



ARKANSAS
Department of Environmental Quality

WATER DIVISION INSPECTION REPORT

AFIN: 46-00237	PERMIT #: AR0048691	DATE: 4/29/2020
COUNTY: 46 Miller	PDS #: 111869	MEDIA: WN
GPS LAT: 33.503137 LONG: -94.017011 LOCATION: Entrance		

FACILITY INFORMATION

NAME:
City of Texarkana - North WWTP

LOCATION:
8301 Sanderson Lane

CITY:
Texarkana, AR 71854

INSPECTION INFORMATION

FACILITY TYPE: 1 - Municipal	INSPECTOR ID#: 101531 S - State		
FACILITY EVALUATION RATING: 5 - Satisfactory	INSPECTION TYPE: SSO/Collection System		
DATE(S): 4/29/2020	ENTRY TIME: 11:02	EXIT TIME: 13:42	PERMIT EFFECTIVE DATE: 10/31/2009
			PERMIT EXPIRATION DATE: 10/31/2014

RESPONSIBLE OFFICIAL

NAME / TITLE:
Joe Doss Phillips / Executive Director

COMPANY:
City of Texarkana

MAILING ADDRESS:
PO Box 2008

CITY, STATE, ZIP:
Texarkana TX 75504

PHONE & EXT. / FAX:
903-798-3821 / 903-793-0610

EMAIL:
phillips@txkusa.org

CONTACTED DURING INSPECTION: **No**

FAYETTEVILLE SHALE RELATED: **N**

FAYETTEVILLE SHALE VIOLATIONS: **N**

INSPECTION PARTICIPANTS

NAME/TITLE/PHONE/FAX/EMAIL/ETC.:
John Wittington (Lic. #008010)/Collection System/903-798-3821

AREA EVALUATIONS

(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)

S	PERMIT	**	FLOW MEASUREMENT	**	STORMWATER
**	RECORDS/REPORTS	**	LABORATORY	**	FACILITY SITE REVIEW
**	OPERATION & MAINTENANCE	**	EFFLUENT/RECEIVING WATER	**	SELF-MONITORING PROGRAM
**	SAMPLING	**	SLUDGE HANDLING/DISPOSAL	**	PRETREATMENT
S	OTHER: Collections System				

SUMMARY OF FINDINGS

There were no violations observed at the time of inspection.

GENERAL COMMENTS

On April 14, 2020, I performed an inspection on the collection system for the City of Texarkana. City of Texarkana has a collection system that consists of gravity-fed piping to ten lift stations around the city (Figure 1). John Wittington stated that are ongoing collection system infrastructure upgrades with a recent lift station improved. At the time of inspection, the Sanderson Lane lift station was in good operation with two working pumps and visual/audio alarms as well as a contact sign (see Photos 1-3). There had been a recent update to the U of A Way lift station, where a permanent backup generator was added; and there was a workover of the pumps and wet well. This lift station had fencing (see Photo 4) and the backup generator was recently installed and made operational (see Photo 5). Audio and visual alarms were in good working condition (see Photo 6) and there was a safety grate over the wet well that could be removed easily, but also provided extra protection to workers (see Photos 7-8).

INSPECTOR'S SIGNATURE: Michael Young	DATE: 5/12/2020
SUPERVISOR'S SIGNATURE: Kerri McCabe	DATE: 5/13/2020

COLLECTION SYSTEM INSPECTION AND OVERALL RATING		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
PROVIDE A BRIEF DESCRIPTION OF THE COLLECTION SYSTEM: <u>Gravity flow > 10 lift stations > forced main > main lift station > WWTP > sludge pumped to Texas</u>		
POPULATION SERVED/NUMBER OF RESIDENTIAL AND COMMERCIAL CONNECTIONS: <u>4427</u>		
FEET OF SEWER SYSTEM: <u>Unknown</u>		
AGE OF SYSTEM: <u>50+</u>		
DOES THE SYSTEM EXPERIENCE PROBLEMS DURING DRY OR WET WEATHER (EXPLAIN): <u>I&I</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
IS THERE A SYSTEM IN PLACE FOR REPORTING SSOS TO ADEQ (DESCRIBE):	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
ARE ALL SSOs REPORTED REGARDLESS OF SIZE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
HAVE SSOs REACHED "WATERS OF THE STATE" (LIST DATE AND LOCATION OF EACH):	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
PUMP STATIONS		<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
NUMBER OF PUMP STATIONS IN SYSTEM: <u>10</u>	NUMBER WITH BACKUP POWER: <u>10</u>	
HOW OFTEN ARE PUMP STATIONS INSPECTED/MONITORED: <u>Daily</u>		
ARE MAINTENANCE RECORDS AND/OR OPERATOR LOGS KEPT: <u>Yes</u>		
ADEQUATE INVENTORY OF SPARE PARTS: <u>Yes</u>		
TYPE OF REMOTE ELECTRONIC MONITORING USED (I.E. SCADA OR AUTO DIALERS): <u>Auto-dialers</u>		
BRIEF SUMMARY OF EMERGENCY PROCEDURES: <u>Single and three phase generators available; some have backup generators onsite</u>		
NUMBER OF PUMP STATIONS VISITED DURING INSPECTION (SEE ATTACHED CHECKLISTS FOR EACH): <u>2</u>		
SATELLITE SYSTEMS		<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
DOES THE COLLECTION SYSTEM RECEIVE FLOW FROM SATELLITE SYSTEMS: <u>No</u>		
TYPE(S) OF WASTE WATER RECEIVED: <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER:		
BRIEFLY DESCRIBE THE SATELLITE SYSTEM:		
ANY KNOWN PROBLEMS WITH SATELLITE SYSTEM:		
NAME, ADDRESS AND PHONE NUMBER OF PERSON RESPONSIBLE FOR SATELLITE SYSTEM:		

