88
1170.	22.41	3050.	23.3	4930.	3.84
1180.	22.48	3060.	23.51	4940.	3.85
1190.	22.44	3070.	23.56	4950.	3.81
1200.	22.48	3080.	23.51	4960.	3.75
1210.	22.52	3090.	23.49	4970.	3.65
1220.	22.52	3100.	23.5	4980.	3.62
1230.	22.55	3110.	23.52	4990.	3.66
1240.	22.59	3120.	23.49	5000.	3.63
1250.	22.63	3130.	23.48	5010.	3.61
1260.	22.63	3140.	23.46	5020.	3.53
1270.	22.62	3150.	23.52	5030.	3.5
1280.	22.62	3160.	23.52	5040.	3.5
1290.	22.66	3170.	23.5	5050.	3.44
1300.	22.65	3180.	23.5	5060.	3.4
1310.	22.69	3190.	23.48	5070.	3.37
1320.	22.68	3200.	23.5	5080.	3.37
1330.	22.7	3210.	23.45	5090.	3.3
1340.	22.69	3220.	23.49	5100.	3.27
1350.	22.7	3230.	23.48	5110.	3.28
1360.	22.75	3240.	23.47	5120.	3.22
1370.	22.77	3250.	23.47	5130.	3.15
1380.	22.73	3260.	23.47	5140.	3.15
1390.	22.71	3270.	23.43	5150.	3.08
1400.	22.82	3280.	23.45	5160.	3.12
1410.	22.78	3290.	23.51	5170.	3.05
1420.	22.82	3300.	23.54	5180.	3.05
1430.	22.85	3310.	23.57	5190.	3.02

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1440.	22.84	3320.	23.53	5200.	3.02
1450.	22.91	3330.	23.55	5210.	3.03
1460.	22.88	3340.	23.59	5220.	3.
1470.	22.9	3350.	23.56	5230.	2.96
1480.	22.93	3360.	23.54	5240.	2.96
1490.	22.93	3370.	23.55	5250.	2.9
1500.	22.92	3380.	23.54	5260.	2.9
1510.	22.91	3390.	23.58	5270.	2.9
1520.	22.94	3400.	23.55	5280.	2.86
1530.	22.97	3410.	23.56	5290.	2.86
1540.	23.	3420.	23.55	5300.	2.79
1550.	22.99	3430.	23.55	5310.	2.79
1560.	22.98	3440.	23.59	5320.	2.77
1570.	23.01	3450.	23.56	5330.	2.73
1580.	23.	3460.	23.54	5340.	2.73
1590.	23.	3470.	23.51	5350.	2.63
1600.	23.06	3480.	23.51	5360.	2.63
1610.	23.09	3490.	23.51	5370.	2.63
1620.	23.04	3500.	23.5	5380.	2.6
1630.	23.07	3510.	23.5	5390.	2.6
1640.	23.06	3520.	23.54	5400.	2.6
1650.	23.1	3530.	23.54	5410.	2.54
1660.	23.09	3540.	23.53	5420.	2.55
1670.	23.13	3550.	23.58	5430.	2.55
1680.	23.12	3560.	23.56	5440.	2.52
1690.	23.15	3570.	23.58	5450.	2.49
1700.	23.17	3580.	23.6	5460.	2.45
1710.	23.16	3590.	23.58	5470.	2.49
1720.	23.19	3600.	23.56	5480.	2.42
1730.	23.14	3610.	23.61	5490.	2.47
1740.	23.17	3620.	23.64	5500.	2.44
1750.	23.14	3630.	23.65	5510.	2.4
1760.	23.17	3640.	23.66	5520.	2.38
1770.	23.17	3650.	23.65	5530.	2.35
1780.	23.16	3660.	23.65	5540.	2.35
1790.	23.2	3670.	23.63	5550.	2.32
1800.	23.16	3680.	23.67	5560.	2.33
1810.	23.16	3690.	23.67	5570.	2.34

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1820.	23.16	3700.	23.64	5580.	2.31
1830.	23.16	3710.	23.68	5590.	2.27
1840.	23.19	3720.	23.67	5600.	2.24
1850.	23.19	3730.	23.68	5610.	2.25
1860.	23.19	3740.	23.7	5620.	2.21
1870.	23.22	3750.	23.67		

SOLUTION

Pumping Test
Aquifer Model: Fractured
Solution Method: Moench w/slab blocks

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0002544	ft/min
Ss	5.748E-11	ft^{-1}
K'	0.001	ft/min
Ss'	0.001	ft^{-1}
Sw	0.	
Sf	1.	
r(w)	0.5	ft
r(c)	0.5	ft

K = 0.0001292 cm/sec
T = K*b = 0.1272 ft^2/min (1.97 sq. cm/sec)

APPENDIX J

LABORATORY ANALYTICAL REPORTS

PHOENIX
Environmental Laboratories, Inc.

Friday, April 05, 2024

Attn: Mr Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Project ID: SHEFFIELD GARDENS
SDG ID: GCQ27317
Sample ID#s: CQ27317 - CQ27320

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Sample Id Cross Reference

April 05, 2024

SDG I.D.: GCQ27317

Project ID: SHEFFIELD GARDENS

Client Id	Lab Id	Matrix
WELL-2	CQ27317	DRINKING WATER
WELL-3	CQ27318	DRINKING WATER
TB03142024-504	CQ27319	DRINKING WATER
TB03142024-524	CQ27320	DRINKING WATER

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 05, 2024

FOR: Attn: Mr Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/14/24	8:40
Location Code:	STERLING	Received by:	SW	03/14/24	17:07
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ27317
Phoenix ID: CQ27317

Project ID: SHEFFIELD GARDENS
Client ID: WELL-2

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Antimony	< 0.0004	0.0004	2	mg/L		0.006		03/15/24	AL1	E200.8
Arsenic	< 0.0005	0.0005	2	mg/L		0.01		03/15/24	AL1	E200.8
Barium	0.050	0.001	1	mg/L		2		03/15/24	CPP	E200.7
Beryllium	< 0.0003	0.0003	1	mg/L		0.004		03/15/24	CPP	E200.7
Calcium	41.1	0.01	1	mg/L				03/15/24	CPP	E200.7
Cadmium	< 0.001	0.001	1	mg/L		0.005		03/15/24	CPP	E200.7
Chromium	< 0.001	0.001	1	mg/L		0.1		03/15/24	CPP	E200.7
Copper	< 0.002	0.002	1	mg/L	1.3		1	03/15/24	CPP	E200.7
Hardness (CaCO3), calc.	136	0.1	1	mg/L				03/17/24		SM2340B-11
Iron	0.110	0.010	1	mg/L		0.3	0.3	03/15/24	CPP	E200.7
Lead	< 0.0010	0.0010	1	mg/L	0.015			03/15/24	CPP	E200.5
Magnesium	8.19	0.01	1	mg/L				03/15/24	CPP	E200.7
Manganese	0.131	0.001	1	mg/L		0.3	0.05	03/15/24	CPP	E200.7
***** Manganese exceeds Secondary Goal of 0.05 *****										
Mercury	< 0.0002	0.0002	1	mg/L		0.002		03/15/24	ZT	E245.1
Nickel	< 0.001	0.001	1	mg/L				03/15/24	CPP	E200.7
Selenium	< 0.001	0.001	2	mg/L		0.05		03/15/24	AL1	E200.8
Silver	< 0.001	0.001	1	mg/L		0.1	0.1	03/15/24	CPP	E200.7
Sodium	21.9	0.2	1	mg/L				03/15/24	CPP	E200.7
Thallium	< 0.0003	0.0003	2	mg/L		0.002		03/15/24	AL1	E200.8
Uranium	< 0.0010	0.0010	2	mg/L		0.03		03/15/24	AL1	E200.8
Zinc	0.004	0.002	1	mg/L		5	5	03/15/24	CPP	E200.7
Escherichia Coli	Absent	0	1	/100 mls		0		03/14/24 18:45	MM/DN	SM9223B-04
Total Coliforms	Absent	0	1	/100 mls		0		03/14/24 18:45	MM/DN	SM9223B-04
Alkalinity-CaCO3	142	20.0	1	mg/L				03/15/24	MW/KDB	SM2320B-11
Chloride	< 5.0	5.0	1	mg/L		250	250	03/14/24	BS/GD	E300.0
Color, Apparent	< 1	1	1	Color Units			15	03/14/24 19:08	MW	SM2120B-11
Cyanide, Free	< 0.005	0.005	1	mg/L		0.2		03/21/24	GD	E335.4/SW9014

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-2

Phoenix I.D.: CQ27317

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Fluoride	0.18	0.10	1	mg/L		2.2	2	03/14/24	BS/GD	E300.0	
Langelier Index	0.056		1					03/18/24	HG	SM2330B	1
Nitrite as Nitrogen	< 0.004	0.004	1	mg/L		1		03/14/24 23:41	BS/GD	E300.0	
Nitrate as Nitrogen	0.02	0.01	1	mg/L		10		03/14/24 23:41	BS/GD	E300.0	
Odor at 60 Degrees C	1.3	1	1.3	T.O.N.			3	03/15/24 06:39	EG/AMM	SM2150B-97	
pH	8.11	1.00	1	pH Units			6.5-8.5	03/15/24 06:22	MW/KDB	SM4500-H B-11	1
Sulfate	21.0	5.0	1	mg/L		250	250	03/14/24	BS/GD	E300.0-2.1	
Total Cyanide (Drinking water)	< 0.005	0.005	1	mg/L		0.2		03/19/24	CL/GD	E335.4R1.0	
Tot. Diss. Solids	180	10	1	mg/L			500	03/18/24	AMM	SM2540C-15	
Turbidity	0.55	0.20	1	NTU			5	03/14/24 20:08	MW	SM2130B-11	
Extraction for 525.3	Completed							03/15/24	W/W	E525.3	
Extraction for Diquat	Completed							03/18/24	W/W	E549	
Mercury DW Digestion	Completed							03/15/24	AL/AL	E245.1	
Extraction of DW PCB	Completed							03/18/24	CV/CV	E508	
Extraction of DW Herbicides	Completed							03/19/24	D/D	E515	
Total Metal Digestion	Completed							03/14/24	BF	E200.5/E200.7	
Total Metal Digestion (MS)	Completed							03/14/24	BF	E200.8	
Gross Alpha Water	ND ±0.975	3.00		pci/L		15		03/28/24	*	E900.0	C
Gross Beta Water	ND ±0.834	4.00		pci/L				03/28/24	*	E900.0	C
PFAS (25)	Completed							03/23/24	***	EPA 533	C
Radium 226	ND ±0.050	1.00		pci/L		5		04/03/24	*	E903.0	C
Radium 228	ND ±0.510	1.00		pci/L		5		04/02/24	*	E904.0	C
Radon	44.0 ±14	18.00		pCi/l				03/15/24	*	7500 Rn B	C
Endothall											
Endothall	<5.0	5.0		ug/L		100		03/20/24	*	E548.1	C
Asbestos in Water											
Asbestos fibers (>0.5u and <10u)	<1.75	1.75		MFL				03/25/24	*	E100.1/100.2	C
Asbestos fibers (>10u)	<0.218	0.218		MFL				03/25/24	*	E100.1/100.2	C
PFAS (25)											
(11Cl-PF3OUdS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
(9Cl-PF3ONS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
(HFPO-DA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
1H,1H,2H,2H-Perfluorodecane (8:2FTS)	ND	1.85	1	ng/L				03/28/24	***	EPA 533	C
1H,1H,2H,2H-Perfluorohexane (4:2FTS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
1H,1H,2H,2H-Perfluorooctane (6:2FTS)	ND	1.85	1	ng/L				03/28/24	***	EPA 533	C
4,8-Dioxa-3h-Perfluorononanoic (ADONA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Nonafluoro-3,6-Dioxaheptanoic (NFDHA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoro(2-Ethoxyethane) (PFEESA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoro-3-Methoxypropanoic (PFMPA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorobutanesulfonic Acid (PFBS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorobutanoic Acid (PFBA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorodecanoic Acid (PFDA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorododecanoic Acid (PFDoA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.85	1	ng/L				03/28/24	***	EPA 533	C
Perfluoroheptanoic Acid (PFHpA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-2

Phoenix I.D.: CQ27317

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorohexanoic Acid (PFHxA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorononanoic Acid (PFNA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorooctanesulfonic Acid (PFOS)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorooctanoic Acid (PFOA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluoropentanesulfonic Acid (PFPeS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoropentanoic Acid (PFPeA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoroundecanoic Acid (PFUnA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
QA/QC Surrogates											
% M2-4:2 FTS	115		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M2-6:2 FTS	97.9		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M2-8:2 FTS	85.3		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M3HFPO-DA	95.8		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M3PFBS	83.5		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M3PFHxS	84.8		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M4PFHpA	97.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M5PFHxA	94.9		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M5PFPEA	101		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M6PFDA	78.7		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M7PFUDA	75.7		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M8PFOA	102		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M8PFOS	72.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M9PFNA	98.8		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% MPFBA	96.9		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% MPFDOA	64.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
EDB and DBCP Analysis											
1,2-Dibromo-3-Chloropropane (DBCP	ND	0.02	1	ug/L		0.2		03/18/24	CN	E504.1	
1,2-Dibromoethane (EDB)	ND	0.01	1	ug/L		0.02		03/18/24	CN	E504.1	
PCB Screen											
PCB-1016 (screen)	ND	0.076	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1221 (screen)	ND	0.095	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1232 (screen)	ND	0.095	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1242 (screen)	ND	0.095	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1248 (screen)	ND	0.095	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1254 (screen)	ND	0.095	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1260 (screen)	ND	0.095	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1262 (screen)	ND	0.095	1	ug/l				03/18/24	SC	E508	
PCB-1268 (screen)	ND	0.095	1	ug/l				03/18/24	SC	E508	
Total PCBs (screen)	ND	0.076	1	ug/l				03/18/24	SC	E508	
QA/QC Surrogates											
%DCBP (Surrogate Rec)	86		1	%	NA	NA	NA	03/18/24	SC	30 - 150 %	
%DCBP (Surrogate Rec) (Confirmation)	80		1	%	NA	NA	NA	03/18/24	SC	30 - 150 %	
Herbicides											
2,4,5-T	ND	0.50	1	ug/L				03/20/24	KCA	E515.3	1
2,4,5-TP	ND	0.20	1	ug/L		50		03/20/24	KCA	E515.3	
2,4-D	ND	0.10	1	ug/L		70		03/20/24	KCA	E515.3	
Dalapon	ND	1.0	1	ug/L		200		03/20/24	KCA	E515.3	

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-2

Phoenix I.D.: CQ27317

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Dicamba	ND	0.50	1	ug/L				03/20/24	KCA	E515.3	
Dichloroprop	ND	0.50	1	ug/L				03/20/24	KCA	E515.3	1
Dinoseb	ND	0.20	1	ug/L		7		03/20/24	KCA	E515.3	
Pentachlorophenol	ND	0.040	1	ug/L		1		03/20/24	KCA	E515.3	
Picloram	ND	0.10	1	ug/L		500		03/20/24	KCA	E515.3	
QA/QC Surrogates											
% DCAA	103		1	%	NA	NA	NA	03/20/24	KCA	70 - 130 %	
% DCAA (Confirmation)	91		1	%	NA	NA	NA	03/20/24	KCA	70 - 130 %	
Carbamates HPLC											
3-Hydroxycarbofuran	ND	0.50	1	ug/L				03/21/24	RM	E531.2	
Aldicarb	ND	0.50	1	ug/L		3		03/21/24	RM	E531.2	
Aldicarb Sulfone	ND	0.80	1	ug/L		2		03/21/24	RM	E531.2	
Aldicarb Sulfoxide	ND	0.50	1	ug/L		4		03/21/24	RM	E531.2	
Carbaryl	ND	0.50	1	ug/L				03/21/24	RM	E531.2	
Carbofuran	ND	0.90	1	ug/L		40		03/21/24	RM	E531.2	
Methomyl	ND	0.50	1	ug/L				03/21/24	RM	E531.2	
Oxamyl	ND	2.0	1	ug/L		200		03/21/24	RM	E531.2	
QA/QC Surrogates											
% BDMC	114		1	%	NA	NA	NA	03/21/24	RM	70 - 130 %	
Diquat											
Diquat	ND	0.40	1	ug/L		20		03/21/24	RM	E549.2	
Glyphosate	ND	5.0	1	ug/L		700		03/25/24	RM	E547	
Volatiles											
1,1,1,2-Tetrachloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,1-Trichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2,2-Tetrachloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2-Trichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2-Trichlorotrifluoroethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	1
1,1-Dichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1-Dichloropropene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,3-Trichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,3-Trichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,4-Trichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,4-Trimethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3,5-Trimethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,4-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
2,2-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
2-Chlorotoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
4-Chlorotoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Benzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	

Project ID: SHEFFIELD GARDENS
Client ID: WELL-2

Phoenix I.D.: CQ27317

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Bromochloromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromodichloromethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Bromoform	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Bromomethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Carbon tetrachloride	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chloroform	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Chloromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
cis-1,2-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
cis-1,3-Dichloropropene	ND	0.40	1	ug/L		5		03/18/24	HM	E524.2	
Dibromochloromethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Dibromomethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Dichlorodifluoromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Ethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Hexachlorobutadiene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Isopropylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
m&p-Xylene	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Methyl t-butyl ether (MTBE)	ND	0.50	1	ug/L		10		03/18/24	HM	E524.2	
Methylene chloride	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Naphthalene	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
n-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
n-Propylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
o-Xylene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
p-Isopropyltoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
sec-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Styrene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
tert-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Tetrachloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Toluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Total 1,3-Dichloropropene	ND	0.40	1	ug/L				03/18/24	HM	E524.2	1
Total Trihalomethanes	ND	0.50	1	ug/L		80		03/18/24	HM	E524.2	
Total Xylenes	ND	0.50	1	ug/L		10000		03/18/24	HM	E524.2	
trans-1,2-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
trans-1,3-Dichloropropene	ND	0.40	1	ug/L		5		03/18/24	HM	E524.2	
Trichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Trichlorofluoromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Vinyl chloride	ND	0.50	1	ug/L		2		03/18/24	HM	E524.2	
QA/QC Surrogates											
% 1,2-dichlorobenzene-d4	98		1	%	NA	NA	NA	03/18/24	HM	70 - 130 %	
% Bromofluorobenzene	98		1	%	NA	NA	NA	03/18/24	HM	70 - 130 %	
Volatile Library Search	Completed							03/20/24	HM		

Semivolatile Organic

Benzo(a)pyrene	ND	0.02	1	ug/L		0.2		03/21/24	MH	E525.3	
Bis(2-ethylhexyl)adipate	ND	0.57	1	ug/L		400		03/21/24	MH	E525.3	
Bis(2-ethylhexyl)phthalate	ND	0.57	1	ug/L		6		03/21/24	MH	E525.3	

Project ID: SHEFFIELD GARDENS
Client ID: WELL-2

Phoenix I.D.: CQ27317

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Organophosphorus Pesticides										
Alachlor	ND	0.05	1	ug/L		2		03/21/24	MH	E525.3
Atrazine	ND	0.05	1	ug/L		3		03/21/24	MH	E525.3
Butachlor	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Metolachlor	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Metribuzin	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Simazine	ND	0.05	1	ug/L		4		03/21/24	MH	E525.3
Pesticides										
Aldrin	ND	0.10	1	ug/L				03/21/24	MH	E525.3
Chlordane	ND	0.19	1	ug/L		2		03/21/24	MH	E525.3
Dieldrin	ND	0.03	1	ug/L				03/21/24	MH	E525.3
Endrin	ND	0.01	1	ug/L		2		03/21/24	MH	E525.3
Heptachlor	ND	0.04	1	ug/L		0.4		03/21/24	MH	E525.3
Heptachlor Epoxide	ND	0.02	1	ug/L		0.2		03/21/24	MH	E525.3
Hexachlorobenzene	ND	0.05	1	ug/L		1		03/21/24	MH	E525.3
Hexachlorocyclopentadiene	ND	0.05	1	ug/L		50		03/21/24	MH	E525.3
Lindane	ND	0.02	1	ug/L		0.2		03/21/24	MH	E525.3
Methoxychlor	ND	0.05	1	ug/L		40		03/21/24	MH	E525.3
Propachlor	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Toxaphene	ND	0.95	1	ug/L		3		03/20/24	MH	E525.3
QA/QC Surrogates										
% 1,3-Dimethyl-2-nitrobenzene	86		1	%	NA	NA	NA	03/21/24	MH	70 - 130 %
% benzo(a)pyrene-d12	72		1	%	NA	NA	NA	03/21/24	MH	70 - 130 %
% Triphenylphosphate	90		1	%	NA	NA	NA	03/21/24	MH	70 - 130 %
1,4-dioxane										
1,4-dioxane	ND	0.20	1	ug/l		1		03/20/24	AW	EPA522
QA/QC Surrogates										
% 1,4-dioxane-d8	86		1	%	NA	NA	NA	03/20/24	AW	70 - 130 %
Extraction for 1,4-Dioxane	Completed							03/19/24	G/G	EPA522

Parameter	Result	RL/PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal LOD=Limit of Detection
MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Maximum Contaminant Level (MCL) (Lower of): 40 CFR Part 141 MCLs; 40 CFR Part 141 MRDLs; New York State Public Health Law, Section 225 Part 5. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

Action Level (AL): (Lower of): 40 CFR Part 141.80 Lead & Copper ALs; New York State Public Health Law, Section 225 Part 5.

