Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
3. Application Materials

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER
The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

City of Nazareth (CN600671838) operates City of Nazareth Wastewater Treatment Plant (RN101918159), an aerated lagoon, followed by 2 stabilization ponds. The facility is located at approximately 4500 feet northwest of the intersection of State Highway 86 and Farm to Market Road 168, in Nazareth, Castro County, Texas 79063. This permit is a renewal to dispose of up to 0.05 million gallons per day of treated domestic wastewater via evaporation and surface irrigation of 47 acres of non-public access land. This permit will not authorize the discharge of pollutants into waters of the State.

Discharges from the facility are expected to contain BOD_5. Domestic wastewater is treated by an aerated lagoon and 2 stabilization ponds.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AMENDED NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

PERMIT NO. WQ0010979001

APPLICATION. City of Nazareth, P.O. Box 7, Nazareth, Texas 79063, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0010979001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 50,000 gallons per day via evaporation and surface irrigation of 47 acres of non-public access perennial pastureland. The domestic wastewater facility and disposal area are located approximately 4,500 feet northwest of the intersection of Farm-to-Market Road 168 and State Highway 86, near the city of Nazareth, in Castro County, Texas 79063. TCEQ received this application on July 31, 2025. The permit application will be available for viewing and copying at Nazareth City Hall, Main Entrance, 106 2nd street, Nazareth, in Castro County, Texas, prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-102.116944,34.548611&level=18

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application**

is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105,

P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from City of Nazareth at the address stated above or by calling Ms. Lacey Farris, City Manager, at (806) 945-2285.

Issuance Date: October 22, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: City of Nazareth

PERMIT NUMBER (If new, leave blank): WQ0010979001

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Original USGS Map	☒	☐
Administrative Report 1.1	☐	☒	Affected Landowners Map	☐	☒
SPIF	☐	☒	Landowner Disk or Labels	☐	☒
Core Data Form	☒	☐	Buffer Zone Map	☐	☒
Summary of Application (PLS)	☒	☐	Flow Diagram	☒	☐
Public Involvement Plan Form	☐	☒	Site Drawing	☒	☐
Technical Report 1.0	☒	☐	Original Photographs	☐	☒
Technical Report 1.1	☐	☒	Design Calculations	☐	☒
Worksheet 2.0	☐	☒	Solids Management Plan	☐	☒
Worksheet 2.1	☐	☒	Water Balance	☐	☒
Worksheet 3.0	☒	☐			
Worksheet 3.1	☐	☒			
Worksheet 3.2	☐	☒			
Worksheet 3.3	☐	☒			
Worksheet 4.0	☐	☒			
Worksheet 5.0	☐	☒			
Worksheet 6.0	☒	☐			
Worksheet 7.0	☐	☒			

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	$350.00 ☐	$315.00 ☐
≥0.05 but <0.10 MGD	$550.00 ☐	$515.00 ☒
≥0.10 but <0.25 MGD	$850.00 ☐	$815.00 ☐
≥0.25 but <0.50 MGD	$1,250.00 ☐	$1,215.00 ☐
≥0.50 but <1.0 MGD	$1,650.00 ☐	$1,615.00 ☐
≥1.0 MGD	$2,050.00 ☐	$2,015.00 ☐

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed Check/Money Order Number: Click to enter text.

Check/Money Order Amount: Click to enter text.

Name Printed on Check: Click to enter text.

EPAY Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

a. Check the box next to the appropriate authorization type.

☒ Publicly Owned Domestic Wastewater

☐ Privately-Owned Domestic Wastewater

☐ Conventional Water Treatment

b. Check the box next to the appropriate facility status.

☒ Active ☐ Inactive

c. Check the box next to the appropriate permit type.

- ☐ TPDES Permit
- ☒ TLAP
- ☐ TPDES Permit with TLAP component
- ☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☐ New
- ☐ Major Amendment *with* Renewal
- ☐ Major Amendment *without* Renewal
- ☒ Renewal without changes
- ☐ Minor Amendment *with* Renewal
- ☐ Minor Amendment *without* Renewal
- ☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: N/A

f. For existing permits:

Permit Number: WQ00 10979001

EPA I.D. (TPDES only): TX N/A

Expiration Date: December 1, 2025

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

City of Nazareth

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at http://www15.tceq.texas.gov/crpub/

CN: 600671838

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: Mr. Last Name, First Name: Durbin, Marlin

Title: Mayor Credential: Click to enter text.

B. Co-applicant information. Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

N/A

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at: http://www15.tceq.texas.gov/crpub/

CN: N/A

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. Appendix A: Core Data Form

Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix: Ms. Last Name, First Name: Farris, Lacey

Title: City Manager Credential: Click to enter text.

Organization Name: City of Nazareth

Mailing Address: P.O. Box 7 City, State, Zip Code: Nazareth, TX 79063

Phone No.: 806.945.2285 E-mail Address: cityofnazareth@yahoo.com

Check one or both: ☒ Administrative Contact ☐ Technical Contact

B. Prefix: Mr. Last Name, First Name: Krueger, Paul

Title: Civil Engineer Credential: P.E.

Organization Name: Parkhill

Mailing Address: 4222 85th St City, State, Zip Code: Lubbock, TX 79423

Phone No.: 806.473.3715 E-mail Address: pkrueger@parkhill.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Ms. Last Name, First Name: Farris, Lacey

Title: City Manager Credential: Click to enter text.

Organization Name: City of Nazareth

Mailing Address: P.O. Box 7 City, State, Zip Code: Nazareth, TX 79063

Phone No.: 806.945.2285 E-mail Address: cityofnazareth@yahoo.com

B. Prefix: Mr. Last Name, First Name: Krueger, Paul

Title: Civil Engineer Credential: P.E.

Organization Name: Parkhill

Mailing Address: 4222 85th St City, State, Zip Code: Lubbock, TX 79423

Phone No.: 806.473.3715 E-mail Address: pkrueger@parkhill.com

Section 6. Billing Contact Information (Instructions Page 27)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits ***in effect on September 1 of each year***. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix: Ms. Last Name, First Name: Farris, Lacey

Title: City Manager Credential: Click to enter text.

Organization Name: City of Nazareth

Mailing Address: P.O. Box 7 City, State, Zip Code: Nazareth, TX 79063

Phone No.: 806.945.2285 E-mail Address: cityofnazareth@yahoo.com

Section 7. DMR/MER Contact Information (Instructions Page 27)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (DMR) (EPA 3320-1) or maintain Monthly Effluent Reports (MER).

Prefix: Ms. Last Name, First Name: Farris, Lacey

Title: City Manager Credential: Click to enter text.

Organization Name: City of Nazareth

Mailing Address: P.O. Box 7 City, State, Zip Code: Nazareth, TX 79063

Phone No.: 806.945.2285 E-mail Address: cityofnazareth@yahoo.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Krueger, Paul

Title: Civil Engineer Credential: P.E.

Organization Name: Parkhill

Mailing Address: 4222 85th St City, State, Zip Code: Lubbock, TX 79423

Phone No.: 806.473.3715 E-mail Address: pkrueger@parkhill.com

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Ms. Last Name, First Name: Farris, Lacey

Title: City Manager Credential: Click to enter text.

Organization Name: City of Nazareth

Mailing Address: P.O. Box 7 City, State, Zip Code: Nazareth, TX 79063

Phone No.: 806.945.2285 E-mail Address: cityofnazareth@yahoo.com

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Nazareth City Hall

Location within the building: Main Entrance

Physical Address of Building: 106 2nd Street

City: Nazareth County: Castro

Contact (Last Name, First Name): Farris, Lacey

Phone No.: 806.945.2285 Ext.: N/A

E. Bilingual Notice Requirements

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☐ Yes ☒ No

   If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

   ☐ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

   ☐ Yes ☐ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

   ☐ Yes ☐ No

5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? Click to enter text.

F. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: Appendix C: Plain Language Summary

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: N/A

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** 101918159

Search the TCEQ's Central Registry at http://www15.tceq.texas.gov/crpub/ to determine if the site is currently regulated by TCEQ.

B. Name of project or site (the name known by the community where located):

City of Nazareth Wastewater Treatment Plant

C. Owner of treatment facility: City of Nazareth

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

Prefix: Mr. Last Name, First Name: Wilhelm, Hugh

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: 2750 Highway 86 City, State, Zip Code: Nazareth, TX 79063

Phone No.: N/A E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: Appendix B: Land Use Agreement

E. Owner of effluent disposal site:

Prefix: Mr. Last Name, First Name: Wilhelm, Hugh

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: 2750 Highway 86 City, State, Zip Code: Nazareth, TX 79063

Phone No.: N/A E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: Appendix B: Land Use Agreement

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: N/A City, State, Zip Code: N/A

Phone No.: N/A E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☐ Yes ☐ No

If **no**, **or a new permit application**, please give an accurate description:

N/A

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☐ Yes ☐ No

If **no**, **or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

N/A – TLAP Only

City nearest the outfall(s): Click to enter text.

County in which the outfalls(s) is/are located: Click to enter text.

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☐ No

If **yes**, indicate by a check mark if:

☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: Click to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: Click to enter text.

Section 11. TLAP Disposal Information (Instructions Page 32)

A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☒ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

N/A

B. City nearest the disposal site: Nazareth

C. County in which the disposal site is located: Castro

D. For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Treated effluent is pumped from the stabilization pond to the irrigation site.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Segment No. 0228 of the Red River, North of disposal site

Section 12. Miscellaneous Information (Instructions Page 32)

A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

N/A

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: N/A

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following information:

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, please provide the following information:

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

Indicate which attachments are included with the Administrative Report. Check all that apply:

☒ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☒ Other Attachments. Please specify: Appendix A: Core Data Form, Appendix B: Land Use Agreement, Appendix C: Plain Language Summary

Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WQ0010979001

Applicant: City of Nazareth

Certification:

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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Marlin Durbin

Signatory title: Mayor

Signature: Marlin Durbin Date: 07-28-25

(Use blue ink)

Subscribed and Sworn to before me by the said Marlin Durbin

on this 28 day of July, 20 25.

My commission expires on the 1 day of August, 20 29.

Lacey Farris

Notary Public

LACEY LYNN FARRIS
[SEAL] My Notary ID # 131229197
Expires August 1, 2029

Castro

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:

- ☐ The applicant's property boundaries
- ☐ The facility site boundaries within the applicant's property boundaries
- ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- ☐ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- ☐ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- ☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- ☐ The property boundaries of all landowners surrounding the effluent disposal site
- ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

B. ☐ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.

C. ☐ Indicate by a check mark that the landowners list has also been provided as mailing labels in electronic format (Avery 5160).

D. Provide the source of the landowners' names and mailing addresses: Click to enter text.

E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

☐ Yes ☐ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s):

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

☐ At least one original photograph of the new or expanded treatment unit location

☐ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.

☐ At least one photograph of the existing/proposed effluent disposal site

☐ A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

☐ Ownership

☐ Restrictive easement

☐ Nuisance odor control

☐ Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

☐ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: N/A

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): Click to enter text.

Full legal name (Last Name, First Name, Middle Initial): Click to enter text.

Driver's License or State Identification Number: Click to enter text.

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text. Fax Number: Click to enter text.

E-mail Address: Click to enter text.

CN: Click to enter text.

For Commission Use Only:
Customer Number:
Regulated Entity Number:
Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) ☒ Yes
(Required for all application types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)

Correct and Current Industrial Wastewater Permit Application Forms ☒ Yes
(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)

Water Quality Permit Payment Submittal Form (Page 19) ☒ Yes
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)

7.5 Minute USGS Quadrangle Topographic Map Attached ☒ Yes
(Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)

Current/Non-Expired, Executed Lease Agreement or Easement ☐ N/A ☒ Yes

Landowners Map ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Labels and Cross Reference List ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Electronic Application Submittal ☒ Yes
(See application submittal requirements on page 23 of the instructions.)

Original signature per 30 TAC § 305.44 – Blue Ink Preferred ☒ Yes
(If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)

Summary of Application (in Plain Language) ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 42)

A. Existing/Interim I Phase

Design Flow (MGD): 0.05

2-Hr Peak Flow (MGD): 0.19

Estimated construction start date: 1970

Estimated waste disposal start date: 1971

B. Interim II Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

D. Current Operating Phase

Provide the startup date of the facility: 1971

Section 2. Treatment Process (Instructions Page 42)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of *each phase* must be provided**.

The aerated lagoon is followed by two stabilization ponds operated in series. The facility includes an adjacent playa lake for storage. Water is either evaporated or land applied on 47 acres of non public access land.

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) **of each treatment unit, accounting for *all* phases of operation.**

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Stabilization Pond #1	1	200' x 250' x 6'
Stabilization Pond #2	1	200' x 150' x 6'
Aerated Lagoon	1	200' x 150' x 9'

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: Appendix E: Flow Diagram

Section 3. Site Information and Drawing (Instructions Page 43)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: N/A
- Longitude: N/A

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: 34.547556
- Longitude: -102.117222

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: Appendix F: Site Map

Provide the name **and** a description of the area served by the treatment facility.

Click to enter text.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
N/A		Choose an item.	
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 44)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

☐ Yes ☒ No

If yes, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☐ Yes ☐ No

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases**.

N/A

Section 5. Closure Plans (Instructions Page 44)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ☒ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

N/A

Section 6. Permit Specific Requirements (Instructions Page 44)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☐ Yes ☐ No

If yes, provide the date(s) of approval for each phase: Unknown

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable**.

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

Click to enter text.

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

☒ Yes ☐ No

If yes, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

Groundwater monitoring

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

☐ Yes ☒ No

If No, stop here and continue with Subsection E. Stormwater Management.

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

N/A

3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

☐ Yes ☐ No

If No, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

Click to enter text.

4. *Grease and decanted liquid disposal*

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

Describe how the decant and grease are treated and disposed of after grit separation.

Click to enter text.

E. Stormwater management

1. *Applicability*

Does the facility have a design flow of 1.0 MGD or greater in any phase?

☐ Yes ☒ No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

☐ Yes ☒ No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. *MSGP coverage*

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☐ Yes ☐ No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 Click to enter text. or TXRNE Click to enter text.

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☐ No

3. *Conditional exclusion*

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☐ No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

Click to enter text.

4. ***Existing coverage in individual permit***

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☐ Yes ☐ No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

Click to enter text.

5. ***Zero stormwater discharge***

Do you intend to have no discharge of stormwater via use of evaporation or other means?

☐ Yes ☐ No

If yes, explain below then skip to Subsection F. Other Wastes Received.

Click to enter text.

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. ***Request for coverage in individual permit***

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

☐ Yes ☐ No

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Click to enter text.

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
N/A

G. Other wastes received including sludge from other WWTPs and septic waste

1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

☐ Yes ☒ No

If yes, attach sewage sludge solids management plan. See Example 5 of instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

If yes, does the facility have a Type V processing unit?

☐ Yes ☐ No

If yes, does the unit have a Municipal Solid Waste permit?

☐ Yes ☐ No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. ***Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)***

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

☐ Yes ☒ No

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

N/A

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 49)

Is the facility in operation?

☒ Yes ☐ No

If no, this section is not applicable. Proceed to Section 8.