PUMP STATION VISIT (COMPLETE A SEPARATE CHECKLIST FOR EACH PUMP STATION VISITED)	
GENERAL INFORMATION AND OVERALL EVALUATION	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
NAME AND/OR LOCATION OF PUMP STATION: <u>Sanderson Lane</u>	
TYPE(S) OF WASTE WATER RECEIVED: <input checked="" type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER:	
NUMBER OF PUMPS: <u>2</u>	NUMBER OPERATIONAL: <u>2</u>
NUMBER AND SIZE OF PUMPS APPEARS ADEQUATE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
EVIDENCE OF RECENT OVERFLOWS OR HIGH LEVELS:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
GENERAL OPERATION AND MAINTENANCE	
CLEAN AND WELL MAINTAINED WITH MINIMAL STORAGE OF UNRELATED EQUIPMENT:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
GATES/DOORS/HATCHES/LIDS/ETC. LOCKED TO PREVENT UNAUTHORIZED ACCESS AND/OR TAMPERING:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
WET WELLS, SUMPS AND PITS ADEQUATELY COVERED, GRATED OR OTHERWISE PROTECTED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
ELECTRICAL CONTROLS COVERS CONDUIT AND EQUIPMENT PROPERLY INSTALLED AND MAINTAINED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
GUARDS AND SHIELDS IN PLACE AROUND MOVING EQUIPMENT (BELTS, PULLEYS, DRIVESHAFTS, ETC.):	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
ADEQUATE VENTILATION TO PREVENT EXCESSIVE CONDENSATION AND/OR GASES AND FUMES:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
ADEQUATE LIGHTING FOR ROUTINE INSPECTION/MAINTENANCE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
SEALS, VALVES AND PACKING ADEQUATELY MAINTAINED TO PREVENT LEAKS:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
MINIMAL ACCUMULATION OF GREASE AND SOLIDS IN WET WELLS:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
BACKUP POWER AND ALARMS	
PROVISIONS FOR GENERATOR AND/OR EMERGENCY TRANSFER PUMP:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
AUDIBLE/VISUAL ALARM WITH EMERGENCY CONTACT INFORMATION POSTED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
SCADA SYSTEM (LIST PARAMETERS MONITORED): <u>Power loss and high levels</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

PUMP STATION VISIT (COMPLETE A SEPARATE CHECKLIST FOR EACH PUMP STATION VISITED)	
GENERAL INFORMATION AND OVERALL EVALUATION	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA
NAME AND/OR LOCATION OF PUMP STATION: <u>U of A Way Lift Station</u>	
TYPE(S) OF WASTE WATER RECEIVED: <input checked="" type="checkbox"/> RESIDENTIAL <input checked="" type="checkbox"/> COMMERCIAL <input checked="" type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER:	
NUMBER OF PUMPS: <u>2</u>	NUMBER OPERATIONAL: <u>2</u>
NUMBER AND SIZE OF PUMPS APPEARS ADEQUATE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
EVIDENCE OF RECENT OVERFLOWS OR HIGH LEVELS:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
GENERAL OPERATION AND MAINTENANCE	
CLEAN AND WELL MAINTAINED WITH MINIMAL STORAGE OF UNRELATED EQUIPMENT:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
GATES/DOORS/HATCHES/LIDS/ETC. LOCKED TO PREVENT UNAUTHORIZED ACCESS AND/OR TAMPERING:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
WET WELLS, SUMPS AND PITS ADEQUATELY COVERED, GRATED OR OTHERWISE PROTECTED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
ELECTRICAL CONTROLS COVERS CONDUIT AND EQUIPMENT PROPERLY INSTALLED AND MAINTAINED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
GUARDS AND SHIELDS IN PLACE AROUND MOVING EQUIPMENT (BELTS, PULLEYS, DRIVESHAFTS, ETC.):	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
ADEQUATE VENTILATION TO PREVENT EXCESSIVE CONDENSATION AND/OR GASES AND FUMES:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
ADEQUATE LIGHTING FOR ROUTINE INSPECTION/MAINTENANCE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
SEALS, VALVES AND PACKING ADEQUATELY MAINTAINED TO PREVENT LEAKS:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
MINIMAL ACCUMULATION OF GREASE AND SOLIDS IN WET WELLS:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
BACKUP POWER AND ALARMS	
PROVISIONS FOR GENERATOR AND/OR EMERGENCY TRANSFER PUMP:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
AUDIBLE/VISUAL ALARM WITH EMERGENCY CONTACT INFORMATION POSTED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
SCADA SYSTEM (LIST PARAMETERS MONITORED): <u>Power loss and high levels</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

Water Division Photographic Evidence Sheet

Location:	City of Texarkana - North WWTP		
Photographer:	Michael Young	Date:	04/29/2020
Witness:		Time:	13:12
		Photo #:	1
Description:	Sanderson Lane lift station with fencing and contact information.		