Secondary DW Maximum Contaminant Level Goal (MCLG): (Lower of): 40 CFR Part 141 Monitoring; 40 CFR Part 143 Secondary Goals. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are non-enforceable public health goals.

*See attached

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

TIC:
*The sample chromatogram contains a sulfur dioxide background.

Asbestos in Water (E100.1/100.2) was analyzed by NY certified lab #10851.
Endothall (E548.1) was analyzed by NY certified lab #11398.
Gross Alpha Water (E900.0), Gross Beta Water (E900.0), Radium 226 (E903.0), Radium 228 (E904.0) were analyzed by NY certified lab #11777.
Radon (7500 Rn B) was analyzed by NY certified lab #11706.
PFAS (25) (EPA 533), PFOA/PFOS - Water Extraction (EPA 533) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 05, 2024
Reviewed and Released by: Anil Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 05, 2024

FOR: Attn: Mr Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/14/24	8:35
Location Code:	STERLING	Received by:	SW	03/14/24	17:07
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ27317
Phoenix ID: CQ27318

Project ID: SHEFFIELD GARDENS
Client ID: WELL-3

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Antimony	< 0.0004	0.0004	2	mg/L		0.006		03/15/24	AL1	E200.8
Arsenic	< 0.0005	0.0005	2	mg/L		0.01		03/15/24	AL1	E200.8
Barium	0.019	0.001	1	mg/L		2		03/15/24	CPP	E200.7
Beryllium	< 0.0003	0.0003	1	mg/L		0.004		03/15/24	CPP	E200.7
Calcium	43.7	0.01	1	mg/L				03/15/24	CPP	E200.7
Cadmium	< 0.001	0.001	1	mg/L		0.005		03/15/24	CPP	E200.7
Chromium	< 0.001	0.001	1	mg/L		0.1		03/15/24	CPP	E200.7
Copper	0.007	0.002	1	mg/L	1.3		1	03/15/24	CPP	E200.7
Hardness (CaCO3), calc.	136	0.1	1	mg/L				03/17/24		SM2340B-11
Iron	0.157	0.010	1	mg/L		0.3	0.3	03/15/24	CPP	E200.7
Lead	< 0.0010	0.0010	1	mg/L	0.015			03/15/24	CPP	E200.5
Magnesium	6.43	0.01	1	mg/L				03/15/24	CPP	E200.7
Manganese	0.035	0.001	1	mg/L		0.3	0.05	03/15/24	CPP	E200.7
Mercury	< 0.0002	0.0002	1	mg/L		0.002		03/15/24	ZT	E245.1
Nickel	< 0.001	0.001	1	mg/L				03/15/24	CPP	E200.7
Selenium	< 0.001	0.001	2	mg/L		0.05		03/15/24	AL1	E200.8
Silver	< 0.001	0.001	1	mg/L		0.1	0.1	03/15/24	CPP	E200.7
Sodium	8.3	0.2	1	mg/L				03/15/24	CPP	E200.7
Thallium	< 0.0003	0.0003	2	mg/L		0.002		03/15/24	AL1	E200.8
Uranium	< 0.0010	0.0010	2	mg/L		0.03		03/15/24	AL1	E200.8
Zinc	0.011	0.002	1	mg/L		5	5	03/15/24	CPP	E200.7
Escherichia Coli	Absent	0	1	/100 mls		0		03/14/24 18:45	MM/DN	SM9223B-04
Total Coliforms	Present	0	1	/100 mls		0		03/14/24 18:45	MM/DN	SM9223B-04
***** Total Coliforms exceeds POTABILITY level of 0 *****										
Alkalinity-CaCO3	117	20.0	1	mg/L				03/15/24	MW/KDB	SM2320B-11
Chloride	< 5.0	5.0	1	mg/L		250	250	03/14/24	BS/GD	E300.0
Color, Apparent	3	1	1	Color Units			15	03/14/24 19:08	MW	SM2120B-11
Cyanide, Free	< 0.005	0.005	1	mg/L		0.2		03/21/24	GD	E335.4/SW9014

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-3

Phoenix I.D.: CQ27318

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Fluoride	< 0.10	0.10	1	mg/L		2.2	2	03/14/24	BS/GD	E300.0	
Langelier Index	-0.171		1					03/18/24	HG	SM2330B	1
Nitrite as Nitrogen	< 0.004	0.004	1	mg/L		1		03/14/24 23:49	BS/GD	E300.0	
Nitrate as Nitrogen	0.03	0.01	1	mg/L		10		03/14/24 23:49	BS/GD	E300.0	
Odor at 60 Degrees C	< 1	1	1	T.O.N.			3	03/15/24 06:39	EG/AMM	SM2150B-97	
pH	7.93	1.00	1	pH Units			6.5-8.5	03/15/24 06:27	MW/KDB	SM4500-H B-11	1
Sulfate	18.2	5.0	1	mg/L		250	250	03/14/24	BS/GD	E300.0-2.1	
Total Cyanide (Drinking water)	< 0.005	0.005	1	mg/L		0.2		03/20/24	CL/GD	E335.4R1.0	
Tot. Diss. Solids	170	10	1	mg/L			500	03/18/24	AMM	SM2540C-15	
Turbidity	3.4	0.20	1	NTU			5	03/14/24 20:08	MW	SM2130B-11	
Extraction for 525.3	Completed							03/15/24	W/W	E525.3	
Extraction for Diquat	Completed							03/18/24	W/W	E549	
Mercury DW Digestion	Completed							03/15/24	AL/AL	E245.1	
Extraction of DW PCB	Completed							03/18/24	CV/CV	E508	
Extraction of DW Herbicides	Completed							03/19/24	D/D	E515	
Total Metal Digestion	Completed							03/14/24	BF	E200.5/E200.7	
Total Metal Digestion (MS)	Completed							03/14/24	BF	E200.8	
Gross Alpha Water	ND ±1.12	3.00		pci/L		15		03/21/24	*	E900.0	C
Gross Beta Water	ND ±0.670	4.00		pci/L				03/21/24	*	E900.0	C
PFAS (25)	Completed							03/23/24	***	EPA 533	C
Radium 226	ND ±0.050	1.00		pci/L		5		04/03/24	*	E903.0	C
Radium 228	ND ±0.400	1.00		pci/L		5		04/02/24	*	E904.0	C
Radon	192 ±19	18.00		pCi/l				03/15/24	*	7500 Rn B	C
Endothall											
Endothall	<5.0	5.0		ug/L		100		03/20/24	*	E548.1	C
Asbestos in Water											
Asbestos fibers (>0.5u and <10u)	<1.75	1.75		MFL				03/26/24	PL	E100.1/100.2	C
Asbestos fibers (>10u)	<0.218	0.218		MFL				03/26/24	PL	E100.1/100.2	C
PFAS (25)											
(11Cl-PF3OUdS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
(9Cl-PF3ONS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
(HFPO-DA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
1H,1H,2H,2H-Perfluorodecane (8:2FTS)	ND	1.85	1	ng/L				03/28/24	***	EPA 533	C
1H,1H,2H,2H-Perfluorohexane (4:2FTS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
1H,1H,2H,2H-Perfluorooctane (6:2FTS)	ND	1.85	1	ng/L				03/28/24	***	EPA 533	C
4,8-Dioxa-3h-Perfluorononanoic (ADONA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Nonafluoro-3,6-Dioxaheptanoic (NFDHA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoro(2-Ethoxyethane) (PFEESA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoro-3-Methoxypropanoic (PFMPA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorobutanesulfonic Acid (PFBS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorobutanoic Acid (PFBA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorodecanoic Acid (PFDA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorododecanoic Acid (PFDoA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.85	1	ng/L				03/28/24	***	EPA 533	C
Perfluoroheptanoic Acid (PFHpA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-3

Phoenix I.D.: CQ27318

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorohexanoic Acid (PFHxA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluorononanoic Acid (PFNA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorooctanesulfonic Acid (PFOS)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluorooctanoic Acid (PFOA)	ND	0.926	1	ng/L		10		03/28/24	***	EPA 533	C
Perfluoropentanesulfonic Acid (PFPeS)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoropentanoic Acid (PFPeA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
Perfluoroundecanoic Acid (PFUnA)	ND	0.926	1	ng/L				03/28/24	***	EPA 533	C
QA/QC Surrogates											
% M2-4:2 FTS	94.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M2-6:2 FTS	97.3		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M2-8:2 FTS	94.3		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M3HFPO-DA	78.1		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M3PFBS	87.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M3PFHxS	80.5		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M4PFHpA	92.8		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M5PFHxA	87.2		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M5PFPEA	94.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M6PFDA	84.7		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M7PFUDA	83.1		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M8PFOA	85.0		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M8PFOS	89.2		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% M9PFNA	93.4		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% MPFBA	89.6		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
% MPFDOA	79.3		1	%	NA	NA	NA	03/28/24	***	50 - 200 %	C
EDB and DBCP Analysis											
1,2-Dibromo-3-Chloropropane (DBCP	ND	0.02	1	ug/L		0.2		03/18/24	CN	E504.1	
1,2-Dibromoethane (EDB)	ND	0.01	1	ug/L		0.02		03/18/24	CN	E504.1	
PCB Screen											
PCB-1016 (screen)	ND	0.075	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1221 (screen)	ND	0.094	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1232 (screen)	ND	0.094	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1242 (screen)	ND	0.094	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1248 (screen)	ND	0.094	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1254 (screen)	ND	0.094	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1260 (screen)	ND	0.094	1	ug/l		0.5		03/18/24	SC	E508	
PCB-1262 (screen)	ND	0.094	1	ug/l				03/18/24	SC	E508	
PCB-1268 (screen)	ND	0.094	1	ug/l				03/18/24	SC	E508	
Total PCBs (screen)	ND	0.075	1	ug/l				03/18/24	SC	E508	
QA/QC Surrogates											
%DCBP (Surrogate Rec)	78		1	%	NA	NA	NA	03/18/24	SC	30 - 150 %	
%DCBP (Surrogate Rec) (Confirmation)	76		1	%	NA	NA	NA	03/18/24	SC	30 - 150 %	
Herbicides											
2,4,5-T	ND	0.50	1	ug/L				03/20/24	KCA	E515.3	1
2,4,5-TP	ND	0.20	1	ug/L		50		03/20/24	KCA	E515.3	
2,4-D	ND	0.10	1	ug/L		70		03/20/24	KCA	E515.3	
Dalapon	ND	1.0	1	ug/L		200		03/20/24	KCA	E515.3	

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-3

Phoenix I.D.: CQ27318

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Dicamba	ND	0.50	1	ug/L				03/20/24	KCA	E515.3	
Dichloroprop	ND	0.50	1	ug/L				03/20/24	KCA	E515.3	1
Dinoseb	ND	0.20	1	ug/L		7		03/20/24	KCA	E515.3	
Pentachlorophenol	ND	0.040	1	ug/L		1		03/20/24	KCA	E515.3	
Picloram	ND	0.10	1	ug/L		500		03/20/24	KCA	E515.3	
QA/QC Surrogates											
% DCAA	95		1	%	NA	NA	NA	03/20/24	KCA	70 - 130 %	
% DCAA (Confirmation)	85		1	%	NA	NA	NA	03/20/24	KCA	70 - 130 %	
Carbamates HPLC											
3-Hydroxycarbofuran	ND	0.50	1	ug/L				03/21/24	RM	E531.2	
Aldicarb	ND	0.50	1	ug/L		3		03/21/24	RM	E531.2	
Aldicarb Sulfone	ND	0.80	1	ug/L		2		03/21/24	RM	E531.2	
Aldicarb Sulfoxide	ND	0.50	1	ug/L		4		03/21/24	RM	E531.2	
Carbaryl	ND	0.50	1	ug/L				03/21/24	RM	E531.2	
Carbofuran	ND	0.90	1	ug/L		40		03/21/24	RM	E531.2	
Methomyl	ND	0.50	1	ug/L				03/21/24	RM	E531.2	
Oxamyl	ND	2.0	1	ug/L		200		03/21/24	RM	E531.2	
QA/QC Surrogates											
% BDMC	124		1	%	NA	NA	NA	03/21/24	RM	70 - 130 %	
Diquat											
Diquat	ND	0.40	1	ug/L		20		03/21/24	RM	E549.2	
Glyphosate	ND	5.0	1	ug/L		700		03/25/24	RM	E547	
Volatiles											
1,1,1,2-Tetrachloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,1-Trichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2,2-Tetrachloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2-Trichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2-Trichlorotrifluoroethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	1
1,1-Dichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1-Dichloropropene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,3-Trichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,3-Trichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,4-Trichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,4-Trimethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3,5-Trimethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,4-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
2,2-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
2-Chlorotoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
4-Chlorotoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Benzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	

Project ID: SHEFFIELD GARDENS
Client ID: WELL-3

Phoenix I.D.: CQ27318

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Bromochloromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromodichloromethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Bromoform	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Bromomethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Carbon tetrachloride	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chloroform	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Chloromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
cis-1,2-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
cis-1,3-Dichloropropene	ND	0.40	1	ug/L		5		03/18/24	HM	E524.2	
Dibromochloromethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Dibromomethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Dichlorodifluoromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Ethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Hexachlorobutadiene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Isopropylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
m&p-Xylene	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Methyl t-butyl ether (MTBE)	ND	0.50	1	ug/L		10		03/18/24	HM	E524.2	
Methylene chloride	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Naphthalene	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
n-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
n-Propylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
o-Xylene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
p-Isopropyltoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
sec-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Styrene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
tert-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Tetrachloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Toluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Total 1,3-Dichloropropene	ND	0.40	1	ug/L				03/18/24	HM	E524.2	1
Total Trihalomethanes	ND	0.50	1	ug/L		80		03/18/24	HM	E524.2	
Total Xylenes	ND	0.50	1	ug/L		10000		03/18/24	HM	E524.2	
trans-1,2-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
trans-1,3-Dichloropropene	ND	0.40	1	ug/L		5		03/18/24	HM	E524.2	
Trichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Trichlorofluoromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Vinyl chloride	ND	0.50	1	ug/L		2		03/18/24	HM	E524.2	
QA/QC Surrogates											
% 1,2-dichlorobenzene-d4	99		1	%	NA	NA	NA	03/18/24	HM	70 - 130 %	
% Bromofluorobenzene	97		1	%	NA	NA	NA	03/18/24	HM	70 - 130 %	
Volatile Library Search	Completed							03/20/24	HM		

Semivolatile Organic

Benzo(a)pyrene	ND	0.02	1	ug/L		0.2		03/21/24	MH	E525.3	
Bis(2-ethylhexyl)adipate	ND	0.57	1	ug/L		400		03/21/24	MH	E525.3	
Bis(2-ethylhexyl)phthalate	ND	0.57	1	ug/L		6		03/21/24	MH	E525.3	

Project ID: SHEFFIELD GARDENS
Client ID: WELL-3

Phoenix I.D.: CQ27318

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Organophosphorus Pesticides										
Alachlor	ND	0.05	1	ug/L		2		03/21/24	MH	E525.3
Atrazine	ND	0.05	1	ug/L		3		03/21/24	MH	E525.3
Butachlor	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Metolachlor	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Metribuzin	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Simazine	ND	0.05	1	ug/L		4		03/21/24	MH	E525.3
Pesticides										
Aldrin	ND	0.10	1	ug/L				03/21/24	MH	E525.3
Chlordane	ND	0.19	1	ug/L		2		03/21/24	MH	E525.3
Dieldrin	ND	0.03	1	ug/L				03/21/24	MH	E525.3
Endrin	ND	0.01	1	ug/L		2		03/21/24	MH	E525.3
Heptachlor	ND	0.04	1	ug/L		0.4		03/21/24	MH	E525.3
Heptachlor Epoxide	ND	0.02	1	ug/L		0.2		03/21/24	MH	E525.3
Hexachlorobenzene	ND	0.05	1	ug/L		1		03/21/24	MH	E525.3
Hexachlorocyclopentadiene	ND	0.05	1	ug/L		50		03/21/24	MH	E525.3
Lindane	ND	0.02	1	ug/L		0.2		03/21/24	MH	E525.3
Methoxychlor	ND	0.05	1	ug/L		40		03/21/24	MH	E525.3
Propachlor	ND	0.05	1	ug/L				03/21/24	MH	E525.3
Toxaphene	ND	0.95	1	ug/L		3		03/21/24	MH	E525.3
QA/QC Surrogates										
% 1,3-Dimethyl-2-nitrobenzene	80		1	%	NA	NA	NA	03/21/24	MH	70 - 130 %
% benzo(a)pyrene-d12	76		1	%	NA	NA	NA	03/21/24	MH	70 - 130 %
% Triphenylphosphate	82		1	%	NA	NA	NA	03/21/24	MH	70 - 130 %
1,4-dioxane										
1,4-dioxane	ND	0.20	1	ug/l		1		03/20/24	AW	EPA522
QA/QC Surrogates										
% 1,4-dioxane-d8	82		1	%	NA	NA	NA	03/20/24	AW	70 - 130 %
Extraction for 1,4-Dioxane	Completed							03/19/24	G/G	EPA522

Parameter	Result	RL/PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal LOD=Limit of Detection
MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Maximum Contaminant Level (MCL) (Lower of): 40 CFR Part 141 MCLs; 40 CFR Part 141 MRDLs; New York State Public Health Law, Section 225 Part 5. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

Action Level (AL): (Lower of): 40 CFR Part 141.80 Lead & Copper ALs; New York State Public Health Law, Section 225 Part 5.

Secondary DW Maximum Contaminant Level Goal (MCLG): (Lower of): 40 CFR Part 141 Monitoring; 40 CFR Part 143 Secondary Goals. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are non-enforceable public health goals.

*See attached

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Asbestos in Water (E100.1/100.2) was analyzed by NY certified lab #10851.
Endothall (E548.1) was analyzed by NY certified lab #11398.
Gross Alpha Water (E900.0), Gross Beta Water (E900.0), Radium 226 (E903.0), Radium 228 (E904.0) were analyzed by NY certified lab #11777.
Radon (7500 Rn B) was analyzed by NY certified lab #11706.
PFAS (25) (EPA 533), PFOA/PFOS - Water Extraction (EPA 533) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 05, 2024
Reviewed and Released by: Anil Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 05, 2024

FOR: Attn: Mr Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/14/24	
Location Code:	STERLING	Received by:	SW	03/14/24	17:07
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ27317
Phoenix ID: CQ27319

Project ID: SHEFFIELD GARDENS
Client ID: TB03142024-504

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
EDB and DBCP Analysis										
1,2-Dibromo-3-Chloropropane (DBCP	ND	0.02	1	ug/L		0.2		03/18/24	CN	E504.1
1,2-Dibromoethane (EDB)	ND	0.01	1	ug/L		0.02		03/18/24	CN	E504.1

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal

Comments:

Maximum Contaminant Level (MCL): 40 CFR Part 141 MCLs. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

TRIP BLANK INCLUDED.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 05, 2024
Reviewed and Released by: Anil Makol, Project Manager

Environmental Laboratories, Inc.
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Analysis Report

April 05, 2024

FOR: Attn: Mr Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/14/24	
Location Code:	STERLING	Received by:	SW	03/14/24	17:07
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ27317
Phoenix ID: CQ27320

Project ID: SHEFFIELD GARDENS
Client ID: TB03142024-524

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Volatiles											
1,1,1,2-Tetrachloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,1-Trichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2,2-Tetrachloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2-Trichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1,2-Trichlorotrifluoroethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	1
1,1-Dichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,1-Dichloropropene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,3-Trichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,3-Trichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,4-Trichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2,4-Trimethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,2-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3,5-Trimethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,3-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
1,4-Dichlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
2,2-Dichloropropane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
2-Chlorotoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
4-Chlorotoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Benzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromochloromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Bromodichloromethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	

Project ID: SHEFFIELD GARDENS
Client ID: TB03142024-524

Phoenix I.D.: CQ27320

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Bromoform	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Bromomethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Carbon tetrachloride	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chlorobenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chloroethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Chloroform	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Chloromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
cis-1,2-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
cis-1,3-Dichloropropene	ND	0.40	1	ug/L		5		03/18/24	HM	E524.2	
Dibromochloromethane	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Dibromomethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Dichlorodifluoromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Ethylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Hexachlorobutadiene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Isopropylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
m&p-Xylene	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
Methyl t-butyl ether (MTBE)	ND	0.50	1	ug/L		10		03/18/24	HM	E524.2	
Methylene chloride	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Naphthalene	ND	0.50	1	ug/L				03/18/24	HM	E524.2	
n-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
n-Propylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
o-Xylene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
p-Isopropyltoluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
sec-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Styrene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
tert-Butylbenzene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Tetrachloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Toluene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Total 1,3-Dichloropropene	ND	0.40	1	ug/L				03/18/24	HM	E524.2	1
Total Trihalomethanes	ND	0.50	1	ug/L		80		03/18/24	HM	E524.2	
Total Xylenes	ND	0.50	1	ug/L		10000		03/18/24	HM	E524.2	
trans-1,2-Dichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
trans-1,3-Dichloropropene	ND	0.40	1	ug/L		5		03/18/24	HM	E524.2	
Trichloroethene	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Trichlorofluoromethane	ND	0.50	1	ug/L		5		03/18/24	HM	E524.2	
Vinyl chloride	ND	0.50	1	ug/L		2		03/18/24	HM	E524.2	
QA/QC Surrogates											
% 1,2-dichlorobenzene-d4	94		1	%	NA	NA	NA	03/18/24	HM	70 - 130 %	
% Bromofluorobenzene	97		1	%	NA	NA	NA	03/18/24	HM	70 - 130 %	
Volatile Library Search	Completed							03/19/24	HM		

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Maximum Contaminant Level (MCL) (Lower of): 40 CFR Part 141 MCLs; New York State Public Health Law, Section 225 Part 5. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

TRIP BLANK INCLUDED.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 05, 2024
Reviewed and Released by: Anil Makol, Project Manager

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: WELL-2

Lab Name: Phoenix Environmental Labs Client: STERLING

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCQ2731

Matrix:(soil/water) DRINKING WATER Lab Sample ID: CQ27317

Sample wt/vol: 5 (g/mL) mL Lab File ID: 0318_11.D

Level: (low/med) Date Received: 03/14/24

% Moisture: not dec. 100 Date Analyzed: 03/18/24

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	TIC:			
	*The sample chromatogram contains a sulfur dioxide background.			

