TCEQ

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
## WATER QUALITY PARAMETER MONITORING FORM 20679

**Completed by PWS (or Agent)**

| | |
|---|---|
| PWS Name: | City of Fort Worth |
| PWS ID#: | TX2200012 |
| PWS Address: | 2600 SE Loop 820, Fort Worth, TX 76140 |
| PWS Contact: | David Nelson |
| PWS Contact Phone #: | 817-392-5900 |

Refer to original WQPMP

| Inhibitor or Stablizer Used (√): | | Phosphate | | Silica | | Calcium carbonate |
|---|---|---|---|---|---|---|
| TREATMENT | Alkalinity Dosage Rate: | Lime 173 ppm | Inhibitor Dosage Rate: | | | |

**Completed by Laboratory**

| | |
|---|---|
| Laboratory Name: | |
| TCEQ Lab ID #: | |
| Laboratory Address: | A&B Labs<br>10100 East Freeway, Suite 100<br>Houston, TX 77029<br>TX 275<br>AHughes/SCarpenter/SGarza<br>713-453-6060 |
| Laboratory Contact: | |
| Laboratory Contact Phone #: | |

**Sample Information**

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Type (√): | X | Compliance | | Non-compliance | | |
| Sample Collector (√): | X | Public Water System | X | Accredited Lab | | 3rd Party Contractor --> LAB ID |
| Temperature and pH (Y or N): | Y | Are temperature and pH included on the sampling entity's Laboratory Approval Form on file at the TCEQ? | Y | Were temperature and pH measured in the field within 15 minutes of sample collection? | | |

**Parameters Requested:** Analyses are required for the parameters checked. * If inhibitors containing phosphate or silica are used, then these parameters should also be analyzed depending on which is in use.

| Facility ID (e.g. DS01, PBCU001) | Sample Point ID (e.g. DSTWQP, EWQP) | Sample Location | Sample Collection: Date (MMDDYY) | Sample Collection: Time - 24 hr (HHMM) | Field Measurements: pH | Field Measurements: Temp (°C) | Replacement? (√) | Original Sample ID # | Original Sample Date (MMDDYY) | Lab Sample ID | Alkalinity (1927) | Calcium (1919) | Chloride (1017) | Conductivity (1064) | Hardness (1915) | Iron (1028) | Manganese (1032) | Sodium (1052) | Sulfate (1055) | TDS (1930) | O-Phosphate (1044) * | Silica (1049) * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PBCU003 | EWQP | South Holly Tap | 10-31-19 | 0944 | 8.10 | 14.9 | | | | 19110130.01 | | | | | | √ | | √ | | | | |
| DS01 | DSTWQP | 3233 Alta Mere Dr | | | | | | | | | | | | | | √ | | √ | | | | |
| | | | | | | | | | | | | | | | | √ | | √ | | | | |
| | | | | | | | | | | | | | | | | √ | | √ | | | | |
| | | | | | | | | | | | | | | | | √ | | √ | | | | |
| | | | | | | | | | | | | | | | | √ | | √ | | | | |
| | | | | | | | | | | | | | | | | √ | | √ | | | | |

I acknowledge that information on this form is true and correct and sites selected for sampling follow the instructions in the TCEQ Monitoring and Sample Collection Guidance for Water Quality Parameters. This includes, but not limited to the measurement of pH and temperature immediately upon collection. Falsification of this form or tampering with water samples is a crime punishable under state and/or federal law. (Texas Penal Code, Title 8, Chapter 37.10)

| Name of Authorized PWS Representative (Print) | Signature | Organization | Date |
|---|---|---|---|
| Ron Middleton | Ron Middleton | City of Ft Worth | 10-31-19 |

**Sample Conditions Upon Receipt (√)**

| | | | |
|---|---|---|---|
| X | Samples received unpreserved? | X Iced | Ambient |
| Rejection Code (if applicable): | | Actual / Corrected sample temperature: | 5.8 C |
| Date & Time of Sample Preservation (Acidified): 11/4/19 @ 1237 | | Thermometer ID #: | 170T029 |