Photographer:	Michael Young	Date:	04/29/2020
Witness:		Time:	13:12
		Photo #:	2
Description:	Wet well for the Sanderson Lane lift station.		



Water Division Photographic Evidence Sheet

Location:	City of Texarkana - North WWTP		
Photographer:	Michael Young	Date:	04/29/2020
Witness:		Time:	13:13
		Photo #:	3
Description:	Control panel for pumps in Sanderson Lane lift station.		



Photographer:	Michael Young	Date:	04/29/2020
Witness:		Time:	13:24
		Photo #:	4
Description:	U of A Way lift station with contact information.		



Water Division Photographic Evidence Sheet

Location:	City of Texarkana - North WWTP		
Photographer:	Michael Young	Date:	04/29/2020
Witness:		Time:	13:24
		Photo #:	5
Description:	Backup generator dedicated to lift station.		



Photographer:	Michael Young	Date:	04/29/2020
Witness:		Time:	13:25
		Photo #:	6
Description:	Audio and visual alarm for U of A Way Station.		



Water Division Photographic Evidence Sheet

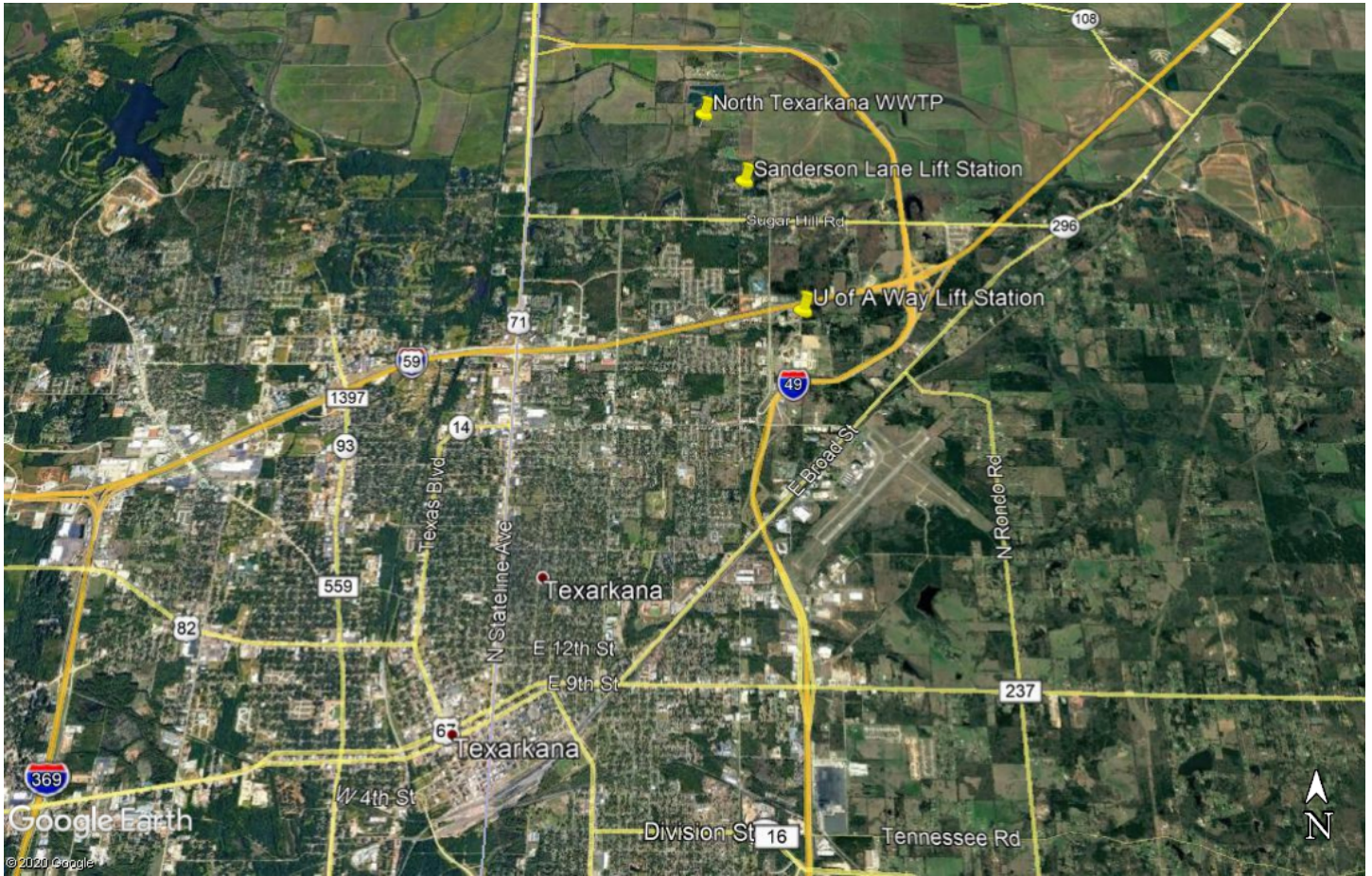
Location:	City of Texarkana - North WWTP				
Photographer:	Michael Young	Date:	04/29/2020	Time:	13:27
Witness:				Photo #:	7
Description:	Grate over wet well adding extra protection to workers.				



