



Date: May 8, 2025

Boil Water Notice Summary and Next Steps

SLO County Public Works continues to work with the state and partner agencies on investigating a cause of the April 30 boil notice that affected communities that receive water from the Lopez Project. Frequent and proactive routine testing helped the County quickly identify the presence of bacteria, which triggered the state to issue the boil notice. To provide a deeper understanding of why the state required that swift protective action, the County has released a timeline of the incident and subsequent actions that are in place to ensure your water continues to be safe for drinking.

What is the County Flood Control and Water Conservation District Zone 3?

This district is also called Lopez Project or the Lopez Water Treatment Plant. For purposes of this update, it will be referred to as Lopez Project. Among other responsibilities, Lopez Project manages Lopez Dam, treats the water supply from Lopez Lake, and distributes this water to Lopez Project members, who are comprised of the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, the community service districts of Oceano and Avila Beach, and County Service Area 12. Lopez Dam was constructed in 1967 and became operational in 1969. The Lopez Water Treatment Plant (WTP) is permitted to treat 6.7 million gallons of water, but on average, 4 –5 million gallons per day is treated daily and delivered to 50,000 residents. Lopez Project is managed by the County Public Works Department (Public Works).

Where Does My Water Come From?

Source water for Lopez Project comes from Lopez Lake, located approximately 10 miles east of Arroyo Grande. Lopez Lake water is conveyed 3 miles by pipeline to the Lopez Terminal Reservoir adjacent to the WTP. Water remains in the Terminal for over a month. During that time, particles naturally settle out of the water, and exposure to sunlight helps reduce the risk of bacterial and viral contamination from human activity in Lopez Lake.

After this natural settling process, the water enters the Lopez Water Treatment Plant, where it undergoes several treatment steps to make it safe to drink:

1. Chemicals are added to help small particles clump together.
2. The water goes through a process called dissolved air flotation, which removes suspended solids and other contaminants.
3. Chlorine dioxide and then chlorine are added to disinfect the water.
4. The water passes through membrane filters, which remove any remaining particles and microscopic contaminants.
5. After filtration, chlorine and ammonia are added to create chloramines, a long-lasting disinfectant that helps keep the water safe as it travels through the system.
6. Water quality parameters are tested daily.
7. The treated water then flows into a drinking water reservoir.
8. The water is then delivered to Lopez Project participants through the Lopez distribution pipeline.

How Does the Lopez Distribution Pipeline Work?

The Lopez Project is a wholesale water system. A wholesale water system is a public water system that supplies water to other public water systems, which in turn distribute it to customers.

After water leaves the Lopez WTP, it is gravity fed through a 25-mile pipeline where it can be delivered through multiple turnouts for the Lopez Project participants who are retail water suppliers, and they provide water directly to their customers.

What Happened?

As part of routine water testing, samples were collected on April 28, 2025, from thirteen (13) locations in the Lopez distribution system. Test results became available the next day, April 29, and showed that five (5) sites tested positive for total coliform bacteria. One (1) of those sites also tested positive for *E. coli*, a bacterium that can sometimes cause illness. A summary of the test results is explained in detail below.

Public Works immediately notified the State Water Resources Control Board Division of Drinking Water (Division of Drinking Water) and Lopez Project participants. Public Works began retesting the system.

On April 30, the next set of test results showed that two (2) locations still tested positive for total coliform and zero (0) positive for *E. coli*.

Because these follow-up results still showed the presence of coliform bacteria after one (1) earlier sample tested positive for *E. coli*, the Division of Drinking Water required Public Works to issue a Boil Water Notice to the Lopez Project participants in order to protect public health. It is important to note that all local water agencies that tested their distribution systems also reported no contamination during the event.

Working with the Lopez Project participants, Public Works and County Office of Emergency Services (OES) notified impacted communities. Nearly 50,000 residents were notified through AlertSLO, Reverse 911, and Wireless Emergency Alerts (WEA). As these systems do not reach 100% of the population, news media and social media were also utilized. Additionally, County Environmental Health was on-site in the impacted communities doing outreach to restaurants and other food establishments. They notified and assisted over 150 businesses.

Public Works continues to work with the Department of Drinking Water in an attempt to identify the source of contamination. At the time of posting this document, the source has not yet been identified.

Daily Summary of Test Results:

As required by the Division of Drinking Water, the County continued daily sampling of the pipeline until there were two (2) consecutive sets of samples over a 48-hour period showing no total coliform or *E. coli*. This was the minimum regulatory time period necessary to remove the boil notice.