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.
N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified
Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: WELL-3

Lab Name: Phoenix Environmental Labs Client: STERLING

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCQ2731

Matrix:(soil/water) DRINKING WATER Lab Sample ID: CQ27318

Sample wt/vol: 5 (g/mL) mL Lab File ID: 0318_12.D

Level: (low/med) Date Received: 03/14/24

% Moisture: not dec. 100 Date Analyzed: 03/18/24

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: TB03142024-524

Lab Name: Phoenix Environmental Labs Client: STERLING

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCQ2731

Matrix:(soil/water) DRINKING WATER Lab Sample ID: CQ27320

Sample wt/vol: 5 (g/mL) mL Lab File ID: 0318_08.D

Level: (low/med) Date Received: 03/14/24

% Moisture: not dec. 100 Date Analyzed: 03/18/24

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 05, 2024

QA/QC Data

SDG I.D.: GCQ27317

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 722364 (mg/L), QC Sample No: CQ27325 (CQ27317, CQ27318)													
Mercury	BRL	0.0002	<0.0002	<0.0002	NC	104			105			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 722329A (mg/L), QC Sample No: CQ27238 (CQ27317, CQ27318)													
ICP Metals - Aqueous													
Barium	BRL	0.0010				108			109			85 - 115	20
Beryllium	BRL	0.00030				102			99.7			85 - 115	20
Cadmium	BRL	0.0005				103			102			85 - 115	20
Calcium	BRL	0.010				106			NC			85 - 115	20
Chromium	BRL	0.0005				101			101			85 - 115	20
Copper	BRL	0.0020				99.6			103			85 - 115	20
Iron	BRL	0.010				104			105			85 - 115	20
Lead	BRL	0.0010				104			105			85 - 115	20
Magnesium	BRL	0.010				112			NC			85 - 115	20
Manganese	BRL	0.0010				102			103			85 - 115	20
Nickel	BRL	0.0010				103			103			85 - 115	20
Silver	BRL	0.0010				99.0			101			85 - 115	20
Sodium	BRL	0.20				101			NC			85 - 115	20
Zinc	BRL	0.0020				102			103			85 - 115	20
Comment:													
This batch does not include a duplicate.													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 722327 (mg/L), QC Sample No: CQ26536 2X (CQ27317, CQ27318)													
ICP MS Metals - Aqueous													
Antimony	BRL	0.0004	<0.0004	<0.0004	NC	97.6			100			85 - 115	20
Arsenic	BRL	0.0005	0.0194	0.0185	4.70	103			104			85 - 115	20
Selenium	BRL	0.001	<0.001	<0.001	NC	109			92.6			85 - 115	20
Thallium	BRL	0.0003	<0.0003	<0.0003	NC	98.4			89.0			85 - 115	20
Uranium	BRL	0.0010	<0.0010	<0.0010	NC	104			104			85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 70-130%.													

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

April 05, 2024

QA/QC Data

SDG I.D.: GCQ27317

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 723331 (mg/L), QC Sample No: CQ27317 (CQ27317, CQ27318)														
Free Cyanide	BRL	0.01	<0.005	<0.01	NC	99.2			113			90 - 110	20	m
Comment:														
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils														
QA/QC Batch 722485A (mg/L), QC Sample No: CQ27317 (CQ27317)														
Total Cyanide (Drinking water)	BRL	0.005				103			102			90 - 110	20	
Weak & Dissociable Cyanide	BRL	0.005				103			102			90 - 110	20	
Comment:														
This batch does not include a duplicate.														
QA/QC Batch 722896 (mg/L), QC Sample No: CQ27318 (CQ27318)														
Total Cyanide (Drinking water)	BRL	0.005	<0.005	<0.005	NC	103			103			90 - 110	20	
Weak & Dissociable Cyanide	BRL	0.005	<0.005	<0.005	NC	103			103			90 - 110	20	
QA/QC Batch 722330 (NTU), QC Sample No: CQ26623 (CQ27317, CQ27318)														
Turbidity	BRL	0.20	2.8	2.9	3.50	104						85 - 115	20	
QA/QC Batch 722383 (mg/L), QC Sample No: CQ26678 (CQ27317, CQ27318)														
Alkalinity-CaCO3	BRL	5.00	67	67	NC	95.3						85 - 115	20	
QA/QC Batch 722380 (pH), QC Sample No: CQ26678 (CQ27317, CQ27318)														
pH			7.23	7.17	0.80	96.8						85 - 115	20	
QA/QC Batch 722640 (mg/L), QC Sample No: CQ27144 (CQ27317, CQ27318)														
Tot. Diss. Solids	BRL	10	200	210	4.90	93.0						85 - 115	20	
QA/QC Batch 722445 (mg/L), QC Sample No: CQ26662 (CQ27317, CQ27318)														
Chloride	BRL	5.0	9.9	9.7	NC	95.9			97.0			90 - 110	20	
Fluoride	BRL	0.10	<0.10	<0.10	NC	102			89.6			90 - 110	20	
Nitrate as Nitrogen	BRL	0.05	3.54	3.57	0.80	104			92.8			90 - 110	20	
Nitrite as Nitrogen	BRL	0.004	<0.004	<0.004	NC	105			90.4			90 - 110	20	
Sulfate	BRL	5.0	5.3	5.1	NC	95.4			92.7			90 - 110	20	

m = This parameter is outside laboratory MS/MSD specified recovery limits.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

April 05, 2024

QA/QC Data

SDG I.D.: GCQ27317

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 724414 (ng/L), QC Sample No: CQ27318 (CQ27317, CQ27318)											
PFOA & PFOS											
11Cl-PF3OUdS	ND	1.00	120	94.4		15.7			70 - 130		m
4:2FTS	ND	1.00	126	110		20.8			70 - 130		m
6:2FTS	ND	2.00	115	89.1		20.6			70 - 130		m
8:2FTS	ND	2.00	137	105		19.0			70 - 130		l,m
9Cl-PF3ONS	ND	1.00	121	96.8		19.9			70 - 130		m
ADONA	ND	1.00	110	82.6		19.8			70 - 130		m
HFPO-DA	ND	1.00	99.0	114		27.4			70 - 130		m
NFDHA	ND	1.00	114	90.8		13.8			70 - 130		m
PFBA	ND	1.00	125	100		21.8			70 - 130		m
PFBS	ND	1.00	136	105		22.0			70 - 130		l,m
PFDA	ND	1.00	135	113		24.9			70 - 130		l,m
PFDoA	ND	1.00	122	97.0		20.0			70 - 130		m
PFEESA	ND	1.00	124	97.2		20.7			70 - 130		m
PFHpA	ND	1.00	119	92.0		21.4			70 - 130		m
PFHpS	ND	2.00	132	105		21.6			70 - 130		l,m
PFHxA	ND	1.00	120	93.8		19.4			70 - 130		m
PFHxS	ND	1.00	129	109		22.0			70 - 130		m
PFMBA	ND	1.00	135	109		22.5			70 - 130		l,m
PFMPA	ND	1.00	127	102		21.8			70 - 130		m
PFNA	ND	1.00	130	105		19.0			70 - 130		m
PFOA	ND	1.00	126	95.7		22.1			70 - 130		m
PFOS	ND	1.00	140	112		25.2			70 - 130		l,m
PFPeA	ND	1.00	121	96.5		20.6			70 - 130		m
PFPeS	ND	1.00	123	94.3		19.5			70 - 130		m
PFUnA	ND	1.00	124	95.1		20.6			70 - 130		m
% M2-4:2 FTS	75.0		99.4	94.0		110			50 - 200		
% M2-6:2 FTS	80.0		95.4	99.0		103			50 - 200		
% M2-8:2 FTS	76.7		84.5	88.6		98.9			50 - 200		
% M3HFPO-DA	63.8		94.0	68.7		80.0			50 - 200		
% M3PFBS	65.5		76.4	78.6		93.2			50 - 200		
% M3PFHxS	67.1		80.1	78.7		91.9			50 - 200		
% M4PFHpA	71.0		86.8	93.0		90.0			50 - 200		
% M5PFHxA	64.6		78.5	76.6		86.8			50 - 200		
% M5PFPEA	75.6		88.1	90.8		100			50 - 200		
% M6PFDA	71.9		79.0	86.5		94.6			50 - 200		
% M7PFUDA	76.2		85.3	92.5		89.1			50 - 200		
% M8PFOA	69.4		82.0	85.6		92.0			50 - 200		
% M8PFOS	67.2		76.0	80.3		88.3			50 - 200		
% M9PFNA	75.6		83.7	80.8		95.5			50 - 200		
% MPFBA	70.3		79.6	83.1		93.4			50 - 200		
% MPFDOA	72.7		86.6	89.7		78.8			50 - 200		

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Comment:										
LCS/LCSD are spiked per method at different levels, no RPD is provided.										
QA/QC Batch 722591 (ug/L), QC Sample No: CQ26780 (CQ27317, CQ27318, CQ27319)										
EDB and DBCP Analysis - Drinking Water										
1,2-Dibromo-3-Chloropropane (DB	ND	0.02	92	97	5.3	93			70 - 130	20
1,2-Dibromoethane (EDB)	ND	0.01	111	109	1.8	95			70 - 130	20
Comment:										
This batch consists of a Blank, LCS, LCSD and MS.										
QA/QC Batch 722799 (ug/L), QC Sample No: CQ26668 (CQ27317, CQ27318)										
Herbicides - Drinking Water										
2,4,5-T	ND	0.50	88			88			70 - 130	20
2,4,5-TP	ND	0.20	92			90			70 - 130	20
2,4-D	ND	0.10	94			94			70 - 130	20
Dalapon	ND	1.0	98			97			70 - 130	20
Dicamba	ND	0.50	94			91			70 - 130	20
Dichloroprop	ND	0.50	94			97			70 - 130	20
Dinoseb	ND	0.20	95			95			70 - 130	20
Pentachlorophenol	ND	0.040	85			86			70 - 130	20
Picloram	ND	0.10	91			89			70 - 130	20
% DCAA	92	%	98			99			70 - 130	20
% DCAA (Confirmation)	84	%	86			88			70 - 130	20
QA/QC Batch 722815 (ug/l), QC Sample No: CQ27317 (CQ27317, CQ27318)										
1,4dioxane - Drinking Water										
1,4-dioxane	ND	0.20	93	87	6.7	91			70 - 130	20
% 1,4-dioxane-d8	86	%	87	87	0.0	87			70 - 130	20
QA/QC Batch 722360 (ug/L), QC Sample No: CQ26666 (CQ27317, CQ27318)										
Semivolatile Organic Compounds - Drinking Water										
Alachlor	ND	0.05	94			98	95	3.1	70 - 130	20
Aldrin	ND	0.10	80			78	79	1.3	70 - 130	20
Atrazine	ND	0.05	89			90	90	0.0	70 - 130	20
Benzo(a)pyrene	ND	0.02	79			82	78	5.0	70 - 130	20
Bis(2-ethylhexyl)adipate	ND	0.60	82			82	79	3.7	70 - 130	20
Bis(2-ethylhexyl)phthalate	ND	0.60	81			82	77	6.3	70 - 130	20
Butachlor	ND	0.05	91			93	93	0.0	70 - 130	20
Chlordane	ND	0.03	81			83	81	2.4	70 - 130	20
Dieldrin	ND	0.03	93			94	92	2.2	70 - 130	20
Endrin	ND	0.01	86			87	86	1.2	70 - 130	20
Heptachlor	ND	0.04	87			88	87	1.1	70 - 130	20
Heptachlor Epoxide	ND	0.02	85			89	88	1.1	70 - 130	20
Hexachlorobenzene	ND	0.05	80			80	78	2.5	60 - 130	20
Hexachlorocyclopentadiene	ND	0.05	85			86	84	2.4	60 - 130	20
Lindane	ND	0.02	88			89	88	1.1	70 - 130	20
Methoxychlor	ND	0.05	98			98	98	0.0	70 - 130	20
Metolachlor	ND	0.05	90			91	90	1.1	70 - 130	20
Metribuzin	ND	0.05	92			96	95	1.0	70 - 130	20
Propachlor	ND	0.05	92			93	93	0.0	70 - 130	20
Simazine	ND	0.05	89			91	91	0.0	70 - 130	20
Toxaphene	ND	1.0	103			116	99	15.8	70 - 130	20
% 1,3-Dimethyl-2-nitrobenzene	83	%	73			81	79	2.5	70 - 130	20
% benzo(a)pyrene-d12	87	%	70			78	75	3.9	70 - 130	20

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Triphenylphosphate	98	%		84			89	88	1.1	70 - 130	20

Comment:

Because insufficient sample volume was received, tap water, collected and dechlorinated in sample containers, was used as the MS and MSD.
g-chlordane recovery is reported as chlordane in the LCS

QA/QC Batch 723464 (ug/L), QC Sample No: CQ30533 (CQ27317, CQ27318)

Carbamates HPLC - Drinking Water

3-Hydroxycarbofuran	ND	0.50		109	100	8.6	95	106	10.9	70 - 130	20
Aldicarb	ND	0.50		102	104	1.9	107	125	15.5	70 - 130	20
Aldicarb Sulfone	ND	0.80		109	106	2.8	107	111	3.7	70 - 130	20
Aldicarb Sulfoxide	ND	0.50		115	111	3.5	109	127	15.3	70 - 130	20
Carbaryl	ND	0.50		113	100	12.2	105	119	12.5	70 - 130	20
Carbofuran	ND	0.90		90	104	14.4	98	106	7.8	70 - 130	20
Methomyl	ND	0.50		106	106	0.0	112	115	2.6	70 - 130	20
Oxamyl	ND	2.0		118	114	3.4	116	126	8.3	70 - 130	20
% BDMC	123	%		125	129	3.1	121	122	0.8	70 - 130	20

QA/QC Batch 723932 (ug/L), QC Sample No: CQ33553 (CQ27317, CQ27318)

Glyphosate - Drinking Water

Glyphosate	ND	5.0		103	102	1.0	92	89	3.3	70 - 130	20

QA/QC Batch 722592 (ug/L), QC Sample No: CQ26173 (CQ27317, CQ27318)

Diquat - Drinking Water

Diquat	ND	0.40		71	76	6.8	98	73	29.2	70 - 130	30

QA/QC Batch 722617 (ug/l), QC Sample No: CQ26173 (CQ27317, CQ27318)

PCB Screen - Drinking Water

PCB-1016 (screen)	ND	0.080		103			68			40 - 140	20
PCB-1221 (screen)	ND	0.10								40 - 140	20
PCB-1232 (screen)	ND	0.10								40 - 140	20
PCB-1242 (screen)	ND	0.10								40 - 140	20
PCB-1248 (screen)	ND	0.10								40 - 140	20
PCB-1254 (screen)	ND	0.10								40 - 140	20
PCB-1260 (screen)	ND	0.10		99			66			40 - 140	20
PCB-1262 (screen)	ND	0.10								40 - 140	20
PCB-1268 (screen)	ND	0.10								40 - 140	20
%DCBP (Surrogate Rec)	88	%		89			53			30 - 150	20
%DCBP (Surrogate Rec) (Confirma	82	%		81			53			30 - 150	20

QA/QC Batch 723007 (ug/L), QC Sample No: CQ27642 (CQ27317, CQ27318, CQ27320)

Volatiles - Drinking Water

1,1,1,2-Tetrachloroethane	ND	0.50		100	115	14.0				70 - 130	30
1,1,1-Trichloroethane	ND	0.50		107	120	11.5				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50		92	102	10.3				70 - 130	30
1,1,2-Trichloroethane	ND	0.50		93	105	12.1				70 - 130	30
1,1-Dichloroethane	ND	0.50		93	105	12.1				70 - 130	30
1,1-Dichloroethene	ND	0.50		95	108	12.8				70 - 130	30
1,1-Dichloropropene	ND	0.40		95	108	12.8				70 - 130	30
1,2,3-Trichlorobenzene	ND	0.50		93	108	14.9				70 - 130	30
1,2,3-Trichloropropane	ND	0.50		95	110	14.6				70 - 130	30
1,2,4-Trichlorobenzene	ND	0.50		94	107	12.9				70 - 130	30
1,2,4-Trimethylbenzene	ND	0.50		99	113	13.2				70 - 130	30
1,2-Dichlorobenzene	ND	0.50		97	108	10.7				70 - 130	30
1,2-Dichloroethane	ND	0.50		103	115	11.0				70 - 130	30

QA/QC Data

SDG I.D.: GCQ27317

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,2-Dichloropropane	ND	0.50	90	100	10.5				70 - 130	30
1,3,5-Trimethylbenzene	ND	0.50	100	115	14.0				70 - 130	30
1,3-Dichlorobenzene	ND	0.50	99	111	11.4				70 - 130	30
1,3-Dichloropropane	ND	0.50	90	102	12.5				70 - 130	30
1,4-Dichlorobenzene	ND	0.50	99	111	11.4				70 - 130	30
2,2-Dichloropropane	ND	0.50	101	114	12.1				70 - 130	30
2-Chlorotoluene	ND	0.50	98	109	10.6				70 - 130	30
4-Chlorotoluene	ND	0.50	99	108	8.7				70 - 130	30
Benzene	ND	0.50	91	104	13.3				70 - 130	30
Bromobenzene	ND	0.50	96	111	14.5				70 - 130	30
Bromochloromethane	ND	0.50	95	107	11.9				70 - 130	30
Bromodichloromethane	ND	0.50	100	112	11.3				70 - 130	30
Bromoform	ND	0.50	103	114	10.1				70 - 130	30
Bromomethane	ND	0.50	95	107	11.9				70 - 130	30
Carbon tetrachloride	ND	0.50	105	121	14.2				70 - 130	30
Chlorobenzene	ND	0.50	92	107	15.1				70 - 130	30
Chloroethane	ND	0.50	95	109	13.7				70 - 130	30
Chloroform	ND	0.50	98	110	11.5				70 - 130	30
Chloromethane	ND	0.50	88	98	10.8				70 - 130	30
cis-1,2-Dichloroethene	ND	0.50	95	106	10.9				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	93	104	11.2				70 - 130	30
Dibromochloromethane	ND	0.50	101	114	12.1				70 - 130	30
Dibromomethane	ND	0.50	97	108	10.7				70 - 130	30
Dichlorodifluoromethane	ND	0.50	102	113	10.2				70 - 130	30
Ethylbenzene	ND	0.50	96	107	10.8				70 - 130	30
Hexachlorobutadiene	ND	0.40	102	111	8.5				70 - 130	30
Isopropylbenzene	ND	0.50	98	110	11.5				70 - 130	30
m&p-Xylene	ND	0.50	98	113	14.2				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	0.50	93	107	14.0				70 - 130	30
Methylene chloride	ND	0.50	86	97	12.0				70 - 130	30
Naphthalene	ND	0.50	93	105	12.1				70 - 130	30
n-Butylbenzene	ND	0.50	95	109	13.7				70 - 130	30
n-Propylbenzene	ND	0.50	99	111	11.4				70 - 130	30
o-Xylene	ND	0.50	95	109	13.7				70 - 130	30
p-Isopropyltoluene	ND	0.50	99	114	14.1				70 - 130	30
sec-Butylbenzene	ND	0.50	98	113	14.2				70 - 130	30
Styrene	ND	0.50	97	110	12.6				70 - 130	30
tert-Butylbenzene	ND	0.50	99	113	13.2				70 - 130	30
Tetrachloroethene	ND	0.50	102	117	13.7				70 - 130	30
Toluene	ND	0.50	93	106	13.1				70 - 130	30
trans-1,2-Dichloroethene	ND	0.50	94	106	12.0				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	96	107	10.8				70 - 130	30
Trichloroethene	ND	0.50	102	112	9.3				70 - 130	30
Trichlorofluoromethane	ND	0.50	113	123	8.5				70 - 130	30
Trichlorotrifluoroethane	ND	0.50	109	116	6.2				70 - 130	30
Vinyl chloride	ND	0.50	90	101	11.5				70 - 130	30
% 1,2-dichlorobenzene-d4	97	%	109	112	2.7				70 - 130	30
% Bromofluorobenzene	97	%	101	105	3.9				70 - 130	30

Comment:

This batch consists of a blank, LCS and LCSD.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.