If yes, provide effluent analysis data for the listed pollutants. ***Wastewater treatment facilities*** complete Table 1.0(2). **W*ater treatment facilities*** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	---	31.6	1	Grab	4/22/2025 8:45 am
Total Suspended Solids, mg/l	---	148	1	Grab	4/22/2025 8:45 am
Ammonia Nitrogen, mg/l	---	< 0.020	1	Grab	4/22/2025 8:45 am
Nitrate Nitrogen, mg/l	---	< 0.1	1	Grab	4/22/2025 8:45 am
Total Kjeldahl Nitrogen, mg/l	---	7.57	1	Grab	4/22/2025 8:45 am
Sulfate, mg/l	---	65.0	1	Grab	4/22/2025 8:45 am
Chloride, mg/l	---	246	1	Grab	4/22/2025 8:45 am
Total Phosphorus, mg/l	---	1.47	1	Grab	4/22/2025 8:45 am
pH, standard units	---	9.0	1	Grab	4/22/2025 8:45 am
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	---	< 0.100	1	Grab	4/22/2025 8:45 am
E.coli (CFU/100ml) freshwater	---	139	1	Grab	4/22/2025 8:45 am
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	---	870	1	Grab	4/22/2025 8:45 am
Electrical Conductivity, µmohs/cm, †	---	1560	1	Grab	4/22/2025 8:45 am
Oil & Grease, mg/l	---	< 4.76	1	Grab	4/22/2025 8:45 am
Alkalinity ($CaCO_3$)*, mg/l	N/A	N/A	N/A	N/A	N/A

*TPDES permits only
†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity ($CaCO_3$), mg/l					

Section 8. Facility Operator (Instructions Page 49)

Facility Operator Name: Jerry Lange

Facility Operator's License Classification and Level: Operator D

Facility Operator's License Number: WW0026825

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 50)

A. WWTP's Sewage Sludge or Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow>= 1 MGD
- ☐ Serves >= 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user – land application (onsite)
- ☐ Biosolids end user – surface disposal (onsite)
- ☐ Biosolids end user – incinerator (onsite)

B. WWTP's Sewage Sludge or Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☐ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☒ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process: Click to enter text.

C. Sewage Sludge or Biosolids Management

Provide information on the *intended* sewage sludge or biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the

permit will authorize all sewage sludge or biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Storage	On-Site Owner or Operator	Not Applicable		Class B: PSRP Aerobic Digestion	Option 5: Aerobic process for 14 days at >40C

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Sludge will be stored in the ponds for the life of the plant.

D. Disposal site

Disposal site name: N/A

TCEQ permit or registration number: N/A

County where disposal site is located: N/A

E. Transportation method

Method of transportation (truck, train, pipe, other): N/A

Name of the hauler: N/A

Hauler registration number: N/A

Sludge is transported as a:

Liquid ☐ semi-liquid ☐ semi-solid ☐ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 52)

A. Beneficial use authorization

Does the existing permit include authorization for land application of biosolids for beneficial use?

☐ Yes ☒ No

If yes, are you requesting to continue this authorization to land apply biosolids for beneficial use?

☐ Yes ☐ No

If yes, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

☐ Yes ☐ No

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	☐ Yes	☒ No
Marketing and Distribution of Biosolids	☐ Yes	☒ No
Sludge Surface Disposal or Sludge Monofill	☐ Yes	☒ No
Temporary storage in sludge lagoons	☐ Yes	☒ No

If yes to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:

  Attachment: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

Click to enter text.

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0.*

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: N/A

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

Volume and frequency of sludge to the lagoon(s): N/A

Total dry tons stored in the lagoons(s) per 365-day period: N/A

Total dry tons stored in the lagoons(s) over the life of the unit: N/A

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

☐ Yes ☐ No

If yes, describe the liner below. Please note that a liner is required.

N/A

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

N/A

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

  Attachment: N/A
- Copy of the closure plan

  Attachment: N/A
- Copy of deed recordation for the site

  Attachment: N/A
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: N/A
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: N/A

E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

☐ Yes ☐ No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: N/A

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 54)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

☐ Yes ☒ No

If yes, provide the TCEQ authorization number and description of the authorization:

N/A

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

☐ Yes ☒ No

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

N/A

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

☐ Yes ☒ No

B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

☐ Yes ☒ No

C. Details about wastes received

If yes to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: N/A

Section 14. Laboratory Accreditation (Instructions Page 55)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
  - periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - performing work for another company with a unit located in the same site; or
  - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.*

Printed Name: Lacey Farris

Title: City Manager

Signature: Lacey Farris

Date: 7/29/2025

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 56)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

Click to enter text.

B. Regionalization of facilities

For additional guidance, please review TCEQ's Regionalization Policy for Wastewater Treatment[1].

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. *Municipally incorporated areas*

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

☐ Yes ☐ No ☐ Not Applicable

If yes, within the city limits of: Click to enter text.

If yes, attach correspondence from the city.

Attachment: Click to enter text.

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment: Click to enter text.

2. *Utility CCN areas*

Is any portion of the proposed service area located inside another utility's CCN area?

☐ Yes ☐ No

[1] https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

If yes, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: Click to enter text.

3. ***Nearby WWTPs or collection systems***

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

☐ Yes ☐ No

If yes, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: Click to enter text.

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: Click to enter text.

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 58)

Is this facility in operation?

☐ Yes ☐ No

If no, proceed to Item B, Proposed Organic Loading.

If yes, provide organic loading information in Item A, Current Organic Loading

A. Current organic loading

Facility Design Flow (flow being requested in application): Click to enter text.

Average Influent Organic Strength or BOD_5 Concentration in mg/l: Click to enter text.

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34): Click to enter text.

Provide the source of the average organic strength or BOD_5 concentration.

Click to enter text.

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD_5 from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 58)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

☐ Chlorine: Click to enter text. mg/l after Click to enter text. minutes detention time at peak flow

Dechlorination process: Click to enter text.

☐ Ultraviolet Light: Click to enter text. seconds contact time at peak flow

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 58)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: Click to enter text.

Section 5. Facility Site (Instructions Page 59)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☐ Yes ☐ No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

Click to enter text.

Provide the source(s) used to determine 100-year frequency flood plain.

Click to enter text.

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

☐ Yes ☐ No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

☐ Yes ☐ No

If yes, provide the permit number: Click to enter text.

If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.

B. Wind rose

Attach a wind rose: Click to enter text.

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 59)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

☐ Yes ☐ No

If yes, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)**: Click to enter text.

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: Click to enter text.

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 60)

Attach a solids management plan to the application.

Attachment: Click to enter text.

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities

- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 63)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

☐ Yes ☐ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: Click to enter text.

Distance and direction to the intake: Click to enter text.

Attach a USGS map that identifies the location of the intake.

Attachment: Click to enter text.

Section 2. Discharge into Tidally Affected Waters (Instructions Page 63)

Does the facility discharge into tidally affected waters?

☐ Yes ☐ No

If **no**, proceed to Section 3. **If yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: Click to enter text.

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

If yes, provide the distance and direction from outfall(s).

Click to enter text.

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☐ No

If yes, provide the distance and direction from the outfall(s).

Click to enter text.

Section 3. Classified Segments (Instructions Page 63)

Is the discharge directly into (or within 300 feet of) a classified segment?

☐ Yes ☐ No

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 63)

Name of the immediate receiving waters: Click to enter text.

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text.

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

☐ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: Click to enter text.

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

Click to enter text.

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

☐ Yes ☐ No

If yes, discuss how.

Click to enter text.

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

Click to enter text.

Date and time of observation: Click to enter text.

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 65)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☐ Urban runoff
☐ Agricultural runoff
☐ Other(s), specify: Click to enter text.