**Chain of Custody**

| | | | |
|---|---|---|---|
| Relinquished By (Signature): M. Watkins | Date/Time: 11.01.19 1058 | Relinquished By Courier (Signature): Merlene Jones-Allens | Date/Time: 11/01/19 1058 |
| Received By Courier (Signature): Merlene Jones-Allens | Date/Time: 11/01/19 1145 | Received By Lab (Signature): Randall Carpenter | Date/Time: 11.2.19 1237 |

**Laboratory Comments:**

TCEQ 20679 (Rev 01/2018)

80112

TCEQ WA

Completed by PWS

Work Order ID: WQP Plants PWS 2200012 103119

UALITY
ORM 20679

| | |
|---|---|
| PWS Name: | City of Fort Worth |
| PWS ID#: | TX2200012 |
| PWS Address: | 2600 SE Loop 820, Fort Worth, TX 76140 |
| PWS Contact: | David Nelson |
| PWS Contact Phone #: | 817-392-5900 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Inhibitor or Stabilizer Used (√): | | Phosphate | | Silica | | Calcium carbonate | |
| TREATMENT | Alkalinity Dosage Rate: | Lime 17.3 ppm | Inhibitor Dosage Rate: | | | | |

Completed by Laboratory

| | |
|---|---|
| Laboratory Name: | Fort Worth Centralized Water and Wastewater Laboratory |
| TCEQ Lab ID #: | 48135 |
| Laboratory Address: | 2600 SE Loop 820<br>Fort Worth, TX 76140 |
| Laboratory Contact: | David Nelson |
| Laboratory Contact Phone #: | 817-392-5900 |

COPY

**Sample Information**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample Type (√): | X | Compliance | | Non-compliance | | | |
| Sample Collector (√): | X | Public Water System | X | Accredited Lab | | 3rd Party Contractor --> LAB ID | |
| Temperature and pH (Y or N): | Y | Are temperature and pH included on the sampling entity's Laboratory Approval Form on file at the TCEQ? | Y | Were temperature and pH measured in the field within 15 minutes of sample collection? | | | |

**Parameters Requested:** Analyses are required for the parameters checked. * If inhibitors containing phosphate or silica are used, then these parameters should also be analyzed depending on which is in use.

| Facility ID (e.g. DS01, PBCU001) | Sample Point ID (e.g. DSTWQP, EWQP) | Sample Location | Sample Collection: Date (MMDDYY) | Sample Collection: Time - 24 hr (HHMM) | Field Measurements: pH | Field Measurements: Temp (°C) | Replacement? (√) | Original Sample ID # | Original Sample Date (MMDDYY) | Lab Sample ID | Alkalinity (1927) | Calcium (1919) | Chloride (1017) | Conductivity (1064) | Hardness (1915) | Iron (1028) | Manganese (1032) | Sodium (1052) | Sulfate (1055) | TDS (1930) | O-Phosphate (1044) * | Silica (1049) * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PBCU003 | EWQP | South Holly Tap | 10-31-19 | 0944 | 8.10 | 14.8 | | | | 8012201 | √ | √ | √ | √ | √ | | √ | | √ | √ | | |
| DS01 | DSTWQP | 3233 Alta Mere Dr | | | | | | | | | √ | √ | √ | √ | √ | | √ | | √ | √ | | |
| | | | | | | | | | | | √ | √ | √ | √ | √ | | √ | | √ | √ | | |
| | | | | | | | | | | | √ | √ | √ | √ | √ | | √ | | √ | √ | | |
| | | | | | | | | | | | √ | √ | √ | √ | √ | | √ | | √ | √ | | |
| | | | | | | | | | | | √ | √ | √ | √ | √ | | √ | | √ | √ | | |