QA/QC Data

SDG I.D.: GCQ27317

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 05, 2024

Friday, April 05, 2024

Criteria: NY: DW

State: NY

Sample Criteria Exceedances Report

GCQ27317 - STERLING

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CQ27317	MN-DW	Manganese	EPA / 40 CFR 141 DW / 143.3 Secondary Goals	0.131	0.001	0.05	0.01	mg/L
CQ27318	T-COLIDW	Total Coliforms	EPA / 40 CFR 141 DW / 141.63 Biologicals MCLs	Present	0	0		/100 mls
CQ27318	T-COLIDW	Total Coliforms	NY / NY Residential DW / Microbiological	Present	0	0	0	/100 mls
CQ27318	T-COLIDW	Total Coliforms	NY / NY Residential DW / Microbiological	Present	0	0	0	/100 mls

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

April 05, 2024 SDG I.D.: GCQ27317

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

April 05, 2024

SDG I.D.: GCQ27317

The samples in this delivery group were received at 1.7°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes ☒ No ☐
Coolant: IPK ☒ ICE ☐ No ☐

PHOENIX
Environmental Laboratories, Inc.

NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: Makrina Nolan, makrina@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Temp 1.7 C Pg of

Contact Options:
☒ Phone: 518 456-4900
☐ Fax:
☒ Email: paul.scholar@sterlingenvironmental.com

Customer: Sterling Env. Eng.
Address: 24 Wade Rd
Latham NY, 12110

Project: Sheffield Gardens
Report to: Paul Scholar
Invoice to: Sterling
QUOTE # :

Project P.O: 2023-76

This section MUST be completed with Bottle Quantities.

Sampler's Signature: Paul S
Date: 3-14-24

Client Sample Information - Identification

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe **OIL**=Oil
B=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	*MS/MSD (May be billable at analysis unit rate)	PFAS 533	1,4 Dioxane	Odor	Total Coliform, E.coli	Asbestos	GL Amber 8 oz. [ ] w/H_3PO_4 [ ] $NAHSO_4$	Soil VOA Vials [ ] methanol [ ] H_2O	GL Soil Encore	GL Soil container ( )oz PFAS	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H_2SO_4	PL As is [ ] 250ml [ ] 1000mL	PL H_2SO_4 [ ] 250ml [ ] 1000ml	PL NAOH 250ml	PL HNO_3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
27317	Well-2	DW	3-14-24	840		X	X	X	X	X				1		2				2			1	6 total
27318	Well-3	DW	3-14-24	835		X	X	X	X	X				1		2				2			1	6 total
27319	TB 564																							
27320	TB 524																							

Relinquished by:	Accepted by:	Date:	Time:
		3-14-24	1100
			3:00

Comments, Special Requirements or Regulations:
Report to: 3/14/24 17:07
paul.scholar@
sterlingenvironmental.com

*MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.

Data Format:
☒ Phoenix Std Report ☐ EQuIS
☒ Excel ☐ NJ Hazsite EDD
☒ PDF ☐ NY EZ EDD (ASP)
☐ GIS/Key ☐ Other

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 4 Days*
☐ 5 Days*
☒ Standard
* SURCHARGE APPLIES

Data Package:
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

NY
☐ TOGS GW
☐ CP-51 SOIL
☐ 375SCO Unrestricted Soil
☐ 375SCO Residential Soil
☐ 375SCO Residential Restricted Soil
☐ 375SCO Commercial Soil
☐ 375SCO Industrial Soil
☒ Subpart 5 DW

PA
☐ Clean Fill Limits
☐ PA-GW
☐ Reg Fill Limits
☐ PA Soil Restricted
☐ PA Soil non-restricted

State Samples Collected?
NY

PEL-111 Rev 1/2023

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

PHOENIX
Environmental Laboratories, Inc.

NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: Makrina Nolan, makrina@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Temp 1.7 C Pg of

Contact Options:
[X] Phone: 518 456-4900
[ ] Fax:
[X] Email: paul.scholar@sterlingenvironmental.com

Customer: Sterling Env. Eng.
Address: 24 Wade Rd
Latham, NY 12110

Project: Sheffield Gardens
Report to: Paul Scholar
Invoice to: Sterling
QUOTE # :

Project P.O: 2023-76

This section MUST be completed with Bottle Quantities.

Sampler's Signature: [signature] Date: 3-14-2024

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe **OIL**=Oil
B=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	*MS/MSD (May be billable at analysis unit rate)	Hardness Total Metals*	Alkalinity	Total Cyanide	SO4, FL, Cl, D, pH, Color, TDS	NO3, NO2, TurB, Long. Index	Radon	Gross Alpha Gross Beta RA 226, RA 228	GL Amber 8 oz. [ ] w/H3PO4 [ ] NAHSO4	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [X] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [X] 250ml [ ] 500ml [X] 1000ml w/ comp	PL H2SO4 [ ] 250ml [ ] 500ml	PL NaOH 250ml	PL HNO3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is	
27317	Well-2	DW	3-14-24	840		X	X	X	X	X	X	X	X			1		2		5		1	1			10 total
27318	Well-3	DW	3-14-24	835		X	X	X	X	X	X	X	X			1		2		5		1	1			10 total

Relinquished by: [signature] Accepted by: [signature] Date: 3-14-24 Time: 1100
[signature] Grey 3:00

Comments, Special Requirements or Regulations:
Total metals - Fe, Mn, Na, Zn, Pb, As, Cd, Cr, Be, Cu, Ni, Sb, Tl, Ba, Se, Hg, Ag, U

***MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.**

Data Format:
[X] Phoenix Std Report [ ] EQuIS
[X] Excel [ ] NJ Hazsite EDD
[X] PDF [ ] NY EZ EDD (ASP)
[ ] GIS/Key [ ] Other

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[ ] 4 Days*
[ ] 5 Days*
[X] Standard
* SURCHARGE APPLIES

NJ
[ ] Res. Criteria
[ ] Non-Res. Criteria
[ ] Impact to GW Soil Cleanup Criteria
[ ] Impact to GW soil screen Criteria
[ ] GW Criteria

Data Package:
[ ] NJ Reduced Deliv. *
[ ] Other
[ ] NY Enhanced (ASP B) *

NY
[ ] TOGS GW
[ ] CP-51 SOIL
[ ] 375SCO Unrestricted Soil
[ ] 375SCO Residential Soil
[ ] 375SCO Residential Restricted Soil
[ ] 375SCO Commercial Soil
[ ] 375SCO Industrial Soil
[X] Subpart 5 DW

PA
[ ] Clean Fill Limits
[ ] PA-GW
[ ] Reg Fill Limits
[ ] PA Soil Restricted
[ ] PA Soil non-restricted

State Samples Collected? NY

PEL-111 Rev 1/2023

3/14/24 17:07

Cooler: Yes ☒ No ☐
Coolant: IPK ☒ ICE ☐ No ☐

PHOENIX Environmental Laboratories, Inc.

NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: Makrina Nolan, makrina@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Temp 1.7 °C Pg of

Contact Options:
☒ Phone: 518-456-4900
☐ Fax:
☒ Email: paul.scholar@sterlingenvironmental.com

Customer: Sterling Env. Eng.
Address: 24 Wade Rd
Latham NY 12110

Project: Sheffield Gardens
Report to: Paul Scholar
Invoice to: Sterling
QUOTE # :

Project P.O: 2023-76

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 3-14-2024

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil
B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	*MS/MSD (524 VOC)	504 EDB	508 PCB	515 Herb	531 Carbamates	525 SVOC+Pest	547 Glyphosate	549 Diquat	548 Endothall	GL Amber 8 oz	Soil VOA Vials	Plastic container	GL Soil container	40 ml VOA Vial	GL Amber 1000ml	PL As is	PL H_2SO_4	PL 250ml	PL HNO_3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is / 60ml Vials
27317	Well-2	DW	3-14-24	840	X	X	X	X	X	X	X	X	X	1		2		7	3			4			17 total
27318	Well-3	DW	↓	835	X	X	X	X	X	X	X	X	X	1		2		7	3			4			17 total
27319	TB03142024-504	LW	↓	-		X										[crossed out]		2							2 total
27320	TB03142024-524	LW	↓	-	X											[crossed out]		2							2 total

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature] Gregory Whittle	3-14-24	1100
G7	Greg		3:00

Comments, Special Requirements or Regulations:
[signature] 3/14/24 17:07

Data Format:
☒ Phoenix Std Report
☒ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 4 Days*
☐ 5 Days*
☒ Standard
*SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

Data Package:
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

NY
☐ TOGS GW
☐ CP-51 SOIL
☐ 375SCO Unrestricted Soil
☐ 375SCO Residential Soil
☐ 375SCO Residential Restricted Soil
☐ 375SCO Commercial Soil
☐ 375SCO Industrial Soil
☒ Subpart 5 DW

PA
☐ Clean Fill Limits
☐ PA-GW
☐ Reg Fill Limits
☐ PA Soil Restricted
☐ PA Soil non-restricted

State Samples Collected? NY

*MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.

PEL-111 Rev 1/2023

726753

3-14-24
Shaff. Garden
2023-76

Sterling Env. Eng.

PHOENIX
Environmental Laboratories, Inc.

CrQ27317

SOC Kit Quantity List

Please list the quantity of each bottle you are submitting to the laboratory in the appropriate space provided below and return this document with your samples and Chain of Custody.

The SOC Kit Quantity List must be submitted to facilitate timely processing of your samples. If you need a replacement copy or have any other inquiries about this process, please contact Krystal Houle at khoule@phoenixlabs.com or 860-645-1102.

531 2 (2) 60mL Amber Vials *Chlor. – C6H7K07/Na2S203 or Non-Chlor. – C6H7K07*

547 2 (2) 60mL Amber Vials *Na2S203*

504 2 (2) 40mL Vials *Chlor. – Na2S203 or Non-Chlor. – As Is*

548 2 (2) 40 mL Amber Vials *Na2S203*

524 3 (3) 40mL HCL Vials *Chlor. – HCL/Ascorbic Acid or Non-Chlor. – HCL*

525 2 (2) Liter Ambers *AA, K Citrate, EDTA*

508 1 (1) Liter Amber *Chlor. – Na2S203 or Non-Chlor. – As Is*

515 1 (1) 8oz Amber *Chlor. – Na2S203 or Non-Chlor. – As Is*

549 2 (2) 500mL Amber Plastic *Na2S203*

DIOXIN NA (2) Liter Amber *As Is*

TRIP BLANKS (504) 0* (2) 40mL Vials *Chlor. – Na2S203 or Non-Chlor. – As Is*

TRIP BLANKS (524) 0* (2) 40mL HCL Vials

* 2 sets sampled - Trip Banks from other set used.

3-14-2024
Sheff. Garden
2023-76

Sterling Env. Eng.

PHOENIX
Environmental Laboratories, Inc.

GCQ27317

SOC Kit Quantity List

Please list the quantity of each bottle you are submitting to the laboratory in the appropriate space provided below and return this document with your samples and Chain of Custody.

The SOC Kit Quantity List must be submitted to facilitate timely processing of your samples. If you need a replacement copy or have any other inquiries about this process, please contact Krystal Houle at khoule@phoenixlabs.com or 860-645-1102.

531 2 (2) 60mL Amber Vials *Chlor. – C6H7K07/Na2S203 or Non-Chlor. – C6H7K07*

547 2 (2) 60mL Amber Vials *Na2S203*

504 2 (2) 40mL Vials *Chlor. – Na2S203 or Non-Chlor. – As Is*

548 2 (2) 40 mL Amber Vials *Na2S203*

524 3 (3) 40mL HCL Vials *Chlor. – HCL/Ascorbic Acid or Non-Chlor. – HCL*

525 2 (2) Liter Ambers *AA, K Citrate, EDTA*

508 1 (1) Liter Amber *Chlor. – Na2S203 or Non-Chlor. – As Is*

515 1 (1) 8oz Amber *Chlor. – Na2S203 or Non-Chlor. – As Is*

549 2 (2) 500mL Amber Plastic *Na2S203*

DIOXIN NA (2) Liter Amber *As Is*

TRIP BLANKS (504) 2 (2) 40mL Vials *Chlor. – Na2S203 or Non-Chlor. – As Is*

TRIP BLANKS (524) 2 (2) 40mL HCL Vials

CLIENT NOTIFICATION
Positive Coliform Report

3/15/2024 6:43:17 PM

Sample Delivery Group: GCQ27317

Location Code: STERLING

Project: SHEFFIELD GARDENS

				T-COLI			E-COLI			F-COLI			ENTERO		
Phoenix ID	**Client Id**	**Matrix**	**Rush**	**Result**	**Units**	**Date**	**Result**	**Units**	**Date**	**Result**	**Units**	**Date**	**Result**	**Units**	**Date**
CQ27317	WELL-2	DW		Absent	/100mls	03/14/24	Absent	/100mls	03/14/24	n.a.			n.a.		
CQ27318	WELL-3	DW		Present	/100mls	03/14/24	Absent	/100mls	03/14/24	n.a.			n.a.		

Contact:

Date:

Comments:

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Geoghegan
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, Connecticut 06040

Generated 3/21/2024 11:14:53 PM

JOB DESCRIPTION

GCQ27317

JOB NUMBER

810-97492-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

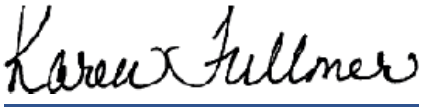
Eurofins Eaton Analytical South Bend

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Authorization



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3/21/2024 11:14:53 PM

Authorized for release by
Karen Fullmer, Project Manager
Karen.Fullmer@et.eurofinsus.com
(574)233-4777

Table of Contents

Definitions/Glossary

Client: Phoenix Environmental Laboratories, Inc. Job ID: 810-97492-1
Project/Site: GCQ27317

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
810-97492-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/16/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-97492-1
Project/Site: GCQ27317

Client Sample ID: CQ27317
Lab Sample ID: 810-97492-1

No Detections.

Client Sample ID: CQ27318
Lab Sample ID: 810-97492-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-97492-1
Project/Site: GCQ27317

Client Sample ID: CQ27317

Lab Sample ID: 810-97492-1

Date Collected: 03/14/24 08:40

Matrix: Drinking Water

Date Received: 03/16/24 09:00

Method: EPA 548.1 - Endothall (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endothall	<5.0		5.0		ug/L		03/19/24 09:26	03/20/24 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*81*		*70 - 130*	*03/19/24 09:26*	*03/20/24 14:45*	*1*

Client Sample ID: CQ27318

Lab Sample ID: 810-97492-2

Date Collected: 03/14/24 08:35

Matrix: Drinking Water

Date Received: 03/16/24 09:00

Method: EPA 548.1 - Endothall (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endothall	<5.0		5.0		ug/L		03/19/24 09:26	03/20/24 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*79*		*70 - 130*	*03/19/24 09:26*	*03/20/24 15:01*	*1*

Surrogate Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: GCQ27317

Job ID: 810-97492-1

Method: 548.1 - Endothall (GC/MS)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCPAA (70-130)								
810-97492-1	CQ27317	81								
810-97492-2	CQ27318	79								
LCS 810-92616/3-A	Lab Control Sample	97								
LLCS 810-92616/2-A	Lab Control Sample	92								
MB 810-92616/1-A	Method Blank	84								

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-97492-1
Project/Site: GCQ27317

Method: 548.1 - Endothall (GC/MS)

Lab Sample ID: MB 810-92616/1-A
Matrix: Drinking Water
Analysis Batch: 92804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92616

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endothall	<5.0		5.0		ug/L		03/19/24 09:26	03/20/24 10:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*84*		*70 - 130*	*03/19/24 09:26*	*03/20/24 10:34*	*1*

Lab Sample ID: LCS 810-92616/3-A
Matrix: Drinking Water
Analysis Batch: 92804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92616

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endothall			100	91.7		ug/L		92	69 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*97*		*70 - 130*

Lab Sample ID: LLCS 810-92616/2-A
Matrix: Drinking Water
Analysis Batch: 92804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92616

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endothall			5.00	4.50	J	ug/L		90	50 - 150		

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*70 - 130*

QC Association Summary

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-97492-1
Project/Site: GCQ27317

GC/MS Semi VOA

Prep Batch: 92616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-97492-1	CQ27317	Total/NA	Drinking Water	548.1	
810-97492-2	CQ27318	Total/NA	Drinking Water	548.1	
MB 810-92616/1-A	Method Blank	Total/NA	Drinking Water	548.1	
LCS 810-92616/3-A	Lab Control Sample	Total/NA	Drinking Water	548.1	
LLCS 810-92616/2-A	Lab Control Sample	Total/NA	Drinking Water	548.1	

Analysis Batch: 92804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-97492-1	CQ27317	Total/NA	Drinking Water	548.1	92616
810-97492-2	CQ27318	Total/NA	Drinking Water	548.1	92616
MB 810-92616/1-A	Method Blank	Total/NA	Drinking Water	548.1	92616
LCS 810-92616/3-A	Lab Control Sample	Total/NA	Drinking Water	548.1	92616
LLCS 810-92616/2-A	Lab Control Sample	Total/NA	Drinking Water	548.1	92616

Lab Chronicle

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-97492-1
Project/Site: GCQ27317

Client Sample ID: CQ27317
Lab Sample ID: 810-97492-1
Date Collected: 03/14/24 08:40
Matrix: Drinking Water
Date Received: 03/16/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	548.1			92616	KB	EA SB	03/19/24 09:26
Total/NA	Analysis	548.1		1	92804	CM	EA SB	03/20/24 14:45

Client Sample ID: CQ27318
Lab Sample ID: 810-97492-2
Date Collected: 03/14/24 08:35
Matrix: Drinking Water
Date Received: 03/16/24 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	548.1			92616	KB	EA SB	03/19/24 09:26
Total/NA	Analysis	548.1		1	92804	CM	EA SB	03/20/24 15:01

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-97492-1
Project/Site: GCQ27317

Laboratory: Eurofins Eaton Analytical South Bend

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11398	04-01-24

Method Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: GCQ27317

Job ID: 810-97492-1

Method	Method Description	Protocol	Laboratory
548.1	Endothall (GC/MS)	EPA	EA SB
548.1	Extraction of Endothall	EPA-DW	EA SB

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Sample Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: GCQ27317

Job ID: 810-97492-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-97492-1	CQ27317	Drinking Water	03/14/24 08:40	03/16/24 09:00
810-97492-2	CQ27318	Drinking Water	03/14/24 08:35	03/16/24 09:00

Cooler: Yes ☐ No ☐
Coolant: IPK ☐ ICE ☐ No ☐
Temp °C Pg of

PHOENIX Environmental Laboratories 810-97492 Chain of Custody

CHAIN OF CUSTODY RECORD

Page 1 of 1
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax: 860-645-0823
☐ Phone: 800-827-5426
☐ Email: HelenG@PhoenixLabs.com

Customer: Eurofins Eaton Analytical
Address: 110 South Hill Street
South Bend, IN
(574) 472-5567

Project #: GCQ27317
Report to: HelenG@PhoenixLabs.com / Helen Geoghegan
Invoice to: AccountsPayable@PhoenixLabs.com
Quote# :

Project P.O: GCQ27317

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Phoenix Sample ID	Sample Comment	Sample Matrix	Date Sampled	Time Sampled	Analysis Request: Endothall E548.1	Analysis Request: 40ml VOA Vial w/Na2S2O3
CQ27317		DW	3/14/2024	8:40 AM	x	2
CQ27318		DW	3/14/2024	8:35 AM	x	2

Initial Temp: 2.3
Corrected Temp: 2.8 wet
IR Gun # 31

Client Provided Sample Container

Relinquished by:	Accepted by:	Date:	Time:
Lori Bailey	Fed Ex	3-15-24	
	Peyton Fontaine	3/16/24	0900

Turnaround:
☐ 1 Day
☐ 2 Days
☐ 3 Days
☐ 5 Days
☐ 10 Days
☒ Standard
☐ Other_____

Report Type:
☒ Standard PDF
☐ Full Data Package
☐ NJ Reduced Deliverable
☐ NJ Full Deliverable
☐ NY ASP B

EDD Format:
☐ Excel
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other:_____

State Criteria:
NY: Residential DW

Comments, Special Requirements or Regulations:

Sample received without a Field Blank, proceed with analysis.

Please send notice as soon as possible not exceeding 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration.

Please notify Phoenix Environmental Laboratories, Inc. immediately and prior to conducting analysis if certification is not held for the analyses requested.

What State were samples collected?
NY

Login Sample Receipt Checklist

Client: Phoenix Environmental Laboratories, Inc.

Job Number: 810-97492-1

Login Number: 97492
List Number: 1
Creator: Trowbridge, Peyton

List Source: Eurofins Eaton Analytical South Bend

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	False	Client provided containers

Eastern Analytical Services, Inc.

Water Sample Report

RE: CPN GCQ27317

Date Collected: 03/14/2024
Collected By: Not Given
Date Received: 03/15/2024
Date Analyzed: 03/25/2024
Analyzed By: Fahrudin Lalic
Signature:
Analyte: Asbestos Fibers
Analytical Method: EPA 100.1/100.2
NVLAP Lab Code 101646-0
NYS Lab Number: 10851

Client: Phoenix Environmental Laboratories, Inc.
P.O. Box 370
Manchester, CT 06040

Sample ID# / Lab ID#	Sample Location	Sample Notes	Vol. (mls)	Concentration - 19k ≥0.5 µm < 10.0 µm	Vol. (mls)	Concentration - 10kX ≥10.0 µm
CQ27317 2988347	Not Given	Drinking Water	50.	BDL< 1.75E+00 MFL	50.	BDL< 2.18E-01 MFL
CQ27318 2988348	Not Given	Drinking Water	50.	BDL< 1.75E+00 MFL	50.	BDL< 2.18E-01 MFL

MFL = Million Fibers per Liter
Liability Limited to Cost of Analysis.
Results Applicable to Those Items Tested. Samples received in acceptable condition unless otherwise noted.
This Report Must Not be Used by the Client to Claim Product Endorsement by NVLAP or Any Agency of the US Government.
Rhode Island DOH No. AAL-072 Massachusetts DOL No. A A 000072 Connecticut DOH No. PH-0622 Maine DEP No. LA-024 Vermont DOH No. AL-709936

Eastern Analytical Services, Inc.

