

Lab Certification #: 5999 Date: 1/1/2024
 Sample Collector/Analyst: JD, JD

Facility Name: New Town WWTP
 Permit #: NC0001234

Reference Method: SM 4500 H+ B-2011 pH Instrument ID: Hach #5678

Calibration Time	Calibration Buffer 4 S.U.	Calibration Buffer 7 S.U.	Calibration Buffer 10 S.U.	*Check Buffer 7 S.U.	Comments
7:06	✓	✓	✓	7.03	

*pH check buffer must read within ± 0.1 S.U. of the buffer's true value. Check buffer acceptable (circle)? Yes / No
 4 S.U. buffer Lot#: pH41001 7 S.U. buffer Lot#: pH71001 10 S.U. buffer Lot#: pH101001

Sample location	Sample Collection Time**	Sample Analysis Time**	pH Reading	Reported pH Result	▶ Post-analysis Buffer Check True Value: 7.0		Comments/Data Qualifiers
					Time	Result	
Downstream		7:30	6.98	7.0			In situ
Upstream		7:45	6.95	7.0			In situ
Effluent		8:05	6.91	6.9	8:07	7.03	In situ

**If sample is measured directly in the stream or immediately on site, one time may be recorded for collection and analysis with the notation in the comments box that they are measured *in situ* or immediately at the sample site.
 ▶ A post-analysis calibration verification must be analyzed at the end of the run any time the meter is transported by vehicle to another location after calibration. The Post analysis buffer check must be within ± 0.1 S.U. of the buffer's true value.
 Post-analysis check buffer acceptable (circle)? Yes / No
 All pH values are in pH units (i.e., S.U.). Record all data to the nearest 0.01 S.U. and report to the nearest 0.1 S.U. on DMRs.
 Follow PT vendor's instructions for reporting PT Sample results.

Reference Method: SM 4500 OG-2016 Dissolved Oxygen (DO) Instrument ID: YSI #1234

Calibration Time	Calibration Variable Pressure (mm Hg)	Calibration Variable Temperature (°C)	Meter reading (mg/L) after calibration	† Post-analysis calibration verification (when analyzing at multiple sites)				Comments
				Temp (°C)	Table DO value (mg/L)	Barometric Pressure (mm Hg)	Correction factor from theoretical DO table	
7:10	730	19.8	8.96	19.5	9.18	730	0.96	
						Calculated Value (mg/L)	Meter Reading (mg/L)	
				TIME	8:12	8.81	8.92	

Note: Calibration Variable for salinity is set to default of 0 ppt since salinity values are consistently ≤ 9 ppt
 † A post-analysis calibration verification must be analyzed at the end of the run any time the meter is transported by vehicle to another location after calibration.
 The meter reading and calculated theoretical value must agree within ± 0.5 mg/L. Acceptable? Yes / No (circle)

Sample Location	Sample Collection Time	*Sample Analysis Time	DO reading (mg/L)	Comments/Data Qualifiers
Downstream		7:32	6.91	In situ
Upstream		7:47	6.87	In situ
Effluent		8:10	6.85	In situ

* If sample is measured directly in the stream and/or onsite, only time analyzed would be recorded with a note in the comments box that they are measured in situ or immediately at the sample site

Reference Method: SM 2550 B-2010 Temperature Instrument ID: YSI #1234

Sample Location	Sample Collection Time	*Sample Analysis Time	Temperature (°C)	Comments/Data Qualifiers
Effluent		8:10	19.7	In situ

* If sample is measured directly in the stream and/or on site, only time analyzed would be recorded, with a note in the comments box that they are measured in situ or immediately at the sample site
 Annual Verification Date 5/20/2023

Reference Method: SM 4500 Cl₆-2011 Total Residual Chlorine (TRC)

Instrument ID: HDR900N1

Time Daily Check Standard Analyzed	Daily Check Standard Reading $\mu\text{g/L}$	Comments/Data Qualifiers
8:15	201	

TRC Daily Check Standard True Value 198 $\mu\text{g/L}$ Acceptance range 178-218 $\mu\text{g/L}$

Check standards must recover within $\pm 10\%$ of the check standard's true value. Is the daily check std acceptable (circle)? Yes / No

Annual Calibration Curve Verification Date: 5/21/2023 Program used: 86

Sample Location	Sample Collection Time	Sample Analysis Time	TRC Meter Reading $\mu\text{g/L}$	TRC Result Reported $\mu\text{g/L}$	Comments/Data Qualifiers
Effluent	8:20	8:25	15	220	

Reference Method: Hach 10014 Total Residual Chlorine (TRC)