I acknowledge that information on this form is true and correct and sites selected for sampling follow the instructions in the TCEQ Monitoring and Sample Collection Guidance for Water Quality Parameters. This includes, but not limited to the measurement of pH and temperature immediately upon collection. Falsification of this form or tampering with water samples is a crime punishable under state and/or federal law. (Texas Penal Code, Title 8, Chapter 37.10)

| Name of Authorized PWS Representative (Print) | Signature | Organization | Date |
|---|---|---|---|
| Ron Middlebrooks | Ron Middlebrooks | City of Ft Worth | 10-31-19 |

**Chain of Custody**

| | | | |
|---|---|---|---|
| Relinquished By (Signature) | Date/Time: | Relinquished By Courier (Signature) | Date/Time: |
| Ron Middlebrooks | 10-31-19 1130 | | |
| Received By Courier (Signature) | Date/Time: | Received By Lab (Signature) | Date/Time: |
| | | Warson | 10-31-19 1130 |

**Sample Conditions Upon Receipt (√)**

| | | | |
|---|---|---|---|
| Samples received unpreserved? | | Iced | Ambient |
| Rejection Code (if applicable): | | Actual / Corrected sample temperature: | 5.3 |
| Date & Time of Sample Preservation (Acidified): | | Thermometer ID #: | C |

Laboratory Comments:

TCEQ 20679 (Rev 01/2018)

# Laboratory Analysis Report

Total Number of Pages: 8

Job ID : 19110130

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

**Client Project Name :**
**PWS ID #TX2200012 / City of Fort Worth**

| | | | |
|---|---|---|---|
| **Report To :** | Client Name: | City of Fort Worth - Water Dept. | P.O.#.: 18-00102306 |
| | Attn: | David Nelson | Sample Collected By: Ron Middleton |
| | Client Address: | 2600 SE Loop 820 | Date Collected: 10/31/19 |
| | City, State, Zip: | Fort Worth, Texas, 76140 | |

**A&B Labs has analyzed the following samples...**

| Client Sample ID | Matrix | A&B Sample ID |
|---|---|---|
| PBCU003 / EWQP / South Holly Tap | Drinking Water | 19110130.01 |

Released By: Senthilkumar Sevukan
Title: Assistant Lab Manager
Date: 11/07/2019

This Laboratory is NELAP ( T104704213-19-21) accredited. Effective: 08/26/2019; Expires: 3/31/2020
Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.



Date Received : 11/02/2019 12:37



Report Number: RPT191107018

# LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 19110130

Date: 11/7/2019

## General Term Definition

| | | | |
|---|---|---|---|
| Back-Wt | Back Weight | Post-Wt | Post Weight |
| BRL | Below Reporting Limit | ppm | parts per million |
| cfu | colony-forming units | Pre-Wt | Previous Weight |
| Conc. | Concentration | Q | Qualifier |
| D.F. | Dilution Factor | RegLimit | Regulatory Limit |
| Front-Wt | Front Weight | RPD | Relative Percent Difference |
| LCS | Laboratory Check Standard | RptLimit | Reporting Limit |
| LCSD | Laboratory Check Standard Duplicate | SDL | Sample Detection Limit |
| MS | Matrix Spike | surr | Surrogate |
| MSD | Matrix Spike Duplicate | T | Time |
| MW | Molecular Weight | TNTC | Too numerous to count |
| J | Estimation. Below calibration range but above MDL | | |

## Qualifier Definition

| | |
|---|---|
| M6 | Not calculated. Sample concentration high, more than 4X spike concentration. Control limits do not apply. |

# LABORATORY TEST RESULTS

Job ID : 19110130

Date 11/7/2019

Client Name: City of Fort Worth - Water Dept. Attn: David Nelson

Project Name: PWS ID #TX2200012 / City of Fort Worth

Client Sample ID: PBCU003 / EWQP / South Holly Tap

Date Collected: 10/31/19

Time Collected: 09:44

Other Information:

Job Sample ID: 19110130.01

Sample Matrix Drinking Water

| Test Method | Parameter/Test Description | Result | Units | DF | Rpt Limit | Reg Limit | Q | Date Time | Analyst |
|---|---|---|---|---|---|---|---|---|---|
| EPA 200.7 | | | | | | | | | |
| | Iron | 0.021 | mg/L | 1 | 0.01 | 0.3 | | 11/06/19 17:12 | BRR |
| | Sodium | 25.0 | mg/L | 100 | 10 | | | 11/06/19 17:35 | BRR |

# QUALITY CONTROL CERTIFICATE

**Job ID :** 19110130 **Date :** 11/7/2019

**Analysis :** **Method :** **EPA 200.7** **Reporting Units :** **mg/L**

**QC Batch ID :** Qb19110664 **Created Date :** 11/06/19 **Created By :** BRena

**Samples in This QC Batch :** 19110130.01

**Digestion :** PB19110618 **Prep Method :** EPA 200.7 **Prep Date :** 11/06/19 08:00 **Prep By :** Mwissman

**QC Type: Method Blank**

| Parameter | CAS # | Result | Units | D.F. | RptLimit | | Qual |
|---|---|---|---|---|---|---|---|
| Iron | 7439-89-6 | BRL | mg/L | 1 | 0.01 | | |
| Sodium | 7440-23-5 | BRL | mg/L | 1 | 0.1 | | |

**QC Type: LCS and LCSD**

| Parameter | LCS Spk Added | LCS Result | LCS % Rec | LCSD Spk Added | LCSD Result | LCSD % Rec | RPD | RPD CtrlLimit | %Recovery CtrlLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Iron | 1 | 1.014 | 101 | 1 | 1.018 | 102 | 0.4 | 20 | 85-115 | |
| Sodium | 1 | 1.026 | 103 | 1 | 1.025 | 103 | 0.1 | 20 | 85-115 | |

**QC Type: MS and MSD**
**QC Sample ID: 19110130.01**

| Parameter | Sample Result | MS Spk Added | MS Result | MS % Rec | MSD Spk Added | MSD Result | MSD % Rec | RPD | RPD CtrlLimit | %Rec CtrlLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iron | 0.021 | 1 | 1.036 | 101 | | | | | | 75-125 | |
| Sodium | 24.7 | 1 | N/A | N/A | | | | | | 75-125 | M6 |

Refer to the Definition page for terms.

The Chain of Custody is a Legal Document



**A&B Labs**
Houston, Texas

10100 East Freeway (I-10) Houston, TX 77029 713-453-6060 1-877-478-6060 Toll Free 713-453-6091 Fax
info@ablabs.com www.ablabs.com

| 1 REPORT TO: | 2 INVOICE TO: |
|---|---|
| Co: City of Fort Worth - Water Dept | Company: Same |
| 2600 SE Loop 820 | Address: 2600 SE Loop 820 |
| Fort Worth, Texas 76140 | Fort Worth, Texas 76140 |
| Contact: David Nelson | Contact: Mike Hoffman |
| Phone: 817.392.5912 | Phone: 817.392.5900 |
| Email: David.Nelson@fortworthtexas.gov | Fax: 817.392.5920 |
| CC: Kay.Gallegos@fortworthtexas.gov<br>Lissamma.Xavier@fortworthtexas.gov<br>Sheldon.Murray@fortworthgov.org<br>Walter.Kornegay@fortworthgov.org | Email: Patty.Stanley@fortworthtexas.gov<br>CC: Michael.Hoffman@fortworthtexas.gov |