Photographer:	Michael Young	Date:	04/29/2020	Time:	13:28
Witness:				Photo #:	8
Description:	Grate for lift station raised.				



Figure 1. Overview of the locations of lift stations observed during the inspection and the location of the WWTP.



From: [TWU-White, Pamela](#)
To: [Water-Inspection-Report](#)
Cc: [TWU-McAllister, Sally](#)
Subject: City of Texarkana - North WWTP Inspections (Miller Co) Corrective Action
Date: Thursday, May 21, 2020 4:10:30 PM
Attachments: [ADEQ Corrective Action.pdf](#)
[Attachments Response Letter May 2020.pdf](#)

Letter and attachments providing corrective action for the four violations found during your April 29, 2020 inspection of our facility.

If additional information is needed, please contact J.D. Phillips at phillips@txkusa.org or (903) 798 3821.

Pamela J. White
Administrative Coordinator
Texarkana Water Utilities

Ph: (903) 798 3821

Fax: (903) 793 0610

pwhite@txkusa.org

www.txkusa.org/twu

Daily Air Calibration HQ40D North Texarkana

1. Press power button
2. Press tool button (shows LDO101 settings)
3. Press select
4. Scroll to modify current settings
5. Press select
6. Press Calibration Options
7. Press Calibration User
8. Press select
9. Scroll to user 100% and press ok
10. Press exit 4 times (main screen will display)
11. Press Calibrate and read
12. Screen will display. Dry probe and now place in DO btl. With $\frac{1}{4}$ Water. Press read.
13. Screen will display 100% and Calibration passed.
14. Press done record you slope for the day
15. Press store. Meter has been calibrated and return to main Screen display. You are ready for today samples
16. **The main Lab will calibrate once a month on the Labs HQ40 counter top meter Using the Winkler results as a set point to make sure the meter maintain a controlled calibration along with the air calibration. The result will be recorded and kept in the main Lab as QC results.**

pH Calibration

Orion Star A121 portable (North Texarkana)

1. Turn on **Power**.
2. Rinse probe and blot dry.
3. Place probe in first standard and press **Calibrate**. (Display will show the reading at the top and **Cal. 1** at the bottom.)
4. When the small **pH** in the top right corner stops flashing, the reading is stable and the display changes to read **04.01** and the small arrow beside pH/ISE (on the left) flashes. Press the button to the left of the arrow keys to change the cursor position, and the up and down arrows to change the numbers.
5. If the display is correct, press **Calibrate** again to move to the next standard.
6. Place the second standard under the probe. When the small **pH** in the top right corner stops flashing, the reading is stable and the display changes to read **10.00** and the small arrow beside pH/ISE (on the left) flashes. Press the button to the left of the arrow keys to change the cursor position, and the up and down arrows to change the numbers.
7. When the display is correct, press **Measure/save/print**. The meter will briefly display the slope.
8. Place the QC standard (7.00) under the probe. When **AR** in the top right corner stops flashing, the display will freeze and the reading is ready.

Reading a Sample

1. Rinse the probe and blot dry.
2. Place sample under probe, and press **Measure/save/print**.
3. When **AR** in the top right corner stops flashing, the display will freeze and the reading is ready.

Salicylate Method¹

Method 8155

0.01 to 0.80 mg/L NH₃-N

Powder Pillows

Scope and application: For water, wastewater and seawater.

¹ Adapted from Clin. Chim. Acta., 14, 403 (1966).



Test preparation

Before starting

The reagents that are used in this test contain sodium nitroferricyanide. **Keep cyanide solutions at pH > 11 to prevent exposure to hydrogen cyanide gas.** Collect the reacted samples for safe disposal.

Keep the samples sealed at all times to prevent ammonia contamination from the air.

Always do tests in sample cells. Do not put the instrument in the sample or pour the sample into the cell holder.

Make sure that the sample cells are clean and there are no scratches where the light passes through them.

Rinse the sample cell and cap with the sample three times before the sample cell is filled.

Make sure that there are no fingerprints or liquid on the external surface of the sample cells. Wipe with a lint-free cloth before measurement.

Cold waters can cause condensation on the sample cell or bubbles in the sample cell during color development. Examine the sample cell for condensation or bubbles. Remove condensation with a lint-free cloth. Invert the sample cell to remove bubbles.

Install the instrument cap over the cell holder before ZERO or READ is pushed.

After the test, immediately empty and rinse the sample cell. Rinse the sample cell and cap three times with deionized water.

If the test result is over-range, dilute the sample with high quality, ammonia-free deionized water and repeat the test. Multiply the result by the dilution factor. Refer to Sample dilution on page 2.

Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

Items to collect

Description	Quantity
Ammonia Cyanurate Reagent Powder Pillow, 10-mL	2
Ammonia Salicylate Reagent Powder Pillow, 10-mL	2
Sample cells, 25-mm (10 mL)	2

Refer to Consumables and replacement items on page 6 for order information.

Sample collection and storage

- Collect samples in clean glass or plastic bottles.
- If the sample contains chlorine, add 1 drop of 0.1 N sodium thiosulfate to 1 liter of sample to remove each 0.3 mg/L of chlorine.
- To preserve samples for later analysis, adjust the sample pH to less than 2 with concentrated sulfuric acid (approximately 2 mL per liter). No acid addition is necessary if the sample is tested immediately.
- Keep the preserved samples at or below 6 °C (43 °F) for a maximum of 28 days.
- Let the sample temperature increase to room temperature before analysis.
- Before analysis, adjust the pH to 7 with 5 N sodium hydroxide solution.
- Correct the test result for the dilution caused by the volume additions.