Water Sample Report

RE: CPN GCQ27317

Date Received:	03/15/2024	**Analytical Method:**	EPA 100.1/100.2	**Filter Type:**	0.1µ MCE
Date Collected:	03/14/2024	**Instrument:**	JEOL 100CXII	**Filter Manufacturer:**	Advantec
Date Analyzed:	03/25/2024	**Accelerating Voltage:**	100 kV	**Filter Lot No:**	00928200
Analyzed By:	Fahrudin Lalic	**Magnification:**	19 kX	**Effective Filtration Area:**	960 mm²
Client:	Phoenix Environmental	**No of Grid Openings:**	1	**Filter Loading:**	Light
Sample No:	CQ27317	**Grid Opening Area:**	0.011 mm²	**Volume:**	50. milliliters
Lab No:	2988347	**Area Analyzed:**	0.011 mm²	**Minimum Detection Limit**	1.75E+00 MFL

Grid Opening	Structure No.	Structure Type	No. of Fibers	Length	Width	SAED	Negative ID	EDS	Spectra File Name
1X2	0	No Structure							

Total Number of Asbestos Structures ≥ 0.5µm < 10.0 µm:	0	**Total Number of Asbestos Structures ≥ 10.0 µm:**	0
Associated Concentration:	BDL< 1.75E+00 MF	**Associated Concentration:**	BDL< 2.18E-01 MFL

Eastern Analytical Services, Inc.

Water Sample Report

RE: CPN GCQ27317

Date Received:	03/15/2024	**Analytical Method:**	EPA 100.1/100.2	**Filter Type:**	0.1µ MCE
Date Collected:	03/14/2024	**Instrument:**	JEOL 100CXII	**Filter Manufacturer:**	Advantec
Date Analyzed:	03/25/2024	**Accelerating Voltage:**	100 kV	**Filter Lot No:**	00928200
Analyzed By:	Fahrudin Lalic	**Magnification:**	19 kX	**Effective Filtration Area:**	960 mm²
Client:	Phoenix Environmental	**No of Grid Openings:**	1	**Filter Loading:**	Light
Sample No:	CQ27318	**Grid Opening Area:**	0.011 mm²	**Volume:**	50. milliliters
Lab No:	2988348	**Area Analyzed:**	0.011 mm²	**Minimum Detection Limit**	1.75E+00 MFL

Grid Opening	Structure No.	Structure Type	No. of Fibers	Length	Width	SAED	Negative ID	EDS	Spectra File Name
1D4	0	No Structure							

Total Number of Asbestos Structures ≥ 0.5µm < 10.0 µm:	0	**Total Number of Asbestos Structures ≥ 10.0 µm:**	0
Associated Concentration:	BDL< 1.75E+00 MF	**Associated Concentration:**	BDL< 2.18E-01 MFL

Eastern Analytical Services, Inc.

Water Sample Report

RE: CPN GCQ27317

Date Received:	03/15/2024	**Analytical Method:**	EPA 100.1/100.2	**Filter Type:**	0.1µ MCE
Date Collected:	03/14/2024	**Instrument:**	JEOL 100CXII	**Filter Manufacturer:**	Advantec
Date Analyzed:	03/25/2024	**Accelerating Voltage:**	100 kV	**Filter Lot No:**	00928200
Analyzed By:	Fahrudin Lalic	**Magnification:**	10 kX	**Effective Filtration Area:**	960 mm²
Client:	Phoenix Environmental	**No of Grid Openings:**	8	**Filter Loading:**	Light
Sample No:	CQ27317	**Grid Opening Area:**	0.011 mm²	**Volume:**	50. milliliters
Lab No:	2988347	**Area Analyzed:**	0.088 mm²	**Minimum Detection Limit**	2.18E-01 MFL

Grid Opening	Structure No.	Structure Type	No. of Fibers	Length	Width	SAED	Negative ID	EDS	Spectra File Name
2Q6	0	No Structure							
2Q8	0	No Structure							
2K1	0	No Structure							
2K3	0	No Structure							
3V1	0	No Structure							
3V6	0	No Structure							
3V8	0	No Structure							

Total Number of Asbestos Structures ≥ 0.5µm < 10.0 µm: 0

Associated Concentration: BDL< 1.75E+00 MF

Total Number of Asbestos Structures ≥ 10.0 µm: 0

Associated Concentration: BDL< 2.18E-01 MFL

Eastern Analytical Services, Inc.

Water Sample Report

RE: CPN GCQ27317

Date Received:	03/15/2024	**Analytical Method:**	EPA 100.1/100.2	**Filter Type:**	0.1µ MCE
Date Collected:	03/14/2024	**Instrument:**	JEOL 100CXII	**Filter Manufacturer:**	Advantec
Date Analyzed:	03/25/2024	**Accelerating Voltage:**	100 kV	**Filter Lot No:**	00928200
Analyzed By:	Fahrudin Lalic	**Magnification:**	10 kX	**Effective Filtration Area:**	960 mm²
Client:	Phoenix Environmental	**No of Grid Openings:**	8	**Filter Loading:**	Light
Sample No:	CQ27318	**Grid Opening Area:**	0.011 mm²	**Volume:**	50. milliliters
Lab No:	2988348	**Area Analyzed:**	0.088 mm²	**Minimum Detection Limit**	2.18E-01 MFL

Grid Opening	Structure No.	Structure Type	No. of Fibers	Length	Width	SAED	Negative ID	EDS	Spectra File Name
2D1	0	No Structure							
2D3	0	No Structure							
2E6	0	No Structure							
2F7	0	No Structure							
3J1	0	No Structure							
3J3	0	No Structure							
3Q6	0	No Structure							

Total Number of Asbestos Structures ≥ 0.5µm < 10.0 µm: 0

Associated Concentration: BDL< 1.75E+00 MF

Total Number of Asbestos Structures ≥ 10.0 µm: 0

Associated Concentration: BDL< 2.18E-01 MFL

Technical Report

for

Emerging Contaminants

prepared for:

Phoenix Environmental Laboratories, Inc.
P.O. Box 370, 587 East Middle Turnpike
Manchester CT, 06040
Attention: Helen Geoghegan

Report Date: 03/28/2024
Client Project ID: CQ27317 - CQ27318
York Project (SDG) No.: 24C1160

Stratford, CT Laboratory IDs:
NY:10854, NJ: CT005, PA: 68-0440, CT: PH-0723

Richmond Hill, NY Laboratory IDs:
NY:12058, NJ: NY037, CT: PH-0721, NH: 2097,
EPA: NY01600

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Report Date: 03/28/2024
Client Project ID: CQ27317 - CQ27318
York Project (SDG) No.: 24C1160

Phoenix Environmental Laboratories, Inc.
P.O. Box 370, 587 East Middle Turnpike
Manchester CT, 06040
Attention: Helen Geoghegan

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 19, 2024 and listed below. The project was identified as your project: **CQ27317 - CQ27318**.

The analyses were conducted utilizing appropriate EPA methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

Please contact Client Services at 203.325.1371 with any questions regarding this report or e-mail clientservices@yorklab.com.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
24C1160-01	CQ27317	Drinking Water	03/14/2024	03/19/2024
24C1160-02	CQ27318	Drinking Water	03/14/2024	03/19/2024

General Notes for York Project (SDG) No.: 24C1160

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854, NJ Cert No. CT005, PA Cert No. 68-04440, CT Cert No. PH-0723; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058, NJ Cert No. NY037, CT Cert No. PH-0721, NH Cert No. 2097, EPA Cert No. NY01600.

Approved By: Cassie L. Mosher
Laboratory Manager

Date: 03/28/2024

Sample Information

Client Sample ID: CQ27317 **York Sample ID:** 24C1160-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1160	CQ27317 - CQ27318	Drinking Water	March 14, 2024 8:40 am	03/19/2024

PFAS, EPA 533 Target List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
919005-14-4	ADONA	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
756426-58-1	9CL-PF3ONS	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
763051-92-9	11CL-PF3OUdS	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
13252-13-6	HFPO-DA (Gen-X)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
375-95-1	Perfluorononanoic acid (PFNA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		-	ng/L	1.85	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		-	ng/L	1.85	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		-	ng/L	1.85	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	

Sample Information

Client Sample ID: CQ27317 **York Sample ID:** 24C1160-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1160	CQ27317 - CQ27318	Drinking Water	March 14, 2024 8:40 am	03/19/2024

PFAS, EPA 533 Target List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:23	

Surrogate Recoveries	Result	Acceptance Range
Surrogate: MPFDoA	*64.4 %*	*50-200*
Surrogate: MPFBA	*96.9 %*	*50-200*
Surrogate: M9PFNA	*98.8 %*	*50-200*
Surrogate: M8PFOS	*72.4 %*	*50-200*
Surrogate: M8PFOA	*102 %*	*50-200*
Surrogate: M7PFUdA	*75.7 %*	*50-200*
Surrogate: M6PFDA	*78.7 %*	*50-200*
Surrogate: M5PFPeA	*101 %*	*50-200*
Surrogate: M5PFHxA	*94.9 %*	*50-200*
Surrogate: M4PFHpA	*97.4 %*	*50-200*
Surrogate: M3PFHxS	*84.8 %*	*50-200*
Surrogate: M3PFBS	*83.5 %*	*50-200*
Surrogate: M3HFPO-DA	*95.8 %*	*50-200*
Surrogate: M2-8:2 FTS	*85.3 %*	*50-200*
Surrogate: M2-6:2 FTS	*97.9 %*	*50-200*
Surrogate: M2-4:2 FTS	*115 %*	*50-200*

Sample Information

Client Sample ID: CQ27318 **York Sample ID:** 24C1160-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1160	CQ27317 - CQ27318	Drinking Water	March 14, 2024 8:35 am	03/19/2024

PFAS, EPA 533 Target List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
919005-14-4	ADONA	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	

Sample Information

Client Sample ID: CQ27318 **York Sample ID:** 24C1160-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1160	CQ27317 - CQ27318	Drinking Water	March 14, 2024 8:35 am	03/19/2024

PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
756426-58-1	9CL-PF3ONS	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
763051-92-9	11CL-PF3OUdS	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
13252-13-6	HFPO-DA (Gen-X)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
335-76-2	Perfluorodecanoic acid (PFDA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
375-95-1	Perfluorononanoic acid (PFNA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
335-67-1	Perfluorooctanoic acid (PFOA)	ND		10	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		-	ng/L	1.85	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		-	ng/L	1.85	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		-	ng/L	1.85	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	

Sample Information

Client Sample ID: CQ27318 **York Sample ID:** 24C1160-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
24C1160	CQ27317 - CQ27318	Drinking Water	March 14, 2024 8:35 am	03/19/2024

PFAS, EPA 533 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 533

CAS No.	Parameter	Result	Flag	Maximum Contaminant Level MCL	Units	Reported to LOQ	Reference Method	Date/Time Prep/Anal.	Analyst
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		-	ng/L	0.926	EPA 533	03/23/2024 19:51	JTG
					Certifications:		NELAC-NY12058	03/28/2024 02:49	

Surrogate Recoveries	Result	Acceptance Range
Surrogate: MPFDoA	*79.3 %*	*50-200*
Surrogate: MPFBA	*89.6 %*	*50-200*
Surrogate: M9PFNA	*93.4 %*	*50-200*
Surrogate: M8PFOS	*89.2 %*	*50-200*
Surrogate: M8PFOA	*85.0 %*	*50-200*
Surrogate: M7PFUdA	*83.1 %*	*50-200*
Surrogate: M6PFDA	*84.7 %*	*50-200*
Surrogate: M5PFPeA	*94.4 %*	*50-200*
Surrogate: M5PFHxA	*87.2 %*	*50-200*
Surrogate: M4PFHpA	*92.8 %*	*50-200*
Surrogate: M3PFHxS	*80.5 %*	*50-200*
Surrogate: M3PFBS	*87.4 %*	*50-200*
Surrogate: M3HFPO-DA	*78.1 %*	*50-200*
Surrogate: M2-8:2 FTS	*94.3 %*	*50-200*
Surrogate: M2-6:2 FTS	*97.3 %*	*50-200*
Surrogate: M2-4:2 FTS	*94.4 %*	*50-200*

Analytical Batch Summary

Batch ID: BC41698 **Preparation Method:** EPA 533 **Prepared By:** J D

YORK Sample ID	Client Sample ID	Preparation Date
24C1160-01	CQ27317	03/23/24
24C1160-02	CQ27318	03/23/24
BC41698-BLK1	Blank	03/23/24
BC41698-BS1	LCS	03/23/24
BC41698-BS2	LCS	03/23/24
BC41698-DUP1	Duplicate	03/23/24
BC41698-MS1	Matrix Spike	03/23/24

PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC41698 - EPA 533											
Blank (BC41698-BLK1)									Prepared: 03/23/2024 Analyzed: 03/28/2024		
ADONA	ND	1.00	ng/L								
9CL-PF3ONS	ND	1.00	"								
11CL-PF3OUdS	ND	1.00	"								
HFPO-DA (Gen-X)	ND	1.00	"								
Perfluorobutanesulfonic acid (PFBS)	ND	1.00	"								
Perfluorodecanoic acid (PFDA)	ND	1.00	"								
Perfluorododecanoic acid (PFDoA)	ND	1.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	1.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	1.00	"								
Perfluorohexanoic acid (PFHxA)	ND	1.00	"								
Perfluorononanoic acid (PFNA)	ND	1.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	1.00	"								
Perfluorooctanoic acid (PFOA)	ND	1.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	1.00	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	1.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	1.00	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	1.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.00	"								
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.00	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.00	"								
Surrogate: MPFDoA	*14.5*		"	*20.0*		*72.7*	*50-200*				
Surrogate: MPFBA	*14.1*		"	*20.0*		*70.3*	*50-200*				
Surrogate: M9PFNA	*15.1*		"	*20.0*		*75.6*	*50-200*				
Surrogate: M8PFOS	*12.9*		"	*19.2*		*67.2*	*50-200*				
Surrogate: M8PFOA	*13.9*		"	*20.0*		*69.4*	*50-200*				
Surrogate: M7PFUdA	*15.2*		"	*20.0*		*76.2*	*50-200*				
Surrogate: M6PFDA	*14.4*		"	*20.0*		*71.9*	*50-200*				
Surrogate: M5PFPeA	*15.1*		"	*20.0*		*75.6*	*50-200*				
Surrogate: M5PFHxA	*12.9*		"	*20.0*		*64.6*	*50-200*				
Surrogate: M4PFHpA	*14.2*		"	*20.0*		*71.0*	*50-200*				
Surrogate: M3PFHxS	*12.7*		"	*19.0*		*67.1*	*50-200*				
Surrogate: M3PFBS	*12.2*		"	*18.6*		*65.5*	*50-200*				
Surrogate: M3HFPO-DA	*12.8*		"	*20.0*		*63.8*	*50-200*				
Surrogate: M2-8:2 FTS	*58.9*		"	*76.8*		*76.7*	*50-200*				
Surrogate: M2-6:2 FTS	*60.8*		"	*76.0*		*80.0*	*50-200*				
Surrogate: M2-4:2 FTS	*56.4*		"	*75.2*		*75.0*	*50-200*				

PFAS Target compounds by LC/MS-MS - Quality Control Data

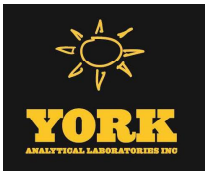
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC41698 - EPA 533											
LCS (BC41698-BS2)							Prepared: 03/23/2024 Analyzed: 03/28/2024				
ADONA	15.6	1.00	ng/L	18.9		82.6	70-130				
9CL-PF3ONS	18.1	1.00	"	18.7		96.8	70-130				
11CL-PF3OUdS	17.8	1.00	"	18.9		94.4	70-130				
HFPO-DA (Gen-X)	22.7	1.00	"	20.0		114	70-130				
Perfluorobutanesulfonic acid (PFBS)	18.7	1.00	"	17.8		105	70-130				
Perfluorodecanoic acid (PFDA)	22.6	1.00	"	20.0		113	70-130				
Perfluorododecanoic acid (PFDoA)	19.4	1.00	"	20.0		97.0	70-130				
Perfluoroheptanoic acid (PFHpA)	18.4	1.00	"	20.0		92.0	70-130				
Perfluorohexanesulfonic acid (PFHxS)	19.9	1.00	"	18.2		109	70-130				
Perfluorohexanoic acid (PFHxA)	18.8	1.00	"	20.0		93.8	70-130				
Perfluorononanoic acid (PFNA)	20.9	1.00	"	20.0		105	70-130				
Perfluorooctanesulfonic acid (PFOS)	20.7	1.00	"	18.6		112	70-130				
Perfluorooctanoic acid (PFOA)	19.1	1.00	"	20.0		95.7	70-130				
Perfluoroundecanoic acid (PFUnA)	19.0	1.00	"	20.0		95.1	70-130				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	20.6	1.00	"	18.8		110	70-130				
Perfluoro-1-pentanesulfonate (PFPeS)	17.7	1.00	"	18.8		94.3	70-130				
Perfluoro-n-butanoic acid (PFBA)	20.1	1.00	"	20.0		100	70-130				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	20.1	2.00	"	19.2		105	70-130				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	17.0	2.00	"	19.0		89.1	70-130				
Perfluoro-1-heptanesulfonic acid (PFHpS)	19.9	2.00	"	19.1		105	70-130				
Perfluoropentanoic acid (PFPeA)	19.3	1.00	"	20.0		96.5	70-130				
Perfluoro-5-oxahexanoic acid (PFMBA)	21.7	1.00	"	20.0		109	70-130				
Perfluoro-4-oxapentanoic acid (PFMPA)	20.4	1.00	"	20.0		102	70-130				
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	18.2	1.00	"	20.0		90.8	70-130				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	17.3	1.00	"	17.8		97.2	70-130				
Surrogate: MPFDoA	*17.9*		"	*20.0*		*89.7*	*50-200*				
Surrogate: MPFBA	*16.6*		"	*20.0*		*83.1*	*50-200*				
Surrogate: M9PFNA	*16.2*		"	*20.0*		*80.8*	*50-200*				
Surrogate: M8PFOS	*15.4*		"	*19.2*		*80.3*	*50-200*				
Surrogate: M8PFOA	*17.1*		"	*20.0*		*85.6*	*50-200*				
Surrogate: M7PFUdA	*18.5*		"	*20.0*		*92.5*	*50-200*				
Surrogate: M6PFDA	*17.3*		"	*20.0*		*86.5*	*50-200*				
Surrogate: M5PFPeA	*18.2*		"	*20.0*		*90.8*	*50-200*				
Surrogate: M5PFHxA	*15.3*		"	*20.0*		*76.6*	*50-200*				
Surrogate: M4PFHpA	*18.6*		"	*20.0*		*93.0*	*50-200*				
Surrogate: M3PFHxS	*14.9*		"	*19.0*		*78.7*	*50-200*				
Surrogate: M3PFBS	*14.6*		"	*18.6*		*78.6*	*50-200*				
Surrogate: M3HFPO-DA	*13.7*		"	*20.0*		*68.7*	*50-200*				
Surrogate: M2-8:2 FTS	*68.1*		"	*76.8*		*88.6*	*50-200*				
Surrogate: M2-6:2 FTS	*75.3*		"	*76.0*		*99.0*	*50-200*				
Surrogate: M2-4:2 FTS	*70.7*		"	*75.2*		*94.0*	*50-200*				

PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC41698 - EPA 533											
Duplicate (BC41698-DUP1)	*Source sample: 24C1033-01 (Duplicate)							Prepared: 03/23/2024 Analyzed: 03/28/2024			
ADONA	ND	1.28	ng/L		ND					30	
9CL-PF3ONS	ND	1.28	"		ND					30	
11CL-PF3OUdS	ND	1.28	"		ND					30	
HFPO-DA (Gen-X)	ND	1.28	"		ND					30	
Perfluorobutanesulfonic acid (PFBS)	ND	1.28	"		ND					30	
Perfluorodecanoic acid (PFDA)	ND	1.28	"		ND					30	
Perfluorododecanoic acid (PFDoA)	ND	1.28	"		ND					30	
Perfluoroheptanoic acid (PFHpA)	ND	1.28	"		ND					30	
Perfluorohexanesulfonic acid (PFHxS)	ND	1.28	"		ND					30	
Perfluorohexanoic acid (PFHxA)	ND	1.28	"		ND					30	
Perfluorononanoic acid (PFNA)	ND	1.28	"		ND					30	
Perfluorooctanesulfonic acid (PFOS)	ND	1.28	"		ND					30	
Perfluorooctanoic acid (PFOA)	ND	1.28	"		ND					30	
Perfluoroundecanoic acid (PFUnA)	ND	1.28	"		ND					30	
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND	1.28	"		ND					30	
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.28	"		ND					30	
Perfluoro-n-butanoic acid (PFBA)	ND	1.28	"		ND					30	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.56	"		ND					30	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	2.56	"		ND					30	
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.56	"		ND					30	
Perfluoropentanoic acid (PFPeA)	ND	1.28	"		ND					30	
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.28	"		ND					30	
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.28	"		ND					30	
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.28	"		ND					30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.28	"		ND					30	
Surrogate: MPFDoA	*16.9*		*"*	*25.6*		*65.9*	*50-200*				
Surrogate: MPFBA	*19.6*		*"*	*25.6*		*76.3*	*50-200*				
Surrogate: M9PFNA	*20.3*		*"*	*25.6*		*79.1*	*50-200*				
Surrogate: M8PFOS	*17.4*		*"*	*24.6*		*70.9*	*50-200*				
Surrogate: M8PFOA	*19.8*		*"*	*25.6*		*77.3*	*50-200*				
Surrogate: M7PFUdA	*18.4*		*"*	*25.6*		*71.9*	*50-200*				
Surrogate: M6PFDA	*18.6*		*"*	*25.6*		*72.4*	*50-200*				
Surrogate: M5PFPeA	*21.0*		*"*	*25.6*		*81.9*	*50-200*				
Surrogate: M5PFHxA	*18.6*		*"*	*25.6*		*72.5*	*50-200*				
Surrogate: M4PFHpA	*20.0*		*"*	*25.6*		*78.0*	*50-200*				
Surrogate: M3PFHxS	*19.2*		*"*	*24.3*		*79.1*	*50-200*				
Surrogate: M3PFBS	*17.1*		*"*	*23.9*		*71.4*	*50-200*				
Surrogate: M3HFPO-DA	*18.5*		*"*	*25.6*		*72.2*	*50-200*				
Surrogate: M2-8:2 FTS	*77.5*		*"*	*98.5*		*78.7*	*50-200*				
Surrogate: M2-6:2 FTS	*81.8*		*"*	*97.4*		*83.9*	*50-200*				
Surrogate: M2-4:2 FTS	*78.9*		*"*	*96.4*		*81.8*	*50-200*				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC41698 - EPA 533											
Matrix Spike (BC41698-MS1)	*Source sample: 24C1160-02 (CQ27318)							Prepared: 03/23/2024 Analyzed: 03/28/2024			
ADONA	6.71	0.893	ng/L	33.8	ND	19.8	70-130	Low Bias			
9CL-PF3ONS	6.64	0.893	"	33.4	ND	19.9	70-130	Low Bias			
11CL-PF3OUdS	5.28	0.893	"	33.7	ND	15.7	70-130	Low Bias			
HFPO-DA (Gen-X)	9.79	0.893	"	35.7	ND	27.4	70-130	Low Bias			
Perfluorobutanesulfonic acid (PFBS)	6.99	0.893	"	31.7	ND	22.0	70-130	Low Bias			
Perfluorodecanoic acid (PFDA)	8.91	0.893	"	35.7	ND	24.9	70-130	Low Bias			
Perfluorododecanoic acid (PFDoA)	7.15	0.893	"	35.7	ND	20.0	70-130	Low Bias			
Perfluoroheptanoic acid (PFHpA)	7.63	0.893	"	35.7	ND	21.4	70-130	Low Bias			
Perfluorohexanesulfonic acid (PFHxS)	7.16	0.893	"	32.6	ND	22.0	70-130	Low Bias			
Perfluorohexanoic acid (PFHxA)	6.93	0.893	"	35.7	ND	19.4	70-130	Low Bias			
Perfluorononanoic acid (PFNA)	6.80	0.893	"	35.7	ND	19.0	70-130	Low Bias			
Perfluorooctanesulfonic acid (PFOS)	8.34	0.893	"	33.1	ND	25.2	70-130	Low Bias			
Perfluorooctanoic acid (PFOA)	7.90	0.893	"	35.7	ND	22.1	70-130	Low Bias			
Perfluoroundecanoic acid (PFUnA)	7.36	0.893	"	35.7	ND	20.6	70-130	Low Bias			
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	6.97	0.893	"	33.5	ND	20.8	70-130	Low Bias			
Perfluoro-1-pentanesulfonate (PFPeS)	6.55	0.893	"	33.6	ND	19.5	70-130	Low Bias			
Perfluoro-n-butanoic acid (PFBA)	7.79	0.893	"	35.7	ND	21.8	70-130	Low Bias			
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	6.52	1.79	"	34.3	ND	19.0	70-130	Low Bias			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	7.00	1.79	"	34.0	ND	20.6	70-130	Low Bias			
Perfluoro-1-heptanesulfonic acid (PFHpS)	7.35	1.79	"	34.1	ND	21.6	70-130	Low Bias			
Perfluoropentanoic acid (PFPeA)	7.36	0.893	"	35.7	ND	20.6	70-130	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	8.03	0.893	"	35.7	ND	22.5	70-130	Low Bias			
Perfluoro-4-oxapentanoic acid (PFMPA)	7.77	0.893	"	35.7	ND	21.8	70-130	Low Bias			
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	4.93	0.893	"	35.7	ND	13.8	70-130	Low Bias			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	6.61	0.893	"	31.9	ND	20.7	70-130	Low Bias			
Surrogate: MPFDoA	*14.1*		"	*17.9*		*78.8*	*50-200*				
Surrogate: MPFBA	*16.7*		"	*17.9*		*93.4*	*50-200*				
Surrogate: M9PFNA	*17.0*		"	*17.9*		*95.5*	*50-200*				
Surrogate: M8PFOS	*15.1*		"	*17.1*		*88.3*	*50-200*				
Surrogate: M8PFOA	*16.4*		"	*17.9*		*92.0*	*50-200*				
Surrogate: M7PFUdA	*15.9*		"	*17.9*		*89.1*	*50-200*				
Surrogate: M6PFDA	*16.9*		"	*17.9*		*94.6*	*50-200*				
Surrogate: M5PFPeA	*17.9*		"	*17.9*		*100*	*50-200*				
Surrogate: M5PFHxA	*15.5*		"	*17.9*		*86.8*	*50-200*				
Surrogate: M4PFHpA	*16.1*		"	*17.9*		*90.0*	*50-200*				
Surrogate: M3PFHxS	*15.6*		"	*16.9*		*91.9*	*50-200*				
Surrogate: M3PFBS	*15.5*		"	*16.6*		*93.2*	*50-200*				
Surrogate: M3HFPO-DA	*14.3*		"	*17.9*		*80.0*	*50-200*				
Surrogate: M2-8:2 FTS	*67.8*		"	*68.6*		*98.9*	*50-200*				
Surrogate: M2-6:2 FTS	*69.8*		"	*67.9*		*103*	*50-200*				
Surrogate: M2-4:2 FTS	*74.0*		"	*67.1*		*110*	*50-200*				

Sample and Data Qualifiers Relating to This Work Order

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.
MCL	This is the Maximum Contaminant Level in ng/L (ppt) established by the NYSDOH for these compounds where an MCL is reported. Exceedences are flagged accordingly.

24C1150

Cooler: Yes ☑ No ☐
Coolant: IPK ☐ ICE ☑ No ☐
Temp 1.4 °C Pg of

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Page 1 of 1
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax: 860-645-0823
☐ Phone: 800-827-5426
☐ Email: HelenG@PhoenixLabs.com

Customer: York Analytical Laboratories
Address: 120 Research Drive
Stratford, CT
(203) 325-1371

Project #: GCQ27317
Report to: HelenG@PhoenixLabs.com / Helen Geoghegan
Invoice to: AccountsPayable@PhoenixLabs.com
Quote# :

Project P.O: GCQ27317

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

Phoenix Sample ID	Sample Comment	Sample Matrix	Date Sampled	Time Sampled	PFAS (25) E533	250ml HDPE Plastic w/Ammonium Acetate
CQ27317		DW	3/14/2024	8:40 AM	x	2
CQ27318		DW	3/14/2024	8:35 AM	x	2

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	3-19-24	0800
[signature]	[signature]	3/19/24	10:10
[signature]	[signature]		14:11

Turnaround:
☐ 1 Day
☐ 2 Days
☐ 3 Days
☐ 5 Days
☐ 10 Days
☒ Standard
☐ Other_____

Report Type:
☒ Standard PDF
☐ Full Data Package
☐ NJ Reduced Deliverable
☐ NJ Full Deliverable
☐ NY ASP B

EDD Format:
☐ Excel
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other:_____

State Criteria:
NY: Residential DW

What State were samples collected?
NY

Comments, Special Requirements or Regulations:

Sa[illegible]e received without a Field Blank, proceed with analysis.

Ple[illegible] send notice as soon as possible not exceeding 24 hours of obtaining valid data, of the results of all drinking wa[illegible]amples that exceed any EPA or Department-established maximum contaminant level, maximum residual dis[illegible]tant level or reportable concentration.

Ple[illegible] notify Phoenix Environmental Laboratories, Inc. immediately and prior to conducting analysis if certification is r[illegible]eld for the analyses requested.

[signature] 03/20/24 1117 4.5C

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

April 04, 2024

Helen Geoghegan
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06040
TEL:
FAX:

RE: CQ27317, CQ27318

Dear Helen Geoghegan:

Order No.: 24031339

Summit Environmental Technologies, Inc. received 2 sample(s) on 3/19/2024 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Salwa A. Najjar
Project Manager
3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **24031339**
Date: **4/4/2024**

CLIENT: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318

This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **24031339**

04-Apr-24

CLIENT: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24031339-001	CQ27317		3/14/2024 8:40:00 AM	3/19/2024 10:10:00 AM	Drinking Water
24031339-002	CQ27318		3/14/2024 8:35:00 AM	3/19/2024 10:10:00 AM	Drinking Water

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24031339**

Date Reported: **4/4/2024**

CLIENT: Phoenix Environmental Laboratories, Inc. **Collection Date:** 3/14/2024 8:40:00 AM

Project: CQ27317, CQ27318

Lab ID: 24031339-001 **Matrix:** DRINKING WATER

Client Sample ID: CQ27317

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
GROSS ALPHA / GROSS BETA RADIOACTIVITY (EPA 900.0)					**E900.0**	**E900**	Analyst: **DHF**
ALPHA, Gross	ND	3.00		pCi/L	± 0.975	1	3/28/2024 9:59:00 AM
BETA, Gross	ND	4.00		pCi/L	± 0.834	1	3/28/2024 9:59:00 AM
RADIUM-226 (903.0)					**E903.0**	**E903-904**	Analyst: **DHF**
Radium-226	ND	1.00		pCi/L	± 0.0500	1	4/3/2024 10:38:00 AM
Yield	1.00					1	4/3/2024 10:38:00 AM
RADIUM-228 (904.0)					**E904.0**	**E903-904**	Analyst: **DHF**
Radium-228	ND	1.00		pCi/L	± 0.510	1	4/2/2024 3:02:00 PM
Yield	1.00					1	4/2/2024 3:02:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode		

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Analytical Report

(consolidated)

WO#: **24031339**

Date Reported: **4/4/2024**

CLIENT: Phoenix Environmental Laboratories, Inc. **Collection Date:** 3/14/2024 8:35:00 AM

Project: CQ27317, CQ27318

Lab ID: 24031339-002 **Matrix:** DRINKING WATER

Client Sample ID: CQ27318

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
GROSS ALPHA / GROSS BETA RADIOACTIVITY (EPA 900.0)					**E900.0**	**E900**	Analyst: **DHF**
ALPHA, Gross	ND	3.00		pCi/L	± 1.12	1	3/21/2024 10:28:00 AM
BETA, Gross	ND	4.00		pCi/L	± 0.670	1	3/21/2024 10:28:00 AM
RADIUM-226 (903.0)					**E903.0**	**E903-904**	Analyst: **DHF**
Radium-226	ND	1.00		pCi/L	± 0.0500	1	4/3/2024 10:38:00 AM
Yield	1.00					1	4/3/2024 10:38:00 AM
RADIUM-228 (904.0)					**E904.0**	**E903-904**	Analyst: **DHF**
Radium-228	ND	1.00		pCi/L	± 0.400	1	4/2/2024 3:02:00 PM
Yield	1.00					1	4/2/2024 3:02:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**
04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318 **BatchID:** **73976**

Sample ID: **24031336-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183079**
Client ID: **BatchQC** Batch ID: **73976** TestNo: **E904.0** **E903-904** Analysis Date: **4/2/2024** SeqNo: **4962414**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0	0	30	R
Yield	1.00			0	0			1.000	0		

Sample ID: **24031336-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183079**
Client ID: **BatchQC** Batch ID: **73976** TestNo: **E904.0** **E903-904** Analysis Date: **4/2/2024** SeqNo: **4962416**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.56	1.00		0	0			1.430	8.70	30	
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**
04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318 **BatchID:** **73976**

Sample ID: **MB-73976** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183079**
Client ID: **PBW** Batch ID: **73976** TestNo: **E904.0** **E903-904** Analysis Date: **4/2/2024** SeqNo: **4962407**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						
Yield	1.00			0	0						

Sample ID: **LCS-73976** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183079**
Client ID: **LCSW** Batch ID: **73976** TestNo: **E904.0** **E903-904** Analysis Date: **4/2/2024** SeqNo: **4962408**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.66	1.00	5.000	0	73.2	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-73976** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183079**
Client ID: **LCSS02** Batch ID: **73976** TestNo: **E904.0** **E903-904** Analysis Date: **4/2/2024** SeqNo: **4962409**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.47	1.00	5.000	0	69.4	50	130	3.660	5.33	20	
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**
04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318 **BatchID:** **73976**

Sample ID: **24031336-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183087**
Client ID: **BatchQC** Batch ID: **73976** TestNo: **E903.0** **E903-904** Analysis Date: **4/3/2024** SeqNo: **4962722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	30	
Yield	1.00							1.000	0	0	

Sample ID: **24031336-002ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **183087**
Client ID: **BatchQC** Batch ID: **73976** TestNo: **E903.0** **E903-904** Analysis Date: **4/3/2024** SeqNo: **4962724**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	30	
Yield	1.00							1.000	0	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**

04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.

Project: CQ27317, CQ27318 **BatchID:** **73976**

Sample ID: **MB-73976**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/21/2024**	RunNo: **183087**
Client ID: **PBW**	Batch ID: **73976**	TestNo: **E903.0**	**E903-904**	Analysis Date: **4/3/2024**	SeqNo: **4962715**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									
Yield	1.00										

Sample ID: **LCS-73976**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/21/2024**	RunNo: **183087**
Client ID: **LCSW**	Batch ID: **73976**	TestNo: **E903.0**	**E903-904**	Analysis Date: **4/3/2024**	SeqNo: **4962716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.16	1.00	5.000	0	103	70	130				

Sample ID: **LCSD-73976**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/21/2024**	RunNo: **183087**
Client ID: **LCSS02**	Batch ID: **73976**	TestNo: **E903.0**	**E903-904**	Analysis Date: **4/3/2024**	SeqNo: **4962717**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.81	1.00	5.000	0	96.2	70	130	5.160	7.02	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**

04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.

Project: CQ27317, CQ27318 **BatchID:** 73977

Sample ID: **MB-73977** SampType: **MBLK** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **182590**
Client ID: **PBW** Batch ID: **73977** TestNo: **E900.0** **E900** Analysis Date: **3/21/2024** SeqNo: **4949198**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	ND	3.00									
BETA, Gross	ND	4.00									

Sample ID: **LCS-73977** SampType: **LCS** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **182590**
Client ID: **LCSW** Batch ID: **73977** TestNo: **E900.0** **E900** Analysis Date: **3/21/2024** SeqNo: **4949199**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	14.3	3.00	15.00	0	95.1	70	130				
BETA, Gross	19.0	4.00	20.00	0	95.2	70	130				

Sample ID: **24031185-001ADUP** SampType: **DUP** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **182590**
Client ID: **BatchQC** Batch ID: **73977** TestNo: **E900.0** **E900** Analysis Date: **3/21/2024** SeqNo: **4949203**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	4.29	3.00						4.576	6.52	30	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**
04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318 **BatchID:** **73977**

Sample ID: **24031187-001ADUP** SampType: **DUP** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/21/2024** RunNo: **182590**
Client ID: **BatchQC** Batch ID: **73977** TestNo: **E900.0** **E900** Analysis Date: **3/21/2024** SeqNo: **4949205**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	ND	3.00						0	0	30	
BETA, Gross	ND	4.00						0	0	30	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**

04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318 **BatchID:** **74051**

Sample ID: **MB-74051** SampType: **MBLK** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/27/2024** RunNo: **182838**
Client ID: **PBW** Batch ID: **74051** TestNo: **E900.0** **E900** Analysis Date: **3/28/2024** SeqNo: **4956139**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	ND	3.00									
BETA, Gross	ND	4.00									

Sample ID: **LCS-74051** SampType: **LCS** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/27/2024** RunNo: **182838**
Client ID: **LCSW** Batch ID: **74051** TestNo: **E900.0** **E900** Analysis Date: **3/28/2024** SeqNo: **4956140**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	11.4	3.00	15.00	0	76.2	70	130				
BETA, Gross	15.4	4.00	20.00	0	77.0	70	130				

Sample ID: **24031339-001ADUP** SampType: **DUP** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/27/2024** RunNo: **182838**
Client ID: **CQ27317** Batch ID: **74051** TestNo: **E900.0** **E900** Analysis Date: **3/28/2024** SeqNo: **4956149**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	ND	3.00						0	0	30	
BETA, Gross	ND	4.00						0	0	30	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24031339**
04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.
Project: CQ27317, CQ27318 **BatchID:** **74051**

Sample ID: **24031352-001ADUP** SampType: **DUP** TestCode: **AlphaBeta_D** Units: **pCi/L** Prep Date: **3/27/2024** RunNo: **182838**
Client ID: **BatchQC** Batch ID: **74051** TestNo: **E900.0** **E900** Analysis Date: **3/28/2024** SeqNo: **4956151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ALPHA, Gross	ND	3.00						0	0	30	
BETA, Gross	ND	4.00						0	0	30	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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Qualifiers and Acronyms

WO#: **24031339**
Date: **4/4/2024**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

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DATES REPORT

WO#: **24031339**

04-Apr-24

Client: Phoenix Environmental Laboratories, Inc.

Project: CQ27317, CQ27318

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24031339-001A	CQ27317	3/14/2024 8:40:00 AM	Drinking Water	Gross Alpha / Gross Beta Radioactivity 900.0)		3/27/2024 11:08:00 AM	3/28/2024 9:59:00 AM
				Radium-226 (903.0)		3/21/2024 10:10:00 PM	4/3/2024 10:38:00 AM
				Radium-228 (904.0)		3/21/2024 10:10:00 PM	4/2/2024 3:02:00 PM
24031339-002A	CQ27318	3/14/2024 8:35:00 AM		Gross Alpha / Gross Beta Radioactivity 900.0)		3/21/2024 10:28:00 PM	3/21/2024 10:28:00 AM
				Radium-226 (903.0)		3/21/2024 10:10:00 PM	4/3/2024 10:38:00 AM
				Radium-228 (904.0)		3/21/2024 10:10:00 PM	4/2/2024 3:02:00 PM

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Accreditation Program Analytes Report

WO#: **24031339**

04-Apr-24

Client: Phoenix Environmental Laboratories, Inc. **State:** NY

Project: CQ27317, CQ27318 **Program Name:** NY_DW_WW_S

Test Name	Matrix	Analyte	Status
Gross Alpha / Gross Beta Radioactivity (EPA 900.0)	Drinking Water	ALPHA, Gross	A
Gross Alpha / Gross Beta Radioactivity (EPA 900.0)	Drinking Water	BETA, Gross	A
Radium-226 (903.0)	Drinking Water	Radium-226	A
Radium-226 (903.0)	Drinking Water	Yield	A
Radium-228 (904.0)	Drinking Water	Radium-228	A
Radium-228 (904.0)	Drinking Water	Yield	A

AL	A	Accredited	AR	N	Not Accredited	CA-NELA	A	Accredited
CO	A	Accredited	CT	A	Accredited	FL-NELA	A	Accredited
HI-DW	N	Not Accredited	ID	A	Accredited	L-NELA	N	Not Accredited
IN_DW	U	Unavailable	S - NELA	N	Not Accredited	KY_UST	N	Not Accredited
W(RADS)	A	Accredited	_DW_WW	A	Accredited	MD-DW	A	Accredited

Cooler: Yes ☐ No ☐
Coolant: IPK ☐ ICE ☐ No ☐

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD 2403133 9

Page 1 of 1
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp °C Pg of

Contact Options:
☐ Fax: 860-645-0823
☐ Phone: 800-827-5426
☐ Email: HelenG@PhoenixLabs.com

Customer: Summit Environmental Technologies, Inc
Address: 3310 Win St
Cuyahoga, OH
(330) 253-8211

Project #: GCQ27317
Report to: HelenG@PhoenixLabs.com / Helen Geoghegan
Invoice to: AccountsPayable@PhoenixLabs.com
Quote# :

Project P.O: GCQ27317

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

Phoenix Sample ID	Sample Comment	Sample Matrix	Date Sampled	Time Sampled	Gross Alpha Water E900.0	Gross Beta Water E900.0	Radium 226 E903.0	Radium 228 E904.0	1000ml Plastic w/HNO3		
CQ27317		DW	3/14/2024	8:40 AM	x	x	x	x	4		pH - 1,1,1,1 CPM - 23,28,31,17
CQ27318		DW	3/14/2024	8:35 AM	x	x	x	x	4		pH - 1,1,1,1 CPM - 26,32,37,29

Relinquished by:	Accepted by:	Date:	Time:
	UPS	3/15/24	
		03/19/24	1010

Comments, Special Requirements or Regulations: UPS cooler -16.1-0.2=15.9

~~Sample received without a Field Blank, proceed with analysis.~~ SR

Please send notice as soon as possible not exceeding 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration.

Please notify Phoenix Environmental Laboratories, Inc. immediately and prior to conducting analysis if certification is not held for the analyses requested.