Instrument ID: HDR2800N2

Time Daily Check Standard Analyzed	Daily Check Standard Reading $\mu\text{g/L}$	Comments/Data Qualifiers
8:15	201	

TRC Daily Check Standard True Value 198 $\mu\text{g/L}$ Acceptance range 178-218 $\mu\text{g/L}$

Check standards must recover within $\pm 10\%$ of the check standard's true value. Is the daily check std acceptable (circle)? Yes / No

Annual Calibration Curve Verification Date: 5/21/2023 Program used: 86

Sample Location	Sample Collection Time	Sample Analysis Time	TRC Meter Reading $\mu\text{g/L}$	Reagent Blank Value $\mu\text{g/L}$	TRC Result Reported $\mu\text{g/L}$	Comments/Data Qualifiers
Effluent	8:20	8:25	26	1	25	

Are all reagent blank values $< 5 \mu\text{g/L}$ (circle)? Yes / No

Reference Method: SM 2510B-2011 Conductivity

Instrument ID: YSI #3456

Calibration Std (1412 $\mu\text{mhos/cm}$) Time	Calibration Check Std Reading ($\mu\text{mhos/cm}$)	Post-analysis Calibration Check Std Time	Post-analysis Calibration Check Std Reading ($\mu\text{mhos/cm}$)	Comments
7:00	15.1	8:10	15.0	

The check standard(s) must recover within 10% of the true value.

Check Standard True Value 14.9 ($\mu\text{mhos/cm}$) Acceptance range 13.4-16.4 ($\mu\text{mhos/cm}$) Is the calibration check acceptable (circle)? Yes / No

[A post-analysis check standard must be analyzed at the end of a run any time the meter is transported by vehicle to another location after calibration]

Is the post-analysis check std acceptable (circle)? Yes / No

Sample Location	Sample Collection Date	Sample Collection Time	*Sample Analysis Date	Conductivity Result ($\mu\text{mhos/cm}$)	Comments/Data Qualifiers
Upstream	4/1/24	7:35		20.4	in situ
Downstream	4/1/24	7:50		21.6	in situ
Effluent	4/1/24	8:10		20.9	in situ

* If sample is measured directly in the stream and/or on site, only time analyzed would be recorded, with a note in the comments box that they are measured in situ or immediately at the sample site

ATC check date: 4/10/2023

Reference Method: SM 2540 F-2015 Settleable Residue

Sample Location	Sample Collection Date	Sample Collection Time	Sample Volume (mL)	Sample Analysis Date	Sample Analysis Start Time	45-Min Stir (check)	Sample Analysis End Time	mL Residue	Reported Value (mL/L)	Comments/Data Qualifiers
Effluent	4/1/24	10:00	1000	4/1/24	10:05	✓	11:05	20.1	20.1	

Salinity

Reference Method: SM 2520 B-2011

Instrument ID: YSI# 3456

Calibration Std (1412 µmhos/cm) Time	Calibration Std Temperature (°C)	Calibration Check Std Reading (µmhos/cm)	Cal Check Std Temperature (°C)	Post-analysis Cal Check Std Time	Post-analysis Cal Check Std Temperature (°C)	Post-analysis Calibration Check Std Reading (µmhos/cm)	Comments
<u>7:00</u>	<u>19.2</u>	<u>15.1</u>	<u>19.3</u>	<u>8:10</u>	<u>19.1</u>	<u>15.0</u>	

The check standard(s) must recover within 10% of the true value.

Check Standard True Value 14.9 (µmhos/cm) Acceptance range 13.4-16.4 (µmhos/cm) Is the calibration check acceptable (circle)? Yes / No

[A post-analysis check standard must be analyzed at the end of a run any time the meter is transported by vehicle to another location after calibration] Is the post-analysis check std acceptable (circle)? Yes / No

Sample Location	Sample Collection Date	Sample Collection Time	*Sample Analysis Date	*Sample Analysis Time	Sample Temperature (°C)	Salinity Result (ppt)	Comments/Data Qualifiers
<u>Upstream</u>	<u>1/1/24</u>	<u>7:35</u>			<u>18.9</u>	<u>7.2</u>	<u>in situ</u>
<u>Downstream</u>	<u>1/1/24</u>	<u>7:50</u>			<u>18.9</u>	<u>7.3</u>	<u>in situ</u>

* If sample is measured directly in the stream and/or on site, only time analyzed would be recorded, with a note in the comments box that they are measured in situ or immediately at the sample site

[Faint, illegible text and markings, possibly bleed-through or a second page of data.]