A&B JOB ID: 19110130

5. Project #

6. Project Name / Location: City of Fort Worth WQP Plants

7. Reporting Requirement: Standard Level II

8. Sampler's Name & Company — Sampler's Signature & Date

3. PO # 18-00102306

4. Turnaround Time- Business Days
1 Day * 5 Days-Standard
2 Days *
3 Days * Other _____
* Surcharge Applies

*Day Zero is the day sample is received. Report due at 5pm on due day.*

| 9. Sample ID & Description | Lab Use Only | 10. Sampling Date | Time | 11 comp | grab | 12. Matrix Water | Soil | Sludge | Oil | Air | Other | 13. TOTAL No. of Containers | EPA 200.7 4.4 (*Fe, *Na) | | | | | | | No. of Containers / 14. Containers** / 15. Preservatives*** / 18. Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 1 | P/O | | | | | | | |
| | | | | | | | | | | | | | HNO3 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| 8011201 South Holly Tap | 01A | 10/31/2019 | 09:44am | | x | x | | | | | | 1 | x | | | | | | | |

| 19. RELINQUISHED BY | DATE | TIME | 20. RECEIVED BY | DATE | TIME |
|---|---|---|---|---|---|
| 1) | 11/01/19 | 1058 | 1) | 11/01/19 | 1058 |
| 2) | 11/01/19 | 11:45A | 2) FedEx | | |
| 3) FedEx | | | 3) | 11.2.19 | 1237 |

Temperature: 5.8 °C Intact? (Y) N
Initials _____

1707029

* Containers: VOA- 40 ml vial 4 oz/8 oz- glass wide mouth A/G- Amber/Glass 1 Liter P/O- Plastic/other _____

**Preservatives: C-Cool H- HCl N- S-H2SO4 OH- NaOH T-Na2S2O3 X-

BILL OF LADING/TRACKING #

METHOD OF SHIPMENT

A&B CANNOT ACCEPT VERBAL CHANGES. PLEASE FAX WRITTEN CHANGES TO 713-453-6091 OR EMAIL THE NEW COC TO YOUR PROJECT MANAGER.

Samples will be disposed of after 30 days. A&B reserves the right to return samples.

# Sample Condition Checklist

| | | |
|---|---|---|
| A&B JobID : **19110130** | Date Received : **11/02/2019** | Time Received : **12:37PM** |
| Client Name : **City of Fort Worth - Water Dept.** | | |
| Temperature : **5.8°C** | Sample pH : **7** | |
| Thermometer ID : **1707629** | pH Paper ID : **72375** | |

| | Check Points | Yes | No | N/A |
|---|---|---|---|---|
| 1. | **Cooler seal present and signed.** | | X | |
| 2. | **Sample(s) in a cooler.** | X | | |
| 3. | **If yes, ice in cooler.** | X | | |
| 4. | **Sample(s) received with chain-of-custody.** | X | | |
| 5. | **C-O-C signed and dated.** | X | | |
| 6. | **Sample(s) received with signed sample custody seal.** | | X | |
| 7. | **Sample containers arrived intact. (If no comment).** | X | | |
| 8. | **Matrix :** **Water** ☑ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐ | | | |
| 9. | **Sample(s) were received in appropriate container(s).** | X | | |
| 10. | **Sample(s) were received with proper preservative** | | X | |
| 11. | **All samples were logged or labeled.** | X | | |
| 12. | **Sample ID labels match C-O-C ID's** | X | | |
| 13. | **Bottle count on C-O-C matches bottles found.** | X | | |
| 14. | **Sample volume is sufficient for analyses requested.** | X | | |
| 15. | **Samples were received within the hold time.** | X | | |
| 16. | **VOA vials completely filled.** | | | X |
| 17. | **Sample accepted.** | X | | |
| 18 | **Has client been contacted about sub-out** | | | X |

**Comments : Include actions taken to resolve discrepancies/problem:**

Preserved with 5mL HNO3 LT#83488(11-4-19 @ 12:37); pH <2. -ANA 11-4-19.

Received by : AArnett

Check in by/date : AArnett / 11/04/2019