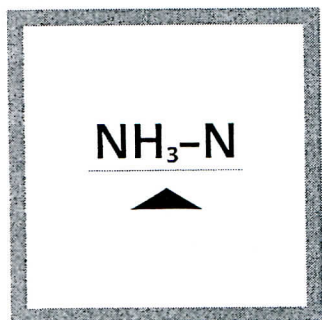
Sample dilution

Select the applicable sample volume from Table 1. The sample volume depends on the starting concentration of the sample. Put the sample in a graduated mixing cylinder, then dilute the sample to 25 mL with deionized water and mix fully.

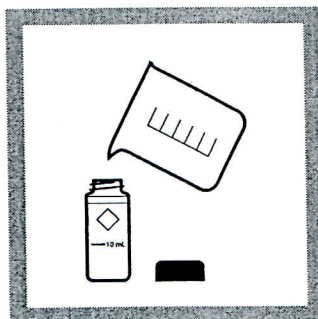
Table 1 Sample volumes for dilution

Starting concentration (mg/L NH ₃ -N)	Sample volume (mL)	Dilution factor
≤ 0.8	Dilution is not necessary.	—
≤ 2	10.0 mL	2.5
≤ 4	5.0 mL	5.0
≤ 8	2.5 mL	10.0
≤ 20	1.0 mL	25.0

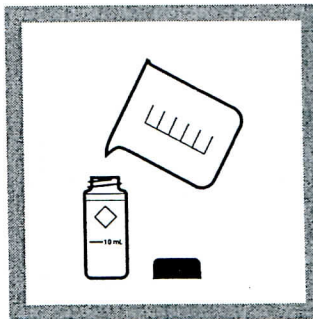
Powder pillow procedure



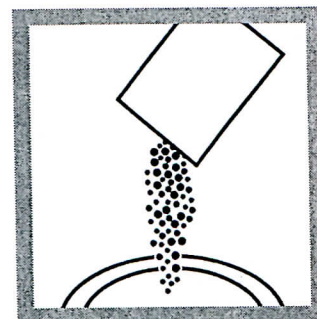
1. Set the instrument to NH₃-N.
For DR300, push the up arrow button. For PCII, push the menu button, checkmark button, then the menu button again.



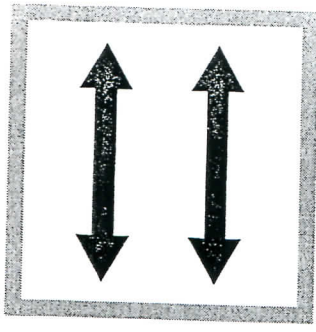
2. Prepare the blank: Fill a sample cell to the 10-mL mark with deionized water.



3. Prepare the sample: Fill a sample cell to the 10-mL mark with sample or diluted sample. Refer to Sample dilution on page 2.



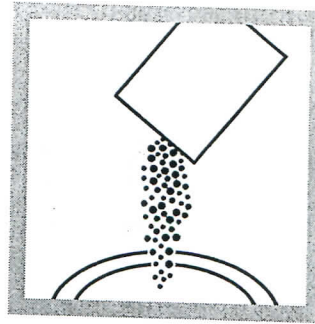
4. Add the contents of one Ammonia Salicylate Powder Pillow to each sample cell.



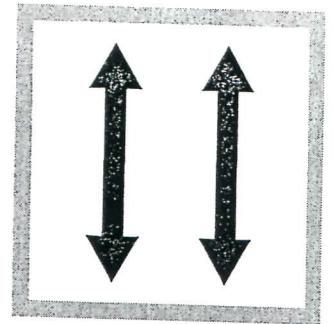
5. Put the stopper on the sample cell. Shake to dissolve the reagent.



6. Set and start a timer for 3 minutes. A 3-minute reaction time starts.



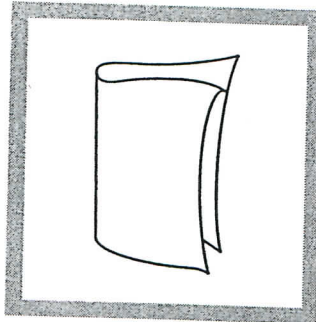
7. After the timer expires, add the contents of one Ammonia Cyanurate Powder Pillow to each sample cell.



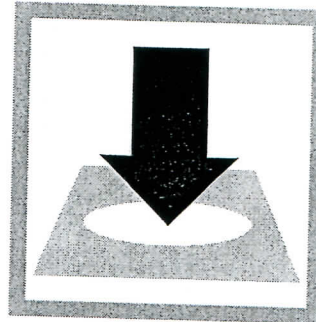
8. Put the stopper on the sample cell. Shake to dissolve the reagent.



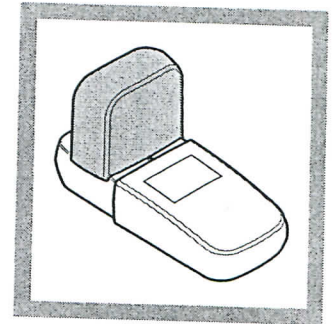
9. Set and start a timer for 15 minutes. A 15-minute reaction time starts.