- **April 28:** Five (5) of thirteen (13) sites positive for total coliform, one (1) of the five (5) coliform-positive samples also tested positive for *E. coli*.
- **April 29:** Two (2) of thirteen (13) sites positive for total coliform, *no E. coli*.
- **April 30:** Two (2) of thirteen (13) sites positive for total coliform, *no E. coli*.
- **May 1:** All thirteen (13) testing sites showed no presence of total coliform or *E. coli*.
- **May 2:** All thirteen (13) testing sites showed no presence of total coliform or *E. coli*.

Important Notes:

- Delivered water from the water treatment plant was tested every day—no presence of total coliform or *E. coli* was detected entering the pipeline.
- All local water agencies that tested their distribution systems also reported no contamination during the event.

The test results and sampling locations are included at the end of this report.

What Are Coliform Bacteria?

Coliform bacteria are naturally found in the environment and are used to indicate possible contamination in a water system. While not all coliform bacteria are harmful, their presence can mean other pathogens like *E. coli* may also be present.

E. coli in drinking water can indicate recent sewage or animal waste contamination. While most *E. coli* strains are harmless, some can cause illness. Ingestion of *E. coli*-contaminated water can lead to symptoms like diarrhea, stomach cramps, and nausea. Public water systems are required to notify consumers if their water may be unsafe.

When these bacteria are detected, follow-up testing is required according to Division of Drinking Water regulations to ensure the water's safety.

Why Did It Take Two Days From the First Test to the Issuance of the Boil Notice?

The testing process for total coliform and *E. coli* takes time. Laboratories performing this testing are certified by the California Environmental Laboratory Accreditation Program and may use a range of approved methods. Most water systems, including the Public Works water lab, select methods that provide results within 18- 24 hours. These test methods can detect a single viable coliform or *E. coli* organism per sample.

Tests for bacteria take time because they require an incubation period for accurate detection and identification, if present. Routine water samples were collected on the afternoon of April 28, and the results were available approximately 24 hours later on April 29. A second set of bacteriological samples was collected on the afternoon of April 29 to confirm the first set of results. These test results were available approximately 18 hours later on Wednesday, April 30. Once Public Works received confirmation, the department notified the Lopez Project participants and issued the Boil Water Notice.

To rule out a false positive or contaminated testing equipment and not unnecessarily issue a boil notice, the second test is required to verify the existence of the bacteria. The entire process was monitored and guided by the Division of Drinking Water under their regulations.

What Are We Doing to Fix the Problem?

Although the water treatment plant continues to meet all State and Federal standards, Public Works is taking extra precautions. Here's what Public Works has done and is continuing to do:

- Retested the pipeline and water at multiple locations
- Reviewed water quality parameters at each site
- Audited laboratory procedures
- Inspected for leaks, backflow issues, and cross-connections on the Lopez distribution pipeline, with inspections by foot and using drones
- Conducted a full assessment of the treatment and distribution systems with the Division of Drinking Water on May 2, 2025
- The Lopez distribution pipeline will convert to free chlorine, a stronger disinfectant, May 7 – 28
- Continued communication with the Division of Drinking Water on identifying the source

Why Did Some Areas Have Their Boil Water Notices Lifted Sooner?

On April 30, several communities (Arroyo Grande, Grover Beach, Oceano Community Services District, and San Miguelito Mutual Water Company) discontinued deliveries from the Lopez water system and switched to other water sources.

They began extensive testing within their water system and confirmed two (2) rounds of clean samples, allowing the Division of Drinking Water to lift their boil water notices on May 2.

Other areas, including Pismo Beach, Avila Beach Community Services District, and CSA 12 continued to take water deliveries from the Lopez water system because they did not have another source of water available. Although these communities also performed extensive testing and confirmed clean samples in their distribution systems, they had to wait for the Lopez distribution pipeline to clear before the boil water notice could be cancelled, which occurred one day later on May 3.

What Are We Doing to Keep Your Water Safe?

Public Works will continue to:

- Perform routine testing throughout the system
- Perform frequent inspections to identify potential problems like leaks, corrosion, or damage to pipes and infrastructure
- Monitor system operations for any issues including low pressure or unusual water quality and address them promptly
- Comply with all drinking water regulations
- Conduct an assessment of our response to this specific water notice event and make improvements where needed

To provide an added level of protection, Public Works will temporarily switch to free chlorine instead of chloramines in the distribution system. This will be carried out in coordination with other Lopez Project participants that use Lopez water.

- Free chlorine is a stronger and faster-acting disinfectant.
- This change will last for a few weeks, and you may notice a stronger chlorine smell or taste in your tap water during this time.

Public Works typically switches to free chlorine annually to maintain water quality and last implemented this procedure in November 2024. This process, commonly referred to as a "free chlorine burn," is an industry-standard practice and is used to clean the pipeline and maintain good water quality.