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ Other(s), specify: Click to enter text.

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☐ Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- ☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 65)

Date of study: Click to enter text. Time of study: Click to enter text.

Stream name: Click to enter text.

Location: Click to enter text.

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial ☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 65)

Number of stream bends that are well defined: Click to enter text.

Number of stream bends that are moderately defined: Click to enter text.

Number of stream bends that are poorly defined: Click to enter text.

Number of riffles: Click to enter text.

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

Click to enter text.

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	**Transect location**	**Water surface width (ft)**	**Stream depths (ft)** at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 65)

Streambed slope of entire reach, from USGS map in feet/feet: Click to enter text.

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): Click to enter text.

Length of stream evaluated, in feet: Click to enter text.

Number of lateral transects made: Click to enter text.

Average stream width, in feet: Click to enter text.

Average stream depth, in feet: Click to enter text.

Average stream velocity, in feet/second: Click to enter text.

Instantaneous stream flow, in cubic feet/second: Click to enter text.

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): Click to enter text.

Size of pools (large, small, moderate, none): Click to enter text.

Maximum pool depth, in feet: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

Section 1. Type of Disposal System (Instructions Page 67)

Identify the method of land disposal:

- ☐ Surface application
- ☒ Irrigation
- ☐ Drip irrigation system
- ☒ Evaporation
- ☐ Other (describe in detail): Click to enter text.
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: N/A

Section 2. Land Application Site(s) (Instructions Page 67)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Native Grass and Rye Grass, Agricultural	47	50,000	N

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 67)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
Stabilization Pond 1	1.15	6.89	200’ x 250’ x 6’	Clay
Stabilization Pond 2	0.69	4.65	200’ x 150’ x 6’	Clay
Aerated Lagoon	0.69	6.3	200’ x 150’ x 6’	Clay

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: N/A

Section 4. Flood and Runoff Protection (Instructions Page 67)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☒ No

If yes, describe how the site will be protected from inundation.

N/A

Provide the source used to determine the 100-year frequency flood level:

FEMA

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Land application will not occur during wet weather events.

Section 5. Annual Cropping Plan (Instructions Page 67)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: Appendix H: Annual Cropping Plan

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 68)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: Appendix I: Well Map and Information

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
1032704	Domestic	Yes	Cased	Buffer
1032403	Irrigation	Yes	Cased	Buffer
1032401	Public Supply	Yes	Cased	Buffer
1032404	Unused	No	Capped	N/A
1032705	Unused	No	Capped	N/A
1032702	Unused	No	Capped	N/A
604777	Domestic	Yes	Cased	Buffer
550896	Domestic	Yes	Cased	Buffer
669993	Domestic	Yes	Cased	Buffer
296142	Domestic	Yes	Cased	Buffer
257720	Domestic	Yes	Cased	Buffer
569462	Domestic	Yes	Cased	Buffer
687306	Domestic	Yes	Cased	Buffer

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment: Click to enter text.

Section 7. Groundwater Quality (Instructions Page 68)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: Appendix J: Groundwater Quality

Are groundwater monitoring wells available onsite? ☐ Yes ☒ No

Do you plan to install ground water monitoring wells or lysimeters around the land application site? ☐ Yes ☒ No

If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: Click to enter text.

Section 8. Soil Map and Soil Analyses (Instructions Page 69)

A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: Appendix K: Soil Map

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: N/A – Irrigation did not occur in the past year

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

Section 9. Effluent Monitoring Data (Instructions Page 70)

Is the facility in operation?

☒ Yes ☐ No

If no, this section is not applicable and the worksheet is complete.

If yes, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
01/03/2023	0.0073	36.8	N/A	7.1	N/A	0
02/07/2023	0.0070	36.3	N/A	8.3	N/A	0
03/13/2023	0.0076	39.0	N/A	8.1	N/A	0

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
04/03/2023	0.0079	45.3	N/A	7.5	N/A	0
05/01/2023	0.0091	70.0	N/A	8.3	N/A	0
06/12/2023	0.0077	40.6	N/A	7.63	N/A	0
07/06/2023	0.0085	57.0	N/A	7.8	N/A	0
08/07/2023	0.0096	55.4	N/A	8.1	N/A	0
09/12/2023	0.0088	56.8	N/A	7.8	N/A	0
10/10/2023	0.0073	65.8	N/A	7.6	N/A	0
11/07/2023	0.0079	28.9	N/A	7.9	N/A	0
12/05/2023	0.0085	20.9	N/A	7.9	N/A	0
01/02/2024	0.0087	28.8	N/A	7.9	N/A	0
02/06/2024	0.0082	36.4	N/A	8.0	N/A	0
03/05/2024	0.0089	59.2	N/A	7.8	N/A	0
04/02/2024	0.0091	52.4	N/A	8.1	N/A	0
05/07/2024	0.0085	111	N/A	8.1	N/A	0
06/18/2024	0.0095	52.5	N/A	8.2	N/A	0
07/16/2024	0.012	63.8	N/A	8.3	N/A	0
08/06/2024	0.0098	64.5	N/A	8.3	N/A	0
09/03/2024	0.0091	63.2	N/A	7.8	N/A	0
10/07/2024	0.0082	22.0	N/A	8.4	N/A	0
11/11/2024	0.0076	21.4	N/A	8.0	N/A	0
12/02/2024	0.0083	128	N/A	2.7	N/A	0

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 71)

Complete the item that applies for the method of disposal being used.

A. Irrigation

Area under irrigation, in acres: Click to enter text.

Design application frequency:

hours/day Click to enter text. **And** days/week Click to enter text.

Land grade (slope):

average percent (%): Click to enter text.

maximum percent (%): Click to enter text.

Design application rate in acre-feet/acre/year: Click to enter text.

Design total nitrogen loading rate, in lbs N/acre/year: Click to enter text.

Soil conductivity (mmhos/cm): Click to enter text.

Method of application: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment: Click to enter text.

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

Area of bed(s), in acres: Click to enter text.

Depth of bed(s), in feet: Click to enter text.

Void ratio of soil in the beds: Click to enter text.

Storage volume within the beds, in acre-feet: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: Click to enter text.

D. Overland flow

Area used for application, in acres: Click to enter text.

Slopes for application area, percent (%): Click to enter text.

Design application rate, in gpm/foot of slope width: Click to enter text.

Slope length, in feet: Click to enter text.

Design BOD_5 loading rate, in lbs BOD_5/acre/day: Click to enter text.

Design application frequency:

hours/day: Click to enter text. **And** days/week: Click to enter text.

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 72)

Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☐ No

If **yes**, is the facility located on the Edwards Aquifer Recharge Zone?

☐ Yes ☐ No

If yes, attach a geological report addressing potential recharge features.

Attachment: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Subsurface Application (Instructions Page 73)

Identify the type of system:

- ☐ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- ☐ Low Pressure Dosing
- ☐ Other, specify: Click to enter text.

Application area, in acres: Click to enter text.

Area of drainfield, in square feet: Click to enter text.

Application rate, in gal/square foot/day: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

Area of trench, in square feet: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Number of beds: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Infiltration rate, in inches/hour: Click to enter text.

Storage volume, in gallons: Click to enter text.

Area of bed(s), in square feet: Click to enter text.

Soil Classification: Click to enter text.

Attach a separate engineering report with the information required in *30 TAC § 309.20,* excluding the requirements of *§* 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 73)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☐ No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

If yes to either question, the subsurface system may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** subsurface area drip dispersal system permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **meets** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Administrative Information (Instructions Page 74)

A. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:

B. Click to enter text. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

Click to enter text.

C. Owner of the subsurface area drip dispersal system: Click to enter text.

D. Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

☐ Yes ☐ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

Click to enter text.