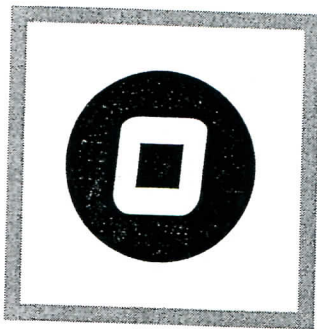
10. When the timer expires, clean the blank sample cell.



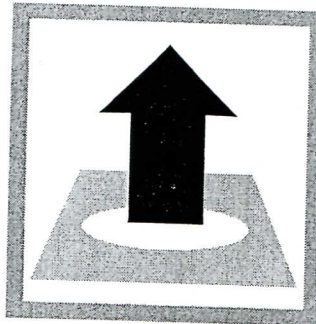
11. Insert the blank into the cell holder. Point the diamond mark on the sample cell toward the keypad.



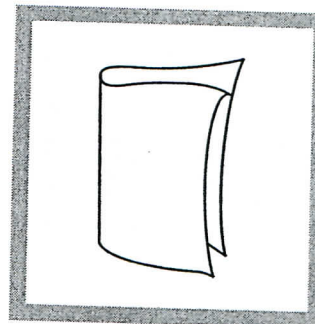
12. Install the instrument cap over the cell holder.



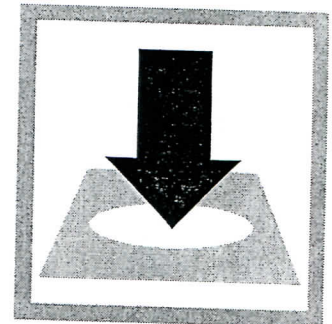
13. Push ZERO. The display shows "0.00".



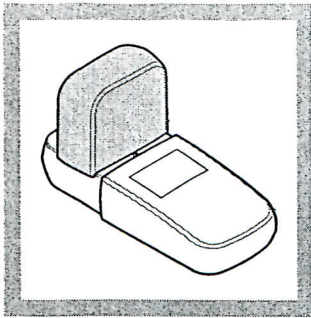
14. Remove the sample cell from the cell holder.



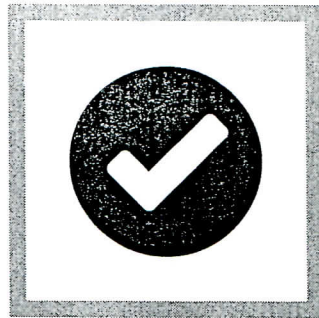
15. Clean the prepared sample cell.



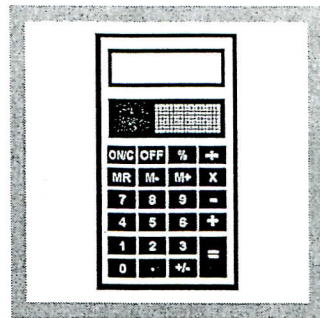
16. Insert the prepared sample into the cell holder. Point the diamond mark on the sample cell toward the keypad.



17. Install the instrument cap over the cell holder.



18. Push READ. Results show in mg/L ammonia as nitrogen ($\text{NH}_3\text{-N}$).



19. If the sample was diluted, multiply the result by the applicable dilution factor from Table 1 on page 2.

Note: To change the results to mg/L ammonia (NH_3), multiply the result by 1.22. To change the results to mg/L ammonium (NH_4^+), multiply the result by 1.29.

Interferences

Interfering substance	Interference level
Calcium	1000 mg/L as CaCO_3
Iron	All levels. Correct for iron interference as follows: <ol style="list-style-type: none"> 1. Use one of the Iron, Total procedures to measure the iron concentration of the sample. 2. Use an iron standard solution to add iron to the deionized water blank so that the blank has the same iron concentration as the sample. The iron interference will be zeroed out from the test result.
Magnesium	6000 mg/L as CaCO_3
Monochloramine	Monochloramine that is in chloraminated drinking water interferes directly at all levels and gives high results. Use a Free Ammonia and Monochloramine method to determine free ammonia in these sample matrices.
Nitrate	100 mg/L as $\text{NO}_3^- \text{-N}$
Nitrite	12 mg/L as $\text{NO}_2^- \text{-N}$
pH	Adjust acidic or basic samples to approximately pH 7. Use 1 N sodium hydroxide standard solution for acidic samples and 1 N hydrochloric acid standard solution for basic samples.
Phosphate	100 mg/L as $\text{PO}_4^{3-} \text{-P}$
Sulfate	300 mg/L as SO_4^{2-}
Sulfide	Sulfide will intensify the color. Remove sulfide interference as follows: <ol style="list-style-type: none"> 1. Measure approximately 350 mL of sample in a 500-mL Erlenmeyer flask. 2. Add the contents of one Sulfide Inhibitor Reagent Powder Pillow. Swirl to mix. 3. Filter the sample through a folded filter paper and filter funnel. 4. Use the filtered sample in the test procedure.
Other substances	Less common interferences such as hydrazine and glycine cause intensified colors in the prepared sample. Turbidity and color will give incorrect high values. Samples with severe interferences require distillation. Use the distillation procedure that is supplied with the distillation set.