While Public Works continues to investigate what happened, the department is taking every precaution to ensure your water remains safe. Public Works will share more information as soon as the Division of Drinking Water completes their review. Public Works will post notifications and use press releases for any updates or changes to the water system.

How Do I Get Future Emergency Alerts from the County of San Luis Obispo?

Information on the County's alert and notification systems can be found [here](#). It is highly recommended that you sign up for Reverse 911 and AlertSLO to receive future messages.

Thank you for your patience and understanding.

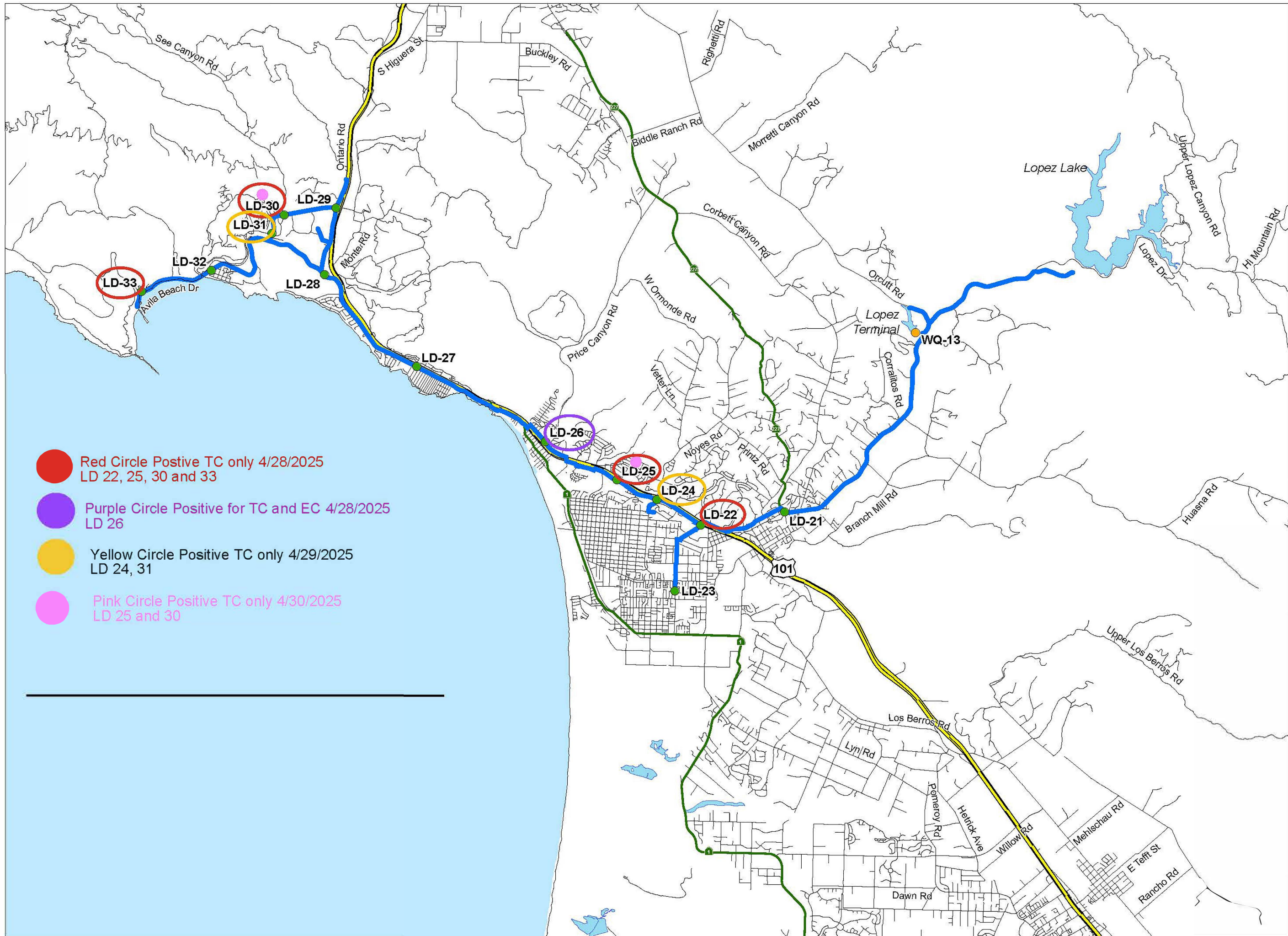


Lopez Project Pipeline

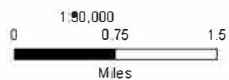
Routine Sample Sites

Revised September 12, 2024

- Routine Sample Sites
- Upstream/Downstream Sites
- Pipeline



- Red Circle Positive TC only 4/28/2025
LD 22, 25, 30 and 33
- Purple Circle Positive for TC and EC 4/28/2025
LD 26
- Yellow Circle Positive TC only 4/29/2025
LD 24, 31
- Pink Circle Positive TC only 4/30/2025
LD 25 and 30



PROJECT NOTES:
WALLACE GROUP
LOCATED PIPELINE
APPURTENANCES USING RTK
GPS TECHNOLOGY PIPELINE
DRAFTED USING AS-BUILT PLAN
INFORMATION. MAP CREATED BY
WALLACE GROUP MARCH 2008.