E. Owner of the land where the subsurface area drip dispersal system is located: Click to enter text.

F. Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

☐ Yes ☐ No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

Click to enter text.

Section 2. Subsurface Area Drip Dispersal System (Instructions Page 74)

A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify: Click to enter text.

B. Irrigation operations

Application area, in acres: Click to enter text.

Infiltration Rate, in inches/hour: Click to enter text.

Average slope of the application area, percent (%): Click to enter text.

Maximum slope of the application area, percent (%): Click to enter text.

Storage volume, in gallons: Click to enter text.

Major soil series: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

C. Application rate

Is the facility located **west** of the boundary shown in *30 TAC § 222.83* **and** also using a vegetative cover of non-native grasses over seeded with cool season grasses during the winter months (October-March)?

☐ Yes ☐ No

If yes, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in *30 TAC § 222.83* **or** in any part of the state when the vegetative cover is any crop other than non-native grasses?

☐ Yes ☐ No

If **yes**, the facility must use the formula in *30 TAC §222.83* to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

☐ Yes ☐ No

Hydraulic application rate, in gal/square foot/day: Click to enter text.

Nitrogen application rate, in lbs/gal/day: Click to enter text.

D. Dosing information

Number of doses per day: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Rest period between doses, in hours: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

Number of zones: Click to enter text.

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

☐ Yes ☐ No

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

Attachment: Click to enter text.

Section 3. Required Plans (Instructions Page 74)

A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79*.

Attachment: Click to enter text.

B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*.

Attachment: Click to enter text.

C. Site preparation plan

Attach a Site Preparation Plan with all information required in *30 TAC §222.75*.

Attachment: Click to enter text.

D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157*.

Attachment: Click to enter text.

Section 4. Floodway Designation (Instructions Page 75)

A. Site location

Is the existing/proposed land application site within a designated floodway?

☐ Yes ☐ No

B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: Click to enter text.

Section 5. Surface Waters in the State (Instructions Page 75)

A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

Attachment: Click to enter text.

B. Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

If yes, then attach the additional information required in *30 TAC § 222.81(c).*

Attachment: Click to enter text.

Section 6. Edwards Aquifer (Instructions Page 75)

A. Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☐ No

B. Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

If yes to either question, then the SADDS may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 76)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile				50
Aldrin				0.01
Aluminum				2.5
Anthracene				10
Antimony				5
Arsenic				0.5
Barium				3
Benzene				10
Benzidine				50
Benzo(a)anthracene				5
Benzo(a)pyrene				5
Bis(2-chloroethyl)ether				10
Bis(2-ethylhexyl)phthalate				10
Bromodichloromethane				10
Bromoform				10
Cadmium				1
Carbon Tetrachloride				2
Carbaryl				5
Chlordane*				0.2
Chlorobenzene				10
Chlorodibromomethane				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform				10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) **(*1)**				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10
Cyanide **(*2)**				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10
Diuron				0.09
Endosulfan I (alpha)				0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Epichlorohydrin				---
Ethylbenzene				10
Ethylene Glycol				---
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane (Lindane)				0.05
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
4,4'-Isopropylidenediphenol				1
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Methyl tert-butyl ether				---
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10
Polychlorinated Biphenyls (PCB's) **(*3)**				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable.

(*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(2)A – Metals, Cyanide, and Phenols

Pollutant	**AVG Effluent Conc. (µg/l)**	**MAX Effluent Conc. (µg/l)**	**Number of Samples**	**MAL (µg/l)**
Antimony				5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) **(*1)**				N/A
Copper				2
Lead				0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide **(*2)**				10
Phenols, Total				10

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein				50
Acrylonitrile				50
Benzene				10
Bromoform				10
Carbon Tetrachloride				2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroethane				50
2-Chloroethylvinyl Ether				10
Chloroform				10
Dichlorobromomethane [Bromodichloromethane]				10
1,1-Dichloroethane				10
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
1,2-Dichloropropane				10
1,3-Dichloropropylene [1,3-Dichloropropene]				10
1,2-Trans-Dichloroethylene				10
Ethylbenzene				10
Methyl Bromide				50
Methyl Chloride				50
Methylene Chloride				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Toluene				10
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
Vinyl Chloride				10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol				10
2,4-Dichlorophenol				10
2,4-Dimethylphenol				10
4,6-Dinitro-o-Cresol				50
2,4-Dinitrophenol				50
2-Nitrophenol				20
4-Nitrophenol				50
P-Chloro-m-Cresol				10
Pentalchlorophenol				5
Phenol				10
2,4,6-Trichlorophenol				10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene				10
Acenaphthylene				10
Anthracene				10
Benzidine				50
Benzo(a)Anthracene				5
Benzo(a)Pyrene				5
3,4-Benzofluoranthene				10
Benzo(ghi)Perylene				20
Benzo(k)Fluoranthene				5
Bis(2-Chloroethoxy)Methane				10
Bis(2-Chloroethyl)Ether				10
Bis(2-Chloroisopropyl)Ether				10
Bis(2-Ethylhexyl)Phthalate				10
4-Bromophenyl Phenyl Ether				10
Butyl benzyl Phthalate				10
2-Chloronaphthalene				10
4-Chlorophenyl phenyl ether				10
Chrysene				5
Dibenzo(a,h)Anthracene				5
1,2-(o)Dichlorobenzene				10
1,3-(m)Dichlorobenzene				10
1,4-(p)Dichlorobenzene				10
3,3-Dichlorobenzidine				5
Diethyl Phthalate				10
Dimethyl Phthalate				10
Di-n-Butyl Phthalate				10
2,4-Dinitrotoluene				10
2,6-Dinitrotoluene				10
Di-n-Octyl Phthalate				10
1,2-Diphenylhydrazine (as Azo-benzene)				20
Fluoranthene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene				10
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclo-pentadiene				10
Hexachloroethane				20
Indeno(1,2,3-cd)pyrene				5
Isophorone				10
Naphthalene				10
Nitrobenzene				10
N-Nitrosodimethylamine				50
N-Nitrosodi-n-Propylamine				20
N-Nitrosodiphenylamine				20
Phenanthrene				10
Pyrene				10
1,2,4-Trichlorobenzene				10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin				0.01
alpha-BHC (Hexachlorocyclohexane)				0.05
beta-BHC (Hexachlorocyclohexane)				0.05
gamma-BHC (Hexachlorocyclohexane)				0.05
delta-BHC (Hexachlorocyclohexane)				0.05
Chlordane				0.2
4,4-DDT				0.02
4,4-DDE				0.1
4,4,-DDD				0.1
Dieldrin				0.02
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Endrin Aldehyde				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
PCB-1242				0.2
PCB-1254				0.2
PCB-1221				0.2
PCB-1232				0.2
PCB-1248				0.2
PCB-1260				0.2
PCB-1016				0.2
Toxaphene				0.3

* For PCBS, if all are non-detects, enter the highest non-detect preceded by a “<”.

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

☐ 2,4,5-trichlorophenoxy acetic acid

Common Name 2,4,5-T, CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid

Common Name Silvex or 2,4,5-TP, CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate

Common Name Erbon, CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate

Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol

Common Name TCP, CASRN 95-95-4

☐ hexachlorophene

Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

Click to enter text.

B. Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

☐ Yes ☐ No

If **yes**, provide a brief description of the conditions for its presence.

Click to enter text.

C. If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of**1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See Page 86 of the instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: Click to enter text.

48-hour Acute: Click to enter text.

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☐ No

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

Click to enter text.

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following **is required** for **all publicly owned treatment works**.