Turnaround:
☐ 1 Day
☐ 2 Days
☐ 3 Days
☐ 5 Days
☐ 10 Days
☒ Standard
☐ Other_____

Report Type:
☒ Standard PDF
☐ Full Data Package
☐ NJ Reduced Deliverable
☐ NJ Full Deliverable
☐ NY ASP B

What State were samples collected?
NY

EDD Format:
☐ Excel
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other:_____

State Criteria:
NY: Residential DW

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: PHO-CT-06040 Work Order Number: 24031339 RcptNo: 1

Logged by:	Anthony W. Britton	3/19/2024 10:10:00 AM	Anthony Britton
Completed By:	Tegan A. Richards	3/19/2024 3:32:06 PM	Tegan Richards
Reviewed By:	Salwa A. Najjar	3/20/2024 10:16:49 AM	Salwa Najjar

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☑
   No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☐ No ☑ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Not required
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	15.9	Good	Not Present			

PHOENIX
Environmental Laboratories, Inc.

Tuesday, April 16, 2024

Attn: Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Project ID: SHEFFIELD GARDENS
SDG ID: GCQ40198
Sample ID#s: CQ40198 - CQ40200

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Sample Id Cross Reference

April 16, 2024

SDG I.D.: GCQ40198

Project ID: SHEFFIELD GARDENS

Client Id	Lab Id	Matrix
WELL-1	CQ40198	DRINKING WATER
TB04012024-504	CQ40199	WATER
TB04012024-524	CQ40200	WATER

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 16, 2024

FOR: Attn: Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:	PS	04/01/24	8:10
Location Code:	STERLING	Received by:	SR1	04/01/24	17:05
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ40198
Phoenix ID: CQ40198

Project ID: SHEFFIELD GARDENS
Client ID: WELL-1

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Extraction for 525.3	Completed							04/04/24	W/W	E525.3	
Extraction for Diquat	Completed							04/03/24	W/W	E549	
Extraction of DW PCB	Completed							04/08/24	AC1/AC1	E508	
Extraction of DW Herbicides	Completed							04/04/24	D/D	E515	
Endothall											
Endothall	<5.0	5.0		ug/L		100		04/05/24	*	E548.1	C
EDB and DBCP Analysis											
1,2-Dibromo-3-Chloropropane (DBCP	ND	0.02	1	ug/L		0.2		04/03/24	CN	E504.1	
1,2-Dibromoethane (EDB)	ND	0.01	1	ug/L		0.02		04/03/24	CN	E504.1	
PCB Screen											
PCB-1016 (screen)	ND	0.076	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1221 (screen)	ND	0.095	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1232 (screen)	ND	0.095	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1242 (screen)	ND	0.095	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1248 (screen)	ND	0.095	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1254 (screen)	ND	0.095	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1260 (screen)	ND	0.095	1	ug/l		0.5		04/08/24	SC	E508	
PCB-1262 (screen)	ND	0.095	1	ug/l				04/08/24	SC	E508	
PCB-1268 (screen)	ND	0.095	1	ug/l				04/08/24	SC	E508	
Total PCBs (screen)	ND	0.076	1	ug/l				04/08/24	SC	E508	
QA/QC Surrogates											
%DCBP (Surrogate Rec)	62		1	%	NA	NA	NA	04/08/24	SC	30 - 150 %	
%DCBP (Surrogate Rec) (Confirmation)	52		1	%	NA	NA	NA	04/08/24	SC	30 - 150 %	

Project ID: SHEFFIELD GARDENS
Client ID: WELL-1

Phoenix I.D.: CQ40198

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
Herbicides											
2,4,5-T	ND	0.50	1	ug/L				04/05/24	KCA	E515.3	1
2,4,5-TP	ND	0.20	1	ug/L		50		04/05/24	KCA	E515.3	
2,4-D	ND	0.10	1	ug/L		70		04/05/24	KCA	E515.3	
Dalapon	ND	1.0	1	ug/L		200		04/05/24	KCA	E515.3	
Dicamba	ND	0.50	1	ug/L				04/05/24	KCA	E515.3	
Dichloroprop	ND	0.50	1	ug/L				04/05/24	KCA	E515.3	1
Dinoseb	ND	0.20	1	ug/L		7		04/05/24	KCA	E515.3	
Pentachlorophenol	ND	0.040	1	ug/L		1		04/05/24	KCA	E515.3	
Picloram	ND	0.10	1	ug/L		500		04/05/24	KCA	E515.3	
QA/QC Surrogates											
% DCAA	89		1	%	NA	NA	NA	04/05/24	KCA	70 - 130 %	
% DCAA (Confirmation)	84		1	%	NA	NA	NA	04/05/24	KCA	70 - 130 %	
Carbamates HPLC											
3-Hydroxycarbofuran	ND	0.50	1	ug/L				04/04/24	RM	E531.2	
Aldicarb	ND	0.50	1	ug/L		3		04/04/24	RM	E531.2	
Aldicarb Sulfone	ND	0.80	1	ug/L		2		04/04/24	RM	E531.2	
Aldicarb Sulfoxide	ND	0.50	1	ug/L		4		04/04/24	RM	E531.2	
Carbaryl	ND	0.50	1	ug/L				04/04/24	RM	E531.2	
Carbofuran	ND	0.90	1	ug/L		40		04/04/24	RM	E531.2	
Methomyl	ND	0.50	1	ug/L				04/04/24	RM	E531.2	
Oxamyl	ND	2.0	1	ug/L		200		04/04/24	RM	E531.2	
QA/QC Surrogates											
% BDMC	114		1	%	NA	NA	NA	04/04/24	RM	70 - 130 %	
Diquat											
Diquat	ND	0.40	1	ug/L		20		04/08/24	RM	E549.2	
Glyphosate	ND	5.0	1	ug/L		700		04/09/24	RM	E547	
Volatiles											
1,1,1,2-Tetrachloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,1,1-Trichloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,1,2,2-Tetrachloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,1,2-Trichloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,1,2-Trichlorotrifluoroethane	ND	0.50	1	ug/L				04/03/24	HM	E524.2	1
1,1-Dichloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,1-Dichloroethene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,1-Dichloropropene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2,3-Trichlorobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2,3-Trichloropropane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2,4-Trichlorobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2,4-Trimethylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2-Dichlorobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2-Dichloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,2-Dichloropropane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,3,5-Trimethylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,3-Dichlorobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
1,3-Dichloropropane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	

Project ID: SHEFFIELD GARDENS
Client ID: WELL-1

Phoenix I.D.: CQ40198

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference	
1,4-Dichlorobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
2,2-Dichloropropane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
2-Chlorotoluene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
4-Chlorotoluene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Benzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Bromobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Bromochloromethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Bromodichloromethane	ND	0.50	1	ug/L				04/03/24	HM	E524.2	
Bromoform	ND	0.50	1	ug/L				04/03/24	HM	E524.2	
Bromomethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Carbon tetrachloride	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Chlorobenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Chloroethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Chloroform	ND	0.50	1	ug/L				04/03/24	HM	E524.2	
Chloromethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
cis-1,2-Dichloroethene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
cis-1,3-Dichloropropene	ND	0.40	1	ug/L		5		04/03/24	HM	E524.2	
Dibromochloromethane	ND	0.50	1	ug/L				04/03/24	HM	E524.2	
Dibromomethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Dichlorodifluoromethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Ethylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Hexachlorobutadiene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Isopropylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
m&p-Xylene	ND	0.50	1	ug/L				04/03/24	HM	E524.2	
Methyl t-butyl ether (MTBE)	ND	0.50	1	ug/L		10		04/03/24	HM	E524.2	
Methylene chloride	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Naphthalene	ND	0.50	1	ug/L				04/03/24	HM	E524.2	
n-Butylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
n-Propylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
o-Xylene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
p-Isopropyltoluene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
sec-Butylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Styrene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
tert-Butylbenzene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Tetrachloroethene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Toluene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Total 1,3-Dichloropropene	ND	0.40	1	ug/L				04/03/24	HM	E524.2	1
Total Trihalomethanes	ND	0.50	1	ug/L		80		04/03/24	HM	E524.2	
Total Xylenes	ND	0.50	1	ug/L		10000		04/03/24	HM	E524.2	
trans-1,2-Dichloroethene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
trans-1,3-Dichloropropene	ND	0.40	1	ug/L		5		04/03/24	HM	E524.2	
Trichloroethene	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Trichlorofluoromethane	ND	0.50	1	ug/L		5		04/03/24	HM	E524.2	
Vinyl chloride	ND	0.50	1	ug/L		2		04/03/24	HM	E524.2	
QA/QC Surrogates											
% 1,2-dichlorobenzene-d4	92		1	%	NA	NA	NA	04/03/24	HM	70 - 130 %	
% Bromofluorobenzene	97		1	%	NA	NA	NA	04/03/24	HM	70 - 130 %	
Volatile Library Search	Completed							04/05/24	HM		

Ver 1

Project ID: SHEFFIELD GARDENS
Client ID: WELL-1

Phoenix I.D.: CQ40198

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Semivolatile Organic										
Benzo(a)pyrene	ND	0.02	1	ug/L		0.2		04/14/24	MH	E525.3
Bis(2-ethylhexyl)adipate	ND	0.57	1	ug/L		400		04/14/24	MH	E525.3
Bis(2-ethylhexyl)phthalate	ND	0.57	1	ug/L		6		04/14/24	MH	E525.3
Organophosphorus Pesticides										
Alachlor	ND	0.05	1	ug/L		2		04/14/24	MH	E525.3
Atrazine	ND	0.05	1	ug/L		3		04/14/24	MH	E525.3
Butachlor	ND	0.05	1	ug/L				04/14/24	MH	E525.3
Metolachlor	ND	0.05	1	ug/L				04/14/24	MH	E525.3
Metribuzin	ND	0.05	1	ug/L				04/14/24	MH	E525.3
Simazine	ND	0.05	1	ug/L		4		04/14/24	MH	E525.3
Pesticides										
Aldrin	ND	0.10	1	ug/L				04/14/24	MH	E525.3
Chlordane	ND	0.19	1	ug/L		2		04/14/24	MH	E525.3
Dieldrin	ND	0.03	1	ug/L				04/14/24	MH	E525.3
Endrin	ND	0.01	1	ug/L		2		04/14/24	MH	E525.3
Heptachlor	ND	0.04	1	ug/L		0.4		04/14/24	MH	E525.3
Heptachlor Epoxide	ND	0.02	1	ug/L		0.2		04/14/24	MH	E525.3
Hexachlorobenzene	ND	0.05	1	ug/L		1		04/14/24	MH	E525.3
Hexachlorocyclopentadiene	ND	0.05	1	ug/L		50		04/14/24	MH	E525.3
Lindane	ND	0.02	1	ug/L		0.2		04/14/24	MH	E525.3
Methoxychlor	ND	0.05	1	ug/L		40		04/14/24	MH	E525.3
Propachlor	ND	0.05	1	ug/L				04/14/24	MH	E525.3
Toxaphene	ND	0.95	1	ug/L		3		04/12/24	MH	E525.3
QA/QC Surrogates										
% 1,3-Dimethyl-2-nitrobenzene	91		1	%	NA	NA	NA	04/14/24	MH	70 - 130 %
% benzo(a)pyrene-d12	81		1	%	NA	NA	NA	04/14/24	MH	70 - 130 %
% Triphenylphosphate	96		1	%	NA	NA	NA	04/14/24	MH	70 - 130 %

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.
C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Maximum Contaminant Level (MCL) (Lower of): 40 CFR Part 141 MCLs; New York State Public Health Law, Section 225 Part 5. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

TIC:
*The sample chromatogram contains a sulfur dioxide background.

Endothall (E548.1) was analyzed by NY certified lab #11398.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 16, 2024
Reviewed and Released by: Anil Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 16, 2024

FOR: Attn: Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	PS	04/01/24	
Location Code:	STERLING	Received by:	SR1	04/01/24	17:05
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ40198
Phoenix ID: CQ40199

Project ID: SHEFFIELD GARDENS
Client ID: TB04012024-504

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
EDB and DBCP Analysis							
1,2-Dibromo-3-Chloropropane (DBCP	ND	0.02	ug/L	1	04/03/24	CN	E504.1
1,2-Dibromoethane (EDB)	ND	0.01	ug/L	1	04/03/24	CN	E504.1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

Comments:

TRIP BLANK INCLUDED.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
April 16, 2024
Reviewed and Released by: Anil Makol, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 16, 2024

FOR: Attn: Paul Scholar
Sterling Env. Engineering
24 Wade Road
Latham, NY 12110

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	PS	04/01/24	
Location Code:	STERLING	Received by:	SR1	04/01/24	17:05
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2023-76				

Laboratory Data

SDG ID: GCQ40198
Phoenix ID: CQ40200

Project ID: SHEFFIELD GARDENS
Client ID: TB04012024-524

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,1,1-Trichloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,1,2-Trichloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,1,2-Trichlorotrifluoroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	1
1,1-Dichloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,1-Dichloroethene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,1-Dichloropropene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2,3-Trichlorobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2,3-Trichloropropane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2,4-Trichlorobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2,4-Trimethylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2-Dichlorobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2-Dichloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,2-Dichloropropane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,3,5-Trimethylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,3-Dichlorobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,3-Dichloropropane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
1,4-Dichlorobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
2,2-Dichloropropane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
2-Chlorotoluene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
4-Chlorotoluene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Benzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Bromobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Bromochloromethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Bromodichloromethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	

Project ID: SHEFFIELD GARDENS
Client ID: TB04012024-524

Phoenix I.D.: CQ40200

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bromoform	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Bromomethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Carbon tetrachloride	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Chlorobenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Chloroethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Chloroform	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Chloromethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	04/02/24	HM	E524.2	
Dibromochloromethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Dibromomethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Dichlorodifluoromethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Ethylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Hexachlorobutadiene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Isopropylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
m&p-Xylene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Methyl t-butyl ether (MTBE)	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Methylene chloride	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Naphthalene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
n-Butylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
n-Propylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
o-Xylene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
p-Isopropyltoluene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
sec-Butylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Styrene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
tert-Butylbenzene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Tetrachloroethene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Toluene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Total 1,3-Dichloropropene	ND	0.40	ug/L	1	04/02/24	HM	E524.2	1
Total Trihalomethanes	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Total Xylenes	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	04/02/24	HM	E524.2	
Trichloroethene	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Trichlorofluoromethane	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
Vinyl chloride	ND	0.50	ug/L	1	04/02/24	HM	E524.2	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	91		%	1	04/02/24	HM	70 - 130 %	
% Bromofluorobenzene	94		%	1	04/02/24	HM	70 - 130 %	
Volatile Library Search	Completed				04/03/24	HM		

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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Phyllis Shiller, Laboratory Director
April 16, 2024
Reviewed and Released by: Anil Makol, Project Manager

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: WELL-1

Lab Name: Phoenix Environmental Labs Client: STERLING

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCQ4019

Matrix:(soil/water) DRINKING WATER Lab Sample ID: CQ40198

Sample wt/vol: 5 (g/mL) mL Lab File ID: 0403_21.D

Level: (low/med) Date Received: 04/01/24

% Moisture: not dec. 100 Date Analyzed: 04/03/24

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): n.a.

CONCENTRATION UNITS:
Number TICs found: 1 (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
007446-09-5	Sulfur dioxide			
	TIC:			
	*The sample chromatogram contains a sulfur dioxide background.			

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.
N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified
Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: TB04012024-524

Lab Name: Phoenix Environmental Labs Client: STERLING

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCQ4019

Matrix:(soil/water) WATER Lab Sample ID: CQ40200

Sample wt/vol: 5 (g/mL) mL Lab File ID: 0402_15.D

Level: (low/med) Date Received: 04/01/24

% Moisture: not dec. 100 Date Analyzed: 04/02/24

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

QA/QC Report

April 16, 2024

QA/QC Data

SDG I.D.: GCQ40198

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 725112 (ug/L), QC Sample No: CQ40199 (CQ40198, CQ40199)										
EDB and DBCP Analysis - Drinking Water										
1,2-Dibromo-3-Chloropropane (DB	ND	0.02	94	98	4.2	90			70 - 130	20
1,2-Dibromoethane (EDB)	ND	0.01	98	98	0.0	101			70 - 130	20
Comment:										
This batch consists of a Blank, LCS, LCSD and MS.										
QA/QC Batch 725337 (ug/L), QC Sample No: CQ37662 (CQ40198)										
Herbicides - Drinking Water										
2,4,5-T	ND	0.50	79			79			70 - 130	20
2,4,5-TP	ND	0.20	80			78			70 - 130	20
2,4-D	ND	0.10	82			81			70 - 130	20
Dalapon	ND	1.0	83			83			70 - 130	20
Dicamba	ND	0.50	85			84			70 - 130	20
Dichloroprop	ND	0.50	84			108			70 - 130	20
Dinoseb	ND	0.20	84			82			70 - 130	20
Pentachlorophenol	ND	0.040	79			77			70 - 130	20
Picloram	ND	0.10	77			76			70 - 130	20
% DCAA	94	%	87			86			70 - 130	20
% DCAA (Confirmation)	87	%	84			85			70 - 130	20
QA/QC Batch 725303 (ug/L), QC Sample No: CQ39836 (CQ40198)										
Semivolatile Organic Compounds - Drinking Water										
Alachlor	ND	0.05	86			94	94	0.0	50 - 150	20
Aldrin	ND	0.10	69			76	75	1.3	50 - 150	20
Atrazine	ND	0.05	86			89	88	1.1	50 - 150	20
Benzo(a)pyrene	ND	0.02	76			85	82	3.6	50 - 150	20
Bis(2-ethylhexyl)adipate	ND	0.60	66			77	75	2.6	50 - 150	20
Bis(2-ethylhexyl)phthalate	ND	0.60	84			92	86	6.7	50 - 150	20
Butachlor	ND	0.05	87			93	95	2.1	50 - 150	20
Chlordane	ND	0.03	77			81	86	6.0	50 - 150	20
Dieldrin	ND	0.03	86			90	96	6.5	50 - 150	20
Endrin	ND	0.01	89			100	97	3.0	50 - 150	20
Heptachlor	ND	0.04	81			91	91	0.0	50 - 150	20
Heptachlor Epoxide	ND	0.02	78			88	91	3.4	50 - 150	20
Hexachlorobenzene	ND	0.05	68			74	76	2.7	60 - 130	20
Hexachlorocyclopentadiene	ND	0.05	106			113	117	3.5	60 - 130	20
Lindane	ND	0.02	89			95	94	1.1	50 - 150	20
Methoxychlor	ND	0.05	110			121	124	2.4	50 - 150	20
Metolachlor	ND	0.05	83			94	92	2.2	50 - 150	20
Metribuzin	ND	0.05	81			95	91	4.3	50 - 150	20
Propachlor	ND	0.05	85			90	90	0.0	50 - 150	20
Simazine	ND	0.05	85			84	93	10.2	50 - 150	20
Toxaphene	ND	1.0	94			108	98	9.7	50 - 150	20

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% 1,3-Dimethyl-2-nitrobenzene	79	%	82			80	81	1.2	50 - 150	20	
% benzo(a)pyrene-d12	76	%	78			76	74	2.7	50 - 150	20	
% Triphenylphosphate	89	%	89			86	85	1.2	50 - 150	20	

Comment:

Because insufficient sample volume was received, tap water, collected and dechlorinated in sample containers, was used as the MS and MSD.
g-chlordane recovery is reported as chlordane in the LCS

QA/QC Batch 725648 (ug/L), QC Sample No: CQ42147 (CQ40198)

Carbamates HPLC - Drinking Water

3-Hydroxycarbofuran	ND	0.50	85	98	14.2	104	104	0.0	70 - 130	20	
Aldicarb	ND	0.50	89	103	14.6	117	120	2.5	70 - 130	20	
Aldicarb Sulfone	ND	0.80	87	102	15.9	96	114	17.1	70 - 130	20	
Aldicarb Sulfoxide	ND	0.50	88	107	19.5	115	125	8.3	70 - 130	20	
Carbaryl	ND	0.50	90	106	16.3	107	116	8.1	70 - 130	20	
Carbofuran	ND	0.90	86	104	18.9	105	114	8.2	70 - 130	20	
Methomyl	ND	0.50	84	108	25.0	115	118	2.6	70 - 130	20	r
Oxamyl	ND	2.0	93	118	23.7	114	118	3.4	70 - 130	20	r
% BDMC	116	%	80	80	0.0	116	117	0.9	70 - 130	20	

QA/QC Batch 726860 (ug/L), QC Sample No: CQ45087 (CQ40198)

Glyphosate - Drinking Water

Glyphosate	ND	5.0	75	73	2.7	77	71	8.1	70 - 130	20	

QA/QC Batch 725113 (ug/L), QC Sample No: CQ39503 (CQ40198)

Diquat - Drinking Water

Diquat	ND	0.40	74	72	2.7	85	86	1.2	70 - 130	30	

QA/QC Batch 725821 (ug/l), QC Sample No: CQ41413 (CQ40198)

PCB Screen - Drinking Water

PCB-1016 (screen)	ND	0.080	84			60			40 - 140	20	
PCB-1221 (screen)	ND	0.10							40 - 140	20	
PCB-1232 (screen)	ND	0.10							40 - 140	20	
PCB-1242 (screen)	ND	0.10							40 - 140	20	
PCB-1248 (screen)	ND	0.10							40 - 140	20	
PCB-1254 (screen)	ND	0.10							40 - 140	20	
PCB-1260 (screen)	ND	0.10	77			57			40 - 140	20	
PCB-1262 (screen)	ND	0.10							40 - 140	20	
PCB-1268 (screen)	ND	0.10							40 - 140	20	
%DCBP (Surrogate Rec)	60	%	79			48			30 - 150	20	
%DCBP (Surrogate Rec) (Confirma	57	%	72			51			30 - 150	20	