CHLORINE, TOTAL (0 to 5.00 mg/L)

For water, wastewater and seawater

DPD Test 'N Tube™ Method*

Note: This product has not been evaluated to test for chlorine and chloramines in medical applications in the United States.



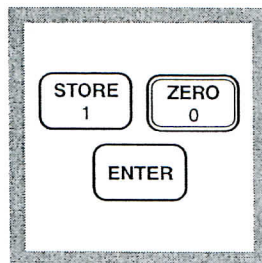
1. Enter the stored program number for Test 'N Tube total chlorine (Cl₂).

Press: **PRGM**

The display will show:

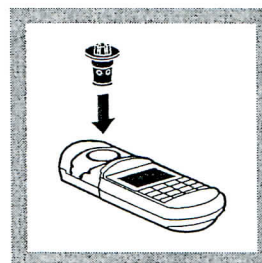
PRGM ?

Note: For most accurate results, perform a Reagent Blank Correction using deionized water (see Section 1).



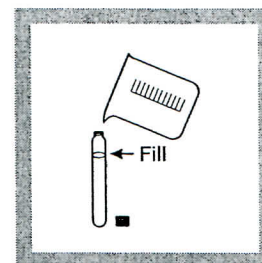
2. Press: **10 ENTER**

The display will show **mg/L, Cl₂** and the **ZERO** icon.



3. Insert the COD/TNT Vial Adapter into the cell holder by rotating the adapter until it drops into place. Then push down to fully insert it.

Note: For increased performance, a diffuser band covers the light path holes on the adapter. Do not remove the diffuser band.



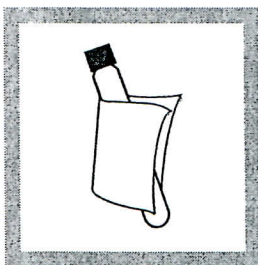
4. Fill an empty Test 'N Tube vial with sample (the blank).

Note: Fill to the top of the Hach logo "oval" mark.

Note: Samples must be analyzed immediately and cannot be preserved for later analysis.

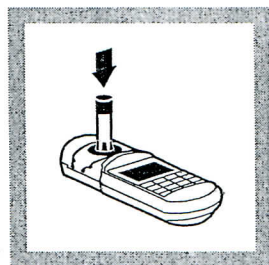
* Adapted from *Standard Methods for the Examination of Water and Wastewater*.

CHLORINE, TOTAL, continued



5. Wipe the outside of the blank vial with a towel.

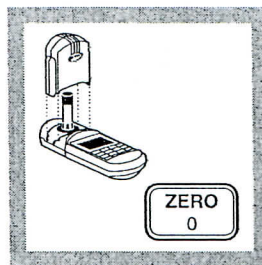
Note: Wiping with a damp cloth followed by a dry one removes fingerprints and other marks.



6. Place the blank in the adapter.

Push straight down on the top of the vial until it seats solidly into the adapter.

Note: Do not move the vial from side to side as this can cause errors.



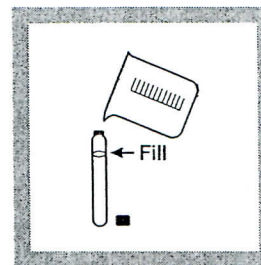
7. Cover the vial tightly with the instrument cap.

Press: **ZERO**

The cursor will move to the right, then the display will show:

0.00 mg/L Cl₂

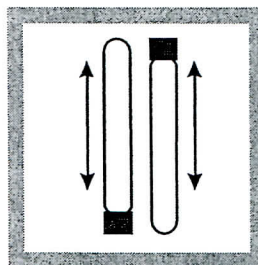
Note: If Reagent Blank Correction is on, the display may flash "limit". See Section 1.



8. Remove the cap from a Total Chlorine DPD-TNT tube. Add 10 mL of sample.

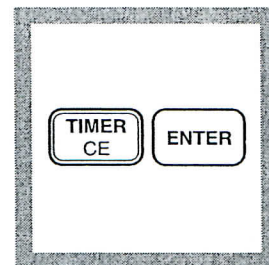
Note: Fill to the top of the Hach logo "oval" mark.

Note: A pink color will develop if chlorine is present.



9. Cap and invert at least 10 times to dissolve the powder. This is the prepared sample.

Note: Use slow, deliberate inversion for complete recovery. Ten inversions should take at least 30 seconds. One inversion equals turning the vial upside down, then returning it to an upright position.

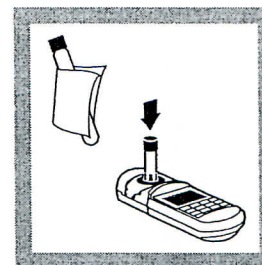


10. Press:

TIMER ENTER

A three-minute reaction period will begin.

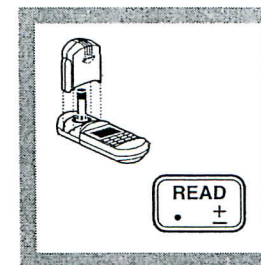
Note: A pink color will develop if chlorine is present.



11. When the timer beeps, wipe the prepared sample vial with a towel, then place it in the vial adapter.

Push straight down on the top of the vial until it seats solidly into the adapter.

Note: Do not move the vial from side to side as this can cause errors.



12. Cover the vial tightly with the instrument cap.

Press: **READ**

The cursor will move to the right, then the result in mg/L total chlorine will be displayed.