Section 1. All POTWs (Instructions Page 87)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs – non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

0

Average Daily Flows, in MGD: N/A

Significant IUs – non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: N/A

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: N/A

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

N/A

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2.c. and 2.d. only, and skip Section 3.

If no to either question above, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 87)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

☐ Yes ☐ No

If yes, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

N/A

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

☐ Yes ☐ No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

N/A

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

☐ Yes ☐ No

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 88)

A. General information

Company Name: N/A – No industrial users

SIC Code: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

Telephone number: N/A

Email address: N/A

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

N/A

C. Product and service information

Provide a description of the principal product(s) or services performed.

N/A

D. Flow rate information

See the Instructions for definitions of "process" and "non-process wastewater."

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *i*nstructions?

☐ Yes ☐ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☐ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: N/A

Click or tap here to enter text. N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

☐ Yes ☐ No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

N/A

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No._____
Date Received_____
Date Authorized_____

Section 1. General Information (Instructions Page 90)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): N/A

Program ID: N/A

Contact Name: N/A

Phone Number: N/A

2. Agent/Consultant Contact Information

Contact Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

3. Owner/Operator Contact Information

☐ Owner ☐ Operator

Owner/Operator Name: N/A

Contact Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

4. Facility Contact Information

Facility Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Location description (if no address is available): N/A

Facility Contact Person: N/A

Phone Number: N/A

5. **Latitude and Longitude, in degrees-minutes-seconds**

Latitude: N/A

Longitude: N/A

Method of determination (GPS, TOPO, etc.): N/A

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: Click to enter text.

Number of Injection Wells: N/A

7. **Purpose**

Detailed Description regarding purpose of Injection System:

N/A

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

License Number: N/A

Section 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Table 7.0(1) – Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Cement	Hole Size	Weight (lbs/ft) PVC/Steel
Casing					
Tubing					
Screen					

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: N/A

System(s) Construction: N/A

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A

2. Receiving Formation Name of Injection Zone: N/A

3. Well/Trench Total Depth: N/A

4. Surface Elevation: N/A

5. Depth to Ground Water: N/A

6. Injection Zone Depth: N/A

7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: N/A

Thickness: N/A

8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer

Attach as Attachment E.

9. Horizontal and Vertical extent of contamination and injection plume

Attach as Attachment F.

10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

Attach as Attachment G.

11. Injection Fluid Chemistry in PPM at point of injection

Attach as Attachment H.

12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A

13. Maximum injection Rate/Volume/Pressure: N/A

14. Water wells within 1/4 mile radius (attach map as Attachment I): N/A

15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A

16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A

17. Sampling frequency: N/A

18. Known hazardous components in injection fluid: N/A

Section 5. Site History

1. Type of Facility: N/A
2. Contamination Dates: N/A
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): N/A
4. Previous Remediation (attach results of any previous remediation as attachment M): N/A

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Class V Injection Well Designations

5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
5D02 Storm Water Drainage (IW designed for the disposal of rain water)
5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
5F01 Agricultural Drainage (IW that receive agricultural runoff)
5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
5W09 Untreated Sewage
5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
5W12 WTTP disposal
5W20 Industrial Process Waste Disposal Wells
5W31 Septic System (Well Disposal method)
5W32 Septic System Drainfield Disposal
5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
5X27 Other Wells
5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
5X29 Abandoned Drinking Water Wells (waste disposal)

Appendix A

Core Data Form

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal *(Core Data Form should be submitted with the renewal form)*

☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 600671838		**RN 101918159**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

City of Nazareth

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☐ **Yes** ☒ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

P.O. Box 7

City	Nazareth	**State**	TX	**ZIP**	79063	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	cityofnazareth@yahoo.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(806) 945-2285		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

City of Nazareth

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County								

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Approximatley 2400 feet North and 3200 feet West of the intersection of State Highway 86 and Farm to Market Road 168 West of the City of Nazareth

26. Nearest City	State	Nearest ZIP Code
Nazareth	TX	79063

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	34.547556		28. Longitude (W) In Decimal:	-102.117222	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
34	32	51	-102	7	2

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
4952		221320	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Domestic Wastewater Treatment

34. Mailing Address:	**P.O. Box 7**							
	City	**Nazareth**	**State**	**TX**	**ZIP**	**79063**	**ZIP + 4**	

35. E-Mail Address:	cityofnazareth@yahoo.com

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(806) 945-2285		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0010979001			

SECTION IV: Preparer Information

40. Name:	Paul Krueger, P.E.	**41. Title:**	Civil Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(806) 473-3715		( ) -	PKrueger@Parkhill.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	City of Nazareth	**Job Title:**	City Manager		
Name *(In Print):*	Lacey Farris			**Phone:**	(806) 945- **2285**
Signature:	Lacey Farris			**Date:**	7/28/25

Appendix B

Land Use Agreement

CONTRACT AND AGREEMENT

THE STATE OF TEXAS
COUNTY OF CASTRO:

This agreement entered by and between Hugh Wilhelm, hereinafter called the first part, and the City of Nazareth, in Castro County, Texas, a municipality, hereinafter called the second part. That whereas the first party executed and delivered to the second party a contract and agreement on plant site and irrigated land located approximately 2400 fee north and 3200 feet west of the intersection of State Highway 86 and Farm-to-Market Road 168 in Castro County, Texas.

Now therefore for and in consideration of the sum of $100.00 paid each year to the first party by the second party, and as additional consideration, the mutual benefits that should insure to both parties, the first party grants unto the second party for a term of ten years, the right to use the property described in the contract and agreement above described, and the other adjacent land presently owned by the first party waives the right to having received an appraisal of the value, if any, of the donation herein made by the first party to the second party. The first party further waives any right that they have to receive fair or just compensation for the granting of the right to distribute excess waste water upon their farm land adjacent to the property sold to the second party.

It is agreed that all expenses involved in preparation and filing of this instrument shall be born by the second party.

It is further agreed that the ten year term of rights herein created may be renewed with the mutual consent of the parties hereto, their heirs, assigns, successors, or personal representatives.

Executed this the 17th day of November, 2005, at Nazareth, Castro County, Texas.

Hugh Wilhelm
First Party

City of Nazareth
A Municipality
By Ralph Brockman, Mayor
Ralph Brockman, Mayor

The State of Texas
County of Castro

This instrument was acknowledged before me on this the 17th day of November, 2005 by Hugh Wilhelm, First Party.

Dianne M. Wilhelm
Notary Public, State of Texas

The State of Texas
County of Castro

This instrument was acknowledged before me on this the 17th day of November, 2005 by Ralph Brockman, Mayor of the City of Nazareth, Castro County, Texas, A Municipality.

Dianne M. Wilhelm
Notary Public, State of Texas

SEWER DISCHARGE EASEMENT

THE STATE OF TEXAS)

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF CASTRO)

THAT **HUGH WILHELM**, a single man, of the County of Castro, State of Texas, hereinafter called Grantors, for and in consideration of the sum of TEN DOLLARS ($10.00) and other good and valuable consideration, paid by the **CITY OF NAZARETH, TEXAS**, the receipt and sufficiency of which is hereby acknowledged, do hereby Grant, Sell and Convey unto the CITY OF NAZARETH, TEXAS an easement and right of way upon and across the following described property of the Grantor:

All of Grantor's real property located in Section Two Hundred Twenty-three (223), Block M-6, SK&K Survey, Castro County, Texas;
SAVE AND EXCEPT all tracts heretofore conveyed to third parties.
LEAVING approximately 628 acres more or less.

The right-of-way easement, rights and privileges herein granted shall be used for the purpose of placing, constructing, operating, repairing, maintaining, rebuilding, replacing, relocating and removing a pipeline for the transportation and disposal of solid and liquid waste (sewer line) and the discharge and disbursal of such affluent onto the easement property in such quantities and at such times as the City of Nazareth, in its sole discretion, shall decide.