QA/QC Batch 725127 (ug/L), QC Sample No: CQ40243 (CQ40200)

Volatiles - Water

1,1,1,2-Tetrachloroethane	ND	0.50	101	107	5.8				70 - 130	30	
1,1,1-Trichloroethane	ND	0.50	100	104	3.9				70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	0.50	98	104	5.9				70 - 130	30	
1,1,2-Trichloroethane	ND	0.50	102	106	3.8				70 - 130	30	
1,1-Dichloroethane	ND	0.50	102	108	5.7				70 - 130	30	
1,1-Dichloroethene	ND	0.50	99	106	6.8				70 - 130	30	
1,1-Dichloropropene	ND	0.40	100	106	5.8				70 - 130	30	
1,2,3-Trichlorobenzene	ND	0.50	99	105	5.9				70 - 130	30	
1,2,3-Trichloropropane	ND	0.50	98	104	5.9				70 - 130	30	
1,2,4-Trichlorobenzene	ND	0.50	100	108	7.7				70 - 130	30	
1,2,4-Trimethylbenzene	ND	0.50	102	106	3.8				70 - 130	30	

QA/QC Data

SDG I.D.: GCQ40198

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,2-Dichlorobenzene	ND	0.50	100	105	4.9				70 - 130	30
1,2-Dichloroethane	ND	0.50	100	107	6.8				70 - 130	30
1,2-Dichloropropane	ND	0.50	102	108	5.7				70 - 130	30
1,3,5-Trimethylbenzene	ND	0.50	102	107	4.8				70 - 130	30
1,3-Dichlorobenzene	ND	0.50	101	105	3.9				70 - 130	30
1,3-Dichloropropane	ND	0.50	99	104	4.9				70 - 130	30
1,4-Dichlorobenzene	ND	0.50	102	104	1.9				70 - 130	30
2,2-Dichloropropane	ND	0.50	103	107	3.8				70 - 130	30
2-Chlorotoluene	ND	0.50	100	105	4.9				70 - 130	30
4-Chlorotoluene	ND	0.50	100	105	4.9				70 - 130	30
Benzene	ND	0.50	100	105	4.9				70 - 130	30
Bromobenzene	ND	0.50	99	102	3.0				70 - 130	30
Bromochloromethane	ND	0.50	99	104	4.9				70 - 130	30
Bromodichloromethane	ND	0.50	103	109	5.7				70 - 130	30
Bromoform	ND	0.50	98	107	8.8				70 - 130	30
Bromomethane	ND	0.50	110	111	0.9				70 - 130	30
Carbon tetrachloride	ND	0.50	98	106	7.8				70 - 130	30
Chlorobenzene	ND	0.50	100	104	3.9				70 - 130	30
Chloroethane	ND	0.50	111	116	4.4				70 - 130	30
Chloroform	ND	0.50	103	108	4.7				70 - 130	30
Chloromethane	ND	0.50	122	125	2.4				70 - 130	30
cis-1,2-Dichloroethene	ND	0.50	100	104	3.9				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	100	106	5.8				70 - 130	30
Dibromochloromethane	ND	0.50	100	106	5.8				70 - 130	30
Dibromomethane	ND	0.50	98	103	5.0				70 - 130	30
Dichlorodifluoromethane	ND	0.50	103	108	4.7				70 - 130	30
Ethylbenzene	ND	0.50	100	105	4.9				70 - 130	30
Hexachlorobutadiene	ND	0.40	99	106	6.8				70 - 130	30
Isopropylbenzene	ND	0.50	99	103	4.0				70 - 130	30
m&p-Xylene	ND	0.50	102	107	4.8				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	0.50	100	106	5.8				70 - 130	30
Methylene chloride	ND	0.50	97	100	3.0				70 - 130	30
Naphthalene	ND	0.50	96	105	9.0				70 - 130	30
n-Butylbenzene	ND	0.50	103	108	4.7				70 - 130	30
n-Propylbenzene	ND	0.50	101	105	3.9				70 - 130	30
o-Xylene	ND	0.50	99	106	6.8				70 - 130	30
p-Isopropyltoluene	ND	0.50	102	107	4.8				70 - 130	30
sec-Butylbenzene	ND	0.50	101	106	4.8				70 - 130	30
Styrene	ND	0.50	102	108	5.7				70 - 130	30
tert-Butylbenzene	ND	0.50	101	105	3.9				70 - 130	30
Tetrachloroethene	ND	0.50	99	106	6.8				70 - 130	30
Toluene	ND	0.50	100	104	3.9				70 - 130	30
trans-1,2-Dichloroethene	ND	0.50	103	108	4.7				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	103	109	5.7				70 - 130	30
Trichloroethene	ND	0.50	101	104	2.9				70 - 130	30
Trichlorofluoromethane	ND	0.50	105	107	1.9				70 - 130	30
Trichlorotrifluoroethane	ND	0.50	103	112	8.4				70 - 130	30
Vinyl chloride	ND	0.50	112	120	6.9				70 - 130	30
% 1,2-dichlorobenzene-d4	89	%	99	98	1.0				70 - 130	30
% Bromofluorobenzene	93	%	98	99	1.0				70 - 130	30

Comment:

This batch consists of a blank, LCS and LCSD.

QA/QC Batch 725552 (ug/L), QC Sample No: CQ40474 (CQ40198)

Volatiles - Drinking Water

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,1,1,2-Tetrachloroethane	ND	0.50	104	92	12.2				70 - 130	30
1,1,1-Trichloroethane	ND	0.50	105	93	12.1				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50	102	93	9.2				70 - 130	30
1,1,2-Trichloroethane	ND	0.50	103	94	9.1				70 - 130	30
1,1-Dichloroethane	ND	0.50	105	95	10.0				70 - 130	30
1,1-Dichloroethene	ND	0.50	107	96	10.8				70 - 130	30
1,1-Dichloropropene	ND	0.40	104	93	11.2				70 - 130	30
1,2,3-Trichlorobenzene	ND	0.50	101	93	8.2				70 - 130	30
1,2,3-Trichloropropane	ND	0.50	101	90	11.5				70 - 130	30
1,2,4-Trichlorobenzene	ND	0.50	102	94	8.2				70 - 130	30
1,2,4-Trimethylbenzene	ND	0.50	107	95	11.9				70 - 130	30
1,2-Dichlorobenzene	ND	0.50	104	93	11.2				70 - 130	30
1,2-Dichloroethane	ND	0.50	101	93	8.2				70 - 130	30
1,2-Dichloropropane	ND	0.50	102	92	10.3				70 - 130	30
1,3,5-Trimethylbenzene	ND	0.50	106	96	9.9				70 - 130	30
1,3-Dichlorobenzene	ND	0.50	105	92	13.2				70 - 130	30
1,3-Dichloropropane	ND	0.50	101	92	9.3				70 - 130	30
1,4-Dichlorobenzene	ND	0.50	105	92	13.2				70 - 130	30
2,2-Dichloropropane	ND	0.50	108	94	13.9				70 - 130	30
2-Chlorotoluene	ND	0.50	105	93	12.1				70 - 130	30
4-Chlorotoluene	ND	0.50	103	93	10.2				70 - 130	30
Benzene	ND	0.50	104	93	11.2				70 - 130	30
Bromobenzene	ND	0.50	101	91	10.4				70 - 130	30
Bromochloromethane	ND	0.50	101	90	11.5				70 - 130	30
Bromodichloromethane	ND	0.50	103	93	10.2				70 - 130	30
Bromoform	ND	0.50	103	94	9.1				70 - 130	30
Bromomethane	ND	0.50	116	100	14.8				70 - 130	30
Carbon tetrachloride	ND	0.50	102	90	12.5				70 - 130	30
Chlorobenzene	ND	0.50	102	92	10.3				70 - 130	30
Chloroethane	ND	0.50	115	104	10.0				70 - 130	30
Chloroform	ND	0.50	105	95	10.0				70 - 130	30
Chloromethane	ND	0.50	128	116	9.8				70 - 130	30
cis-1,2-Dichloroethene	ND	0.50	97	90	7.5				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	101	91	10.4				70 - 130	30
Dibromochloromethane	ND	0.50	103	92	11.3				70 - 130	30
Dibromomethane	ND	0.50	99	90	9.5				70 - 130	30
Dichlorodifluoromethane	ND	0.50	112	99	12.3				70 - 130	30
Ethylbenzene	ND	0.50	104	93	11.2				70 - 130	30
Hexachlorobutadiene	ND	0.40	104	94	10.1				70 - 130	30
Isopropylbenzene	ND	0.50	102	93	9.2				70 - 130	30
m&p-Xylene	ND	0.50	105	95	10.0				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	0.50	100	92	8.3				70 - 130	30
Methylene chloride	ND	0.50	98	87	11.9				70 - 130	30
Naphthalene	ND	0.50	100	93	7.3				70 - 130	30
n-Butylbenzene	ND	0.50	109	96	12.7				70 - 130	30
n-Propylbenzene	ND	0.50	107	97	9.8				70 - 130	30
o-Xylene	ND	0.50	103	93	10.2				70 - 130	30
p-Isopropyltoluene	ND	0.50	106	96	9.9				70 - 130	30
sec-Butylbenzene	ND	0.50	106	95	10.9				70 - 130	30
Styrene	ND	0.50	105	95	10.0				70 - 130	30

QA/QC Data

SDG I.D.: GCQ40198

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
tert-Butylbenzene	ND	0.50	104	94	10.1				70 - 130	30
Tetrachloroethene	ND	0.50	106	94	12.0				70 - 130	30
Toluene	ND	0.50	101	93	8.2				70 - 130	30
trans-1,2-Dichloroethene	ND	0.50	109	97	11.7				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	104	95	9.0				70 - 130	30
Trichloroethene	ND	0.50	103	93	10.2				70 - 130	30
Trichlorofluoromethane	ND	0.50	106	95	10.9				70 - 130	30
Trichlorotrifluoroethane	ND	0.50	111	99	11.4				70 - 130	30
Vinyl chloride	ND	0.50	122	106	14.0				70 - 130	30
% 1,2-dichlorobenzene-d4	90	%	100	103	3.0				70 - 130	30
% Bromofluorobenzene	95	%	98	99	1.0				70 - 130	30

Comment:

This batch consists of a blank, LCS and LCSD.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 16, 2024

Tuesday, April 16, 2024

Criteria: NY: DW

State: NY

Sample Criteria Exceedances Report

GCQ40198 - STERLING

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

April 16, 2024 SDG I.D.: GCQ40198

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

PCB Narration

AU-ECD29 04/08/24-1: CQ40198

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CQ40198
Preceding CC 408B023 - DCBP SURR 19%L (15%)
Succeeding CC 408B036 - None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

April 16, 2024

SDG I.D.: GCQ40198

The samples in this delivery group were received at 1.7°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes ☑ No ☐
Coolant: IPK ☑ ICE ☐ No ☐

NY/NJ/PA CHAIN OF CUSTODY RECORD

Temp 4.7 °C Pg of

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: Makrina Nolan, makrina@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Contact Options:
☐ Phone: 518 456-4900
☐ Fax:
☒ Email: paul.scholar @sterlingenvironmental.com

Customer: Sterling Environmental Engineering, P.C.
Address: 24 Wade Road
Latham, NY 12100

Project: Sheffield Gardens
Report to: Paul Scholar
Invoice to: Sterling
QUOTE # :

Project P.O: 2023-76

This section MUST be completed with Bottle Quantities.

Sampler's Signature: PWS Date: 4-1-24

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	504 (EDB)	508 (PCB)	515 (Herbicides)	531 (Carbamates)	525 (Semi Volatiles and Pest)	547 (Glyphosate)	549 (Diquat)	548 (Endothall)	524 (VOC)	40 ml Vials AS IS	Liter Amber AS IS	8oz Amber AS IS	60 ml Amber Vials C6H7KO7	Liter Amber AA, K, Citrate, EDTA	60 ml Amber Vials Na2S2O3	500ml Brown Plastic Na2S2O3	40ml Amber Vials Na2S2O3	40ml HCL	
40198	Well-1	DW	4-1-24	810	X	X	X	X	X	X	X	X	X	2	1	1	2	2	2	2	2	3	17 total
40199	TB040/2024-524LW		↓	—	X										2								
40250	TB040/2024-524LW		↓	—									X									2	

PWS PWS

Relinquished by:	Accepted by:	Date:	Time:
PWS		4-1-24	1140
			3cw

Comments, Special Requirements or Regulations:

4/1/24 17:05

*MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.

Data Format:
☒ Phoenix Std Report ☐ EQuIS
☒ Excel ☐ NJ Hazsite EDD
☒ PDF ☐ NY EZ EDD (ASP)
☐ GIS/Key ☐ Other

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 4 Days*
☐ 5 Days*
☒ Standard
* SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

Data Package:
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

NY
☐ TOGS GW
☐ CP-51 SOIL
☐ 375SCO Unrestricted Soil
☐ 375SCO Residential Soil
☐ 375SCO Residential Restricted Soil
☐ 375SCO Commercial Soil
☐ 375SCO Industrial Soil
☒ Subpart 5 DW

PA
☐ Clean Fill Limits
☐ PA-GW
☐ Reg Fill Limits
☐ PA Soil Restricted
☐ PA Soil non-restricted

State Samples Collected?
NY

GC# 40198

PHOENIX
Environmental Laboratories, Inc.

SOC Kit Quantity List

Please list the quantity of each bottle you are submitting to the laboratory in the appropriate space provided below and return this document with your samples and Chain of Custody.

The SOC Kit Quantity List must be submitted to facilitate timely processing of your samples. If you need a replacement copy or have any other inquiries about this process, please contact Krystal Houle at khoule@phoenixlabs.com or 860-645-1102.

531 2 (2) 60mL Amber Vials *Chlor. – C6H7K07/Na2S203 or Non-Chlor. – C6H7K07*

547 2 (2) 60mL Amber Vials *Na2S203*

504 2 (2) 40mL Vials *Chlor. – Na2S203 or Non-Chlor. – As Is*

548 2 (2) 40 mL Amber Vials *Na2S203*

524 3 (3) 40mL HCL Vials *Chlor. – HCL/Ascorbic Acid or Non-Chlor. – HCL*

525 2 (2) Liter Ambers *AA, K Citrate, EDTA*

508 1 (1) Liter Amber *Chlor. – Na2S203 or Non-Chlor. – As Is*

515 1 (1) 8oz Amber *Chlor. – Na2S203 or Non-Chlor. – As Is*

549 2 (2) 500mL Amber Plastic *Na2S203*

DIOXIN NA (2) Liter Amber *As Is*

TRIP BLANKS (504) 2 (2) 40mL Vials *Chlor. – Na2S203 or Non-Chlor. – As Is*

TRIP BLANKS (524) 2 (2) 40mL HCL Vials

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Geoghegan
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
Manchester, Connecticut 06040

Generated 4/9/2024 12:29:58 AM

JOB DESCRIPTION

CQ40198

JOB NUMBER

810-99075-1

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend IN 46617

See page two for job notes and contact information.

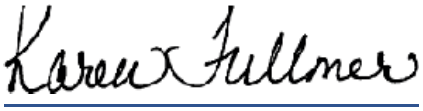
Eurofins Eaton Analytical South Bend

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Authorization



Generated
4/9/2024 12:29:58 AM

Authorized for release by
Karen Fullmer, Project Manager
Karen.Fullmer@et.eurofinsus.com
(574)233-4777

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 810-99075-1 Eurofins Eaton Analytical South Bend

Job Narrative
810-99075-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 4/3/2024 9:40 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: CQ40198

Job ID: 810-99075-1

Client Sample ID: CQ40198 **Lab Sample ID: 810-99075-1**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-99075-1
Project/Site: CQ40198

Client Sample ID: CQ40198
Lab Sample ID: 810-99075-1
Date Collected: 04/01/24 08:10
Matrix: Drinking Water
Date Received: 04/03/24 09:40

Method: EPA 548.1 - Endothall (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endothall	<5.0		5.0		ug/L		04/04/24 08:25	04/05/24 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*103*		*70 - 130*	*04/04/24 08:25*	*04/05/24 17:01*	*1*

Surrogate Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: CQ40198

Job ID: 810-99075-1

Method: 548.1 - Endothall (GC/MS)

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCPAA (70-130)								
810-99075-1	CQ40198	103								
LCS 810-94405/2-A	Lab Control Sample	101								
LLCS 810-94405/3-A	Lab Control Sample	93								
MB 810-94405/1-A	Method Blank	105								

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-99075-1
Project/Site: CQ40198

Method: 548.1 - Endothall (GC/MS)

Lab Sample ID: MB 810-94405/1-A
Matrix: Drinking Water
Analysis Batch: 94611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 94405

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endothall	<5.0		5.0		ug/L		04/04/24 08:25	04/05/24 16:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*105*		*70 - 130*	*04/04/24 08:25*	*04/05/24 16:30*	*1*

Lab Sample ID: LCS 810-94405/2-A
Matrix: Drinking Water
Analysis Batch: 94611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94405

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endothall			100	111		ug/L		111	69 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*101*		*70 - 130*

Lab Sample ID: LLCS 810-94405/3-A
Matrix: Drinking Water
Analysis Batch: 94611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 94405

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endothall			5.00	6.38		ug/L		128	50 - 150		

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*93*		*70 - 130*

QC Association Summary

Client: Phoenix Environmental Laboratories, Inc.
Job ID: 810-99075-1
Project/Site: CQ40198

GC/MS Semi VOA

Prep Batch: 94405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-99075-1	CQ40198	Total/NA	Drinking Water	548.1	
MB 810-94405/1-A	Method Blank	Total/NA	Drinking Water	548.1	
LCS 810-94405/2-A	Lab Control Sample	Total/NA	Drinking Water	548.1	
LLCS 810-94405/3-A	Lab Control Sample	Total/NA	Drinking Water	548.1	

Analysis Batch: 94611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-99075-1	CQ40198	Total/NA	Drinking Water	548.1	94405
MB 810-94405/1-A	Method Blank	Total/NA	Drinking Water	548.1	94405
LCS 810-94405/2-A	Lab Control Sample	Total/NA	Drinking Water	548.1	94405
LLCS 810-94405/3-A	Lab Control Sample	Total/NA	Drinking Water	548.1	94405

Lab Chronicle

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: CQ40198

Job ID: 810-99075-1

Client Sample ID: CQ40198

Date Collected: 04/01/24 08:10
Date Received: 04/03/24 09:40

Lab Sample ID: 810-99075-1

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	548.1			94405	EP	EA SB	04/04/24 08:25
Total/NA	Analysis	548.1		1	94611	CM	EA SB	04/05/24 17:01

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: Phoenix Environmental Laboratories, Inc. Job ID: 810-99075-1
Project/Site: CQ40198

Laboratory: Eurofins Eaton Analytical South Bend

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11398	04-01-25

Method Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: CQ40198

Job ID: 810-99075-1

Method	Method Description	Protocol	Laboratory
548.1	Endothall (GC/MS)	EPA	EA SB
548.1	Extraction of Endothall	EPA-DW	EA SB

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Sample Summary

Client: Phoenix Environmental Laboratories, Inc.
Project/Site: CQ40198

Job ID: 810-99075-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-99075-1	CQ40198	Drinking Water	04/01/24 08:10	04/03/24 09:40

Cooler: Yes ☐ No ☐
Coolant: IPK ☐ ICE ☐ No ☐

Temp °C Pg of

810-99075 Chain of Custody

CHAIN OF CUSTODY RECORD

Page 1 of 1

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax: 860-645-0823
☐ Phone: 800-827-5426
☐ Email: HelenG@PhoenixLabs.com

Customer: Eurofins Eaton Analytical
Address: 110 South Hill Street
South Bend, IN
(574) 472-5567

Project #: GCQ40198
Report to: HelenG@PhoenixLabs.com / Helen Geoghegan
Invoice to: AccountsPayable@PhoenixLabs.com
Quote# :

Project P.O: GCQ40198

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

Phoenix Sample ID	Sample Comment	Sample Matrix	Date Sampled	Time Sampled	Endothall E548.1	40ml VOA Vial w/Na2S2O3
CQ40198		DW	4/1/2024	8:10 AM	x	2
	Client Provided Sample Container					

Relinquished by:	Accepted by:	Date:	Time:
[signature]	UPS	4/2/24	
[signature]	[signature]	4/3/24	0943

Turnaround:
☐ 1 Day
☐ 2 Days
☐ 3 Days
☐ 5 Days
☐ 10 Days
☒ Standard
☐ Other_____

Report Type:
☒ Standard PDF
☐ Full Data Package
☐ NJ Reduced Deliverable
☐ NJ Full Deliverable
☐ NY ASP B

EDD Format:
☐ Excel
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other:_____

State Criteria:
Initial Temp: 2.0
Corrected Temp: 3.3
NY: Residential DW
IR Gun # 2514

Comments, Special Requirements or Regulations:

Please send notice as soon as possible not exceeding 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration.

Please notify Phoenix Environmental Laboratories, Inc. immediately and prior to conducting analysis if certification is not held for the analyses requested.

What State were samples collected?
NY

Login Sample Receipt Checklist

Client: Phoenix Environmental Laboratories, Inc.

Job Number: 810-99075-1

Login Number: 99075
List Number: 1
Creator: Moore, Gary

List Source: Eurofins Eaton Analytical South Bend

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	False	Client provided containers