Date/Parameter	Units	WQ-13	LD-21	LD-22	LD-23	LD-24	LD-25	LD-26	LD-27	LD-28	LD-29	LD-30	LD-31	LD-32	LD-33
28-Apr															
Total Coliform Presence/Absence	Presence/Absence	Absent	Absent	Present	Absent	Absent	Present	Present	Absent	Absent	Absent	Present	Absent	Absent	Present
E. coli Presence/Absence	Presence/Absence	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Heterotrophic Plate Count	CFU/mL	< 1	575	81	89	61	70	33	4	11	5	8	1	36	53
Free Ammonia Screen	mg/L	0.09	----	0.11	----	0.08	----	----	0.12	----	0.16	----	0.1	0.08	0.16
Monochloramine Screen	mg/L	2.35	----	2.37	----	2.37	----	----	2.37	----	2.39	----	2.26	2.27	1.38
NO2-N (measured in field)	mg/L	0.002	----	0.004	----	0.003	----	----	0.011	----	0.006	----	0.005	0.005	0.068
Total Ammonia Screen (Field)	mg/L	0.55	----	0.58	----	0.55	----	----	0.59	----	0.63	----	0.55	0.53	0.43
Total Chlorine Residual (measured in the field)	mg/L	2.54	2.52	2.51	2.51	2.49	2.5	2.47	2.47	2.45	2.4	2.35	2.4	2.36	1.45
Total Chlorine Residual:Total Ammonia Ratio	Ratio	4.62	----	4.33	----	4.53	----	----	4.19	----	3.81	----	4.36	4.45	3.37
Temperature	°C	17.9	18	18	18.6	18	18	18	18	18.7	18.5	18.5	18.6	18.8	22.4
Threshold Odor @ 60°C	TON	----	----	1	----	1	----	----	1	----	1	----	1	1	1
Turbidity	NTU	----	----	0.08	----	0.07	----	----	0.07	----	0.07	----	0.08	0.08	0.18
29-Apr															
Total Coliform Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	13.5	< 1	< 1
E. Coli Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Heterotrophic Plate Count	CFU/mL	< 1	35	< 1	16	8	12	11	3	12	10	13	21	3	9
Temperature	°C	18.2	17.8	18	18.1	18.5	18.2	18.1	18.3	18.4	18.7	18.7	19.1	19.1	18.7
Total Chlorine Residual (measured in the field)	mg/L	2.58	2.57	2.67	2.59	2.7	2.57	2.69	2.51	2.49	2.38	2.22	2.28	2.31	2.27
30-Apr															
Total Coliform Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1
E. Coli Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Heterotrophic Plate Count	CFU/mL	< 1	11	< 1	< 1	< 1	1	< 1	< 1	2	< 1	< 1	1	< 1	< 1
Temperature	°C	18.1	17.6	17.7	17.9	17.9	18	18	18.1	18.5	18.8	17.6	18.4	19.3	20.1
Total Chlorine Residual (measured in the field)	mg/L	2.6	2.7	2.64	2.62	2.65	2.58	2.87	2.53	2.56	2.37	2.41	2.42	2.73	2.08
1-May															
Total Coliform Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
E. Coli Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Heterotrophic Plate Count	CFU/mL	< 1	4	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Temperature	°C	18.3	17.6	17.7	20	17.9	17.6	17.6	18	18.1	18.1	18	17.8	19.2	18.6
Total Chlorine Residual (measured in the field)	mg/L	2.82	2.59	2.55	2.92	2.53	2.69	2.5	2.49	2.48	2.4	2.43	2.29	2.34	2.12
2-May															
Total Coliform Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
E. Coli Bacteria	MPN/100mL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Heterotrophic Plate Count	CFU/mL	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Temperature	°C	18.9	18.2	18.3	21	18.6	18.5	18.5	18.8	19	20	19.3	19.3	20.5	18.5
Total Chlorine Residual (measured in the field)	mg/L	2.99	2.96	2.78	2.35	2.73	2.74	2.7	2.69	2.4	2.19	2.27	2.71	2.18	2.13