The easement, rights and privileges herein granted shall be for so long as the CITY OF NAZARETH, TEXAS shall operate a sewer pipeline and discharge affluent within said easement.

Grantor hereby binds himself, his heirs and legal representatives to WARRANT AND FOREVER DEFEND the above described easement and rights unto the CITY OF NAZARETH, TEXAS, its successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof.

In addition to the easement, rights and privileges herein conveyed, the CITY OF NAZARETH, TEXAS shall have the right to use so much of the surface of the heretofore described property of Grantor as may be reasonably necessary to construct and install the facilities contemplated and to discharge and disburse all affluent as contemplated by this grant.

Grantor also retains, reserves, and shall continue to enjoy the use of the surface of such property for any and all purposes which do not interfere with and prevent the use by the City of Nazareth, Texas of the rights and privileges granted by this easement agreement.

This instrument shall be binding upon the heirs, executors, administrators, legal representatives, successors and assigns of the parties hereto.

IN WITNESS WHEREOF, this easement is executed this the 23rd day of January, 2006.

HUGH WILHELM

CITY OF NAZARETH, TEXAS

/ Ralph Brockman

RALPH BROCKMAN, Mayor

THE STATE OF TEXAS

COUNTY OF CASTRO

This instrument was acknowledged before me on the 27 day of January, 2006 by HUGH WILHELM.

BILLY HACKLEMAN
Notary Public, State of Texas
My Commission Expires 05-01-2009

Billy Hackleman
Notary Public in and for the State of Texas

THE STATE OF TEXAS

COUNTY OF CASTRO

This instrument was acknowledged before me on the 25th day of January, 2006 by RALPH BROCKMAN as Mayor for the CITY OF NAZARETH, TEXAS, on behalf of said city and in the capacity therein stated.

BILLY HACKLEMAN
Notary Public, State of Texas
My Commission Expires 05-01-2009

Billy Hackleman
Notary Public in and for the State of Texas

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

BUFFER ZONE EASEMENT

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF CASTRO

That for and in consideration of the sum of Ten Dollars ($10.00) cash to the undersigned paid by the GRANTEE herein, the receipt of which is hereby acknowledged, I, HUGH WILHELM, a single person, (hereinafter called GRANTOR whether one or more) hereby grant unto the City of Nazareth, Texas, (hereinafter called GRANTEE), a restrictive easement on the part of said GRANTOR, not to construct a residential structure within a distance of five hundred (500) feet of the facultative wastewater treatment plant lagoon nor within a distance of one hundred fifty (150) feet of two (2) wastewater stabilization ponds on a tract of land located in Castro County, Texas, as shown on a plat in Exhibit "A", which is attached hereto and incorporated herein for any and all purposes and also more particularly described by metes and bounds as follows:

A 4.675 acre tract of land in Section 223, Block M-6, SK&K Survey, in Castro County, Texas, described by metes and bounds as follows, to-wit:

BEGINNING at a point that is 2,374.65 feet North and 3,399.36 ft. West of the Southeast corner of said Section 223 for the beginning point of this tract;

THENCE South 62 deg. West, 190.00 ft. to a point;

THENCE North 71 deg. 30' West, 240.00 ft. to a point;

THENCE North 11 deg. 46' 39" West, 575.79 ft. to a point;

THENCE North 88 deg. 30' East, 260.00 ft. to a point;

THENCE South 1 deg. 30' East, 570.00 ft. **to the point of beginning,** and containing 4.675 acres of land.

GRANTOR shall maintain all other rights of the surface of the easement conveyed hereby for agricultural purposes, pasturage, or other purposes.

This instrument and the covenants and agreements herein contained shall constitute a covenant running with the land for the benefit of the GRANTEE, its successors, and assigns.

IN WITNESS WHEREOF, the said GRANTORS have executed this instrument on November 15th, 2006.

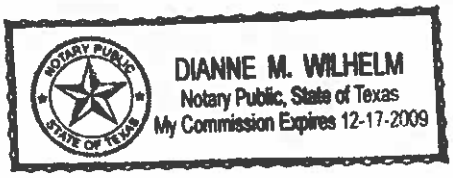
Hugh Wilhelm

HUGH WILHELM

THE STATE OF TEXAS

COUNTY OF CASTRO

This instrument was acknowledged before me on November 15th, 2006 by HUGH WILHELM.



Dianne M. Wilhelm
Notary Public, State of Texas

Appendix C

Plain Language Summary

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER
The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

City of Nazareth (CN600671838) operates City of Nazareth Wastewater Treatment Plant (RN101918159), an aerated lagoon, followed by 2 stabilization ponds. The facility is located at approximately 2400 feet North and 3200 feet West of the intersection of State Highway 86 and Farm to Market Road 168, in Nazareth, Castro County, Texas 79063. This permit is a renewal to dispose of up to 0.05 million gallons per day of treated domestic wastewater via evaporation and surface irrigation of 47 acres of non-public access land. This permit will not authorize the discharge of pollutants into waters of the State.

Discharges from the facility are expected to contain BOD_5. Domestic wastewater is treated by an aerated lagoon and 2 stabilization ponds.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/AGUAS PLUVIALES**

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

1. Introduzca el nombre del solicitante aquí (2. Introduzca el número de cliente aquí (es decir, CN6########).) 3. Elija del menú desplegable 4. Introduzca el nombre de la instalación aquí 5. Introduzca el número de entidad regulada aquí (es decir, RN1########), 6. Elija del menú desplegable 7. Introduzca la descripción de la instalación aquí. La instalación 8. Elija del menú desplegable. ubicada en 9. Introduzca la ubicación aquí, en 10. Introduzca el nombre de la ciudad aquí, Condado de 11. Introduzca el nombre del condado aquí, Texas 12. Introduzca el código postal aquí. 13. Introduzca el resumen de la petición de solicitud aquí. *<<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>>* Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan 14. Liste todos los contaminantes esperados aquí. 15. Introduzca los tipos de aguas residuales descargadas aquí. 16. Elija del menú desplegable tratado por 17. Introduzca una descripción del tratamiento de aguas residuales utilizado en la instalación aquí.

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division’s Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example 1: Industrial Wastewater TPDES Application (ENGLISH)

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as "previously monitored effluents" (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility's potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Example 2: Domestic Wastewater TPDES Renewal application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to discharge at an annual average flow of 1,200,000 gallons per day of treated domestic wastewater via Outfalls 001 and 002.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 3: Domestic Wastewater TPDES New Application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Texas (CN000000000) proposes to operate the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the extended aeration mode. The facility will be located at 123 Texas Street, in the City of More Texas, Texas County, Texas 71234.

This application is for a new application to discharge at a daily average flow of 200,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process plant and the treatment units will include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 4: Domestic Wastewater TLAP Renewal application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations

of the permit application.