CHLORINE, TOTAL, continued

Sampling and Storage

Analyze samples for chlorine **immediately** after collection. Free and combined chlorine are strong oxidizing agents and are unstable in natural waters. They react rapidly with various inorganic compounds and more slowly oxidizes organic compounds. Many factors, including reactant concentrations, sunlight, pH, temperature and salinity influence decomposition of chlorine in water.

Avoid plastic containers since these may have a large chlorine demand. **Pretreat glass** sample containers to remove any chlorine demand by soaking in a dilute bleach solution (1 mL commercial bleach to 1 liter of deionized water) for at least 1 hour. Rinse thoroughly with deionized or distilled water. If sample containers are rinsed thoroughly with deionized or distilled water after use, only occasional pre-treatment is necessary.

A common error in testing for chlorine is obtaining an unrepresentative sample. If sampling from a tap, let the water flow for at least 5 minutes to ensure a representative sample. Let the container overflow with the sample several times, then cap the sample containers so there is no headspace (air) above the sample. Perform the analysis immediately.

Accuracy Check

Standard Additions Method

- a) Snap the top off a High Range Chlorine PourRite™ Ampule Standard Solution.
- b) Use a TenSette® Pipet to add 0.1 mL of the standard to 10 mL of sample (this is the spiked sample). Swirl to mix.
- c) Analyze the spiked sample, beginning at Step 8 of the procedure.
- d) Calculate the concentration of mg/L chlorine added to the sample:
$$\text{mg/L chlorine added} = \frac{0.1 (\text{vol. standard added}) \times \text{Label value (mg/L Cl}_2\text{)}}{10.1 (\text{sample} + \text{standard volume})}$$
- e) The spiked sample result (step c) should reflect the analyzed sample result + the calculated mg/L Cl₂ added (step d).
- f) If this increase does not occur, see *Standard Additions, Section 1* for more information.

NON-COMPLIANCE REPORT

Arkansas Department of Environmental Quality
 Office of Water Quality – Enforcement Branch
 5301 Northshore Drive
 North Little Rock, AR 72118

RE: Permit No: AR0048691 Discharge Number: 001-A

Facility: North Texarkana WWTP

Address: 8301 N. Sanderson Lane (PO Box 2008)

City: Texarkana State: AR Zip: 71854

Contact: J. D. Phillips, Executive Director Phone: (903) 798-3821

Date of Non-Compliance	Parameter Exceeded	Quantity or Loading	Quality or Concentration	Permit Limits
Feb 9 - 15, 2020	7 Day Avg flow MGD	1.230		0.95

We feel this problem was due to:

~~5.72 inches of rainfall during this time period.~~

We plan on correcting the problem in this manner:

~~Texarkana Water Utilities has an Inflow & Infiltration Program in place. They actively search out any I & I situations and report them for immediate repairs~~

Time estimated that it will take to correct problem:

~~On going every day.~~

Sincerely,

JD Phillips, Executive Director

03/10/2020, corrected 05/19/2020

Submitted By:

Date

Submitted electronically via NetDMR

Certification Statement: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (Revised March 2016)



Texarkana Water Utilities

801 Wood Street, P.O. Box 2008, Texarkana, Texas 75504

(903) 798-3800 Phone

711 TTY

(903) 791-0724 Fax

May 21, 2020

Arkansas Department of Environmental Quality
Office of Water Quality (OWQ) Compliance Branch
5301 Northshore Drive
North Little Rock, AR 72118-5317

RE: City of Texarkana - North Texarkana WWTP Inspections (Miller Co.)

AFIN: 46-00237

NPDES Permit No.: AR0048691

ARR00C484

Dear Mr. Young:

During your April 29, 2020 inspection of our facility, you noted four violations in your summary. Corrective action has been taken and addressed below.

- 1) *Dissolved Oxygen meter calibration was being performed as a liquid saturation without the appropriate buffer and not an air saturation method.*

The main lab at South Regional WWTP has always performed a Winkler water calibration once a month on the DO meter. The calibration log is attached for your review. The plant operator performs a daily air calibration on the DO meter and the SOP is included with this response.

- 2) *The thermometer in the composite sampler has no recorded calibration.*

Temperature will be read daily and recorded. The thermometer will be brought to the main lab once a month and exchanged with another. The Lab will compare at a temperature that has been Factory Certified on the NIST Thermometer. The results will be recorded and kept in both laboratory locations.

Note: The thermometers will be replaced if they do not calibrate in the range for Sampler ($4^{\circ}\pm 2$). The NIST thermometer has been certified at 0, 4, 20, 37, 44.5, and 103 degree.

- 3) *There are no written Standard Operating Procedures (SOPs) for the laboratory analyses that are conducted in the lab of the North Texarkana WWTP.*

Standard Operating Procedures (SOPs) for laboratory analyses conducted at North Texarkana WWTP are included for pH, Ammonia Nitrogen, and Total Chlorine.

- 4) *In February 2020, there was an exceedance of the 7-day average of flow and the non-compliance report (NCR) included did not have all the information required.*

New information has now been added to the Non-Compliance Report (NCR) and is included with this response.

If additional information is needed, please contact me at phillips@txkusa.org or (903) 798-3821.

Sincerely,

J.D. Phillips, P.E.
Executive Director