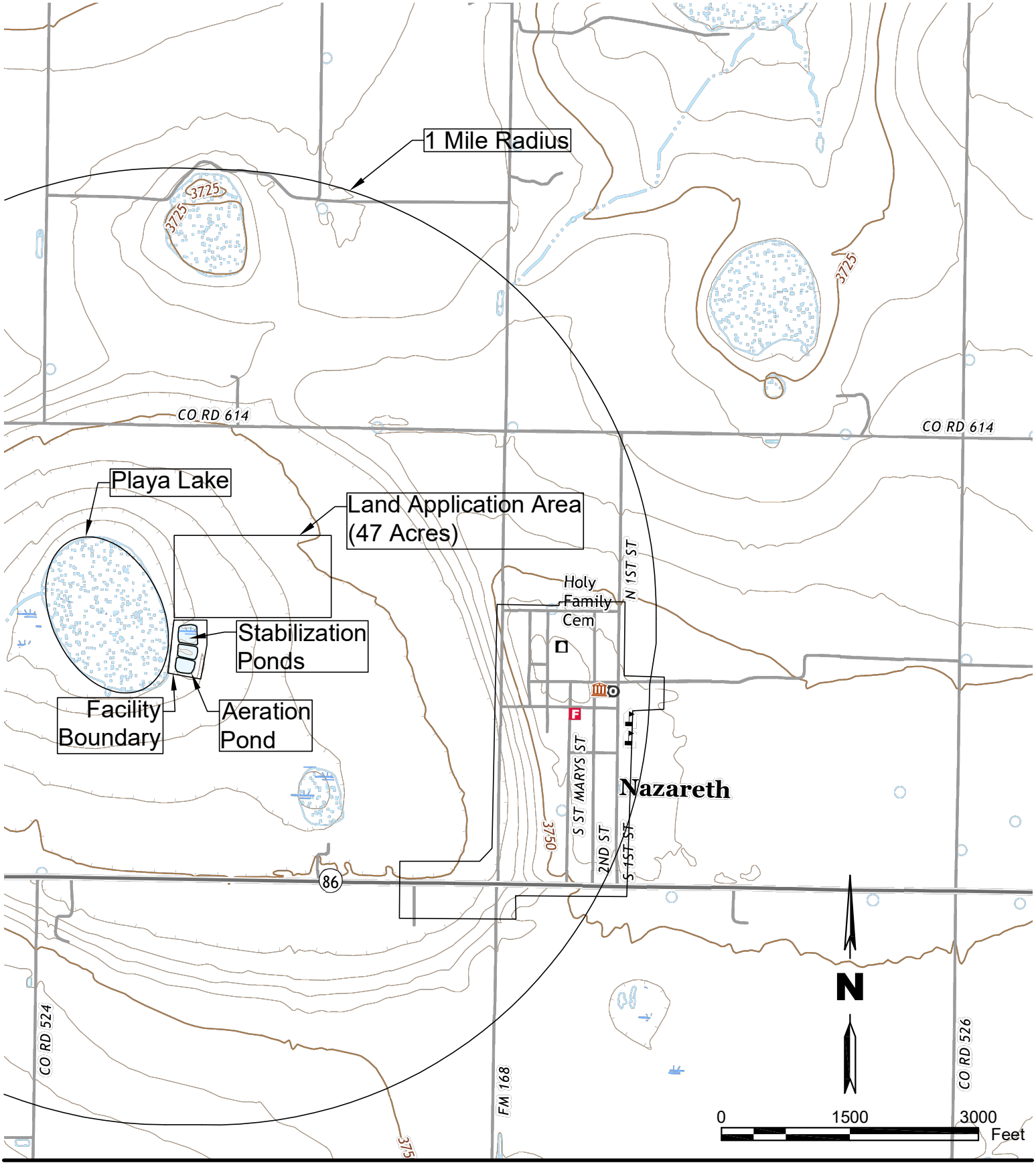
The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to dispose a daily average flow not to exceed 76,500 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 32 acres. This permit will not authorize a discharge of pollutants into water in the state.

Land application of domestic wastewater from the facility are expected to contain five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, tertiary filters, and a chlorine contact chamber. In addition, the facility includes a temporary storage that equals to at least three days of the daily average flow.

Appendix D

USGS Map



City of Nazareth Wastewater Treatment Plant Renewal

City of Nazareth
P.O. Box 7
Nazareth, TX 79063

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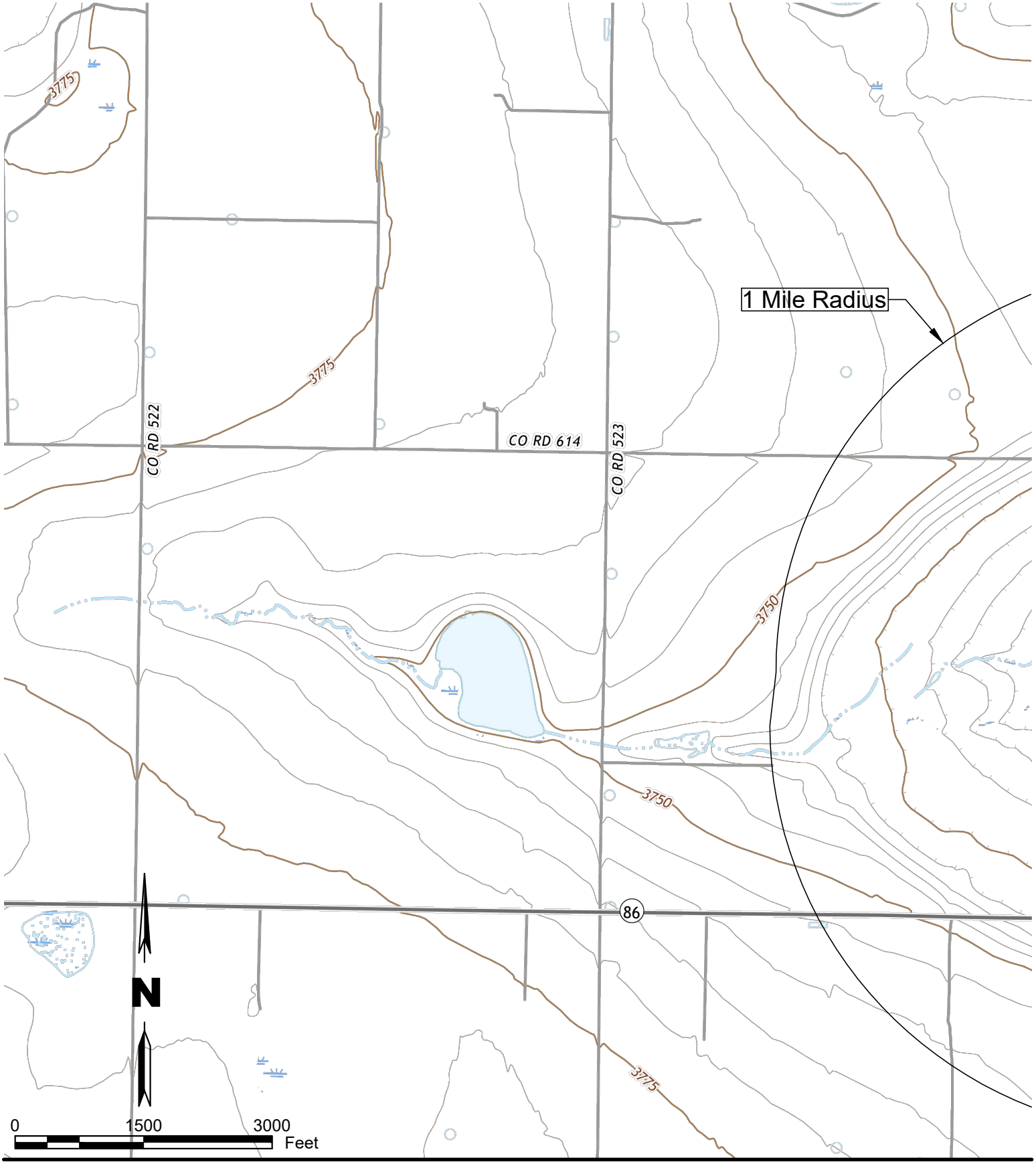
USGS Map

Issue:	Renewal
Date:	07/02/2025
Project No:	44995.25
Sheet:	1 OF 2



City of Nazareth Wastewater Treatment Plant Renewal

City of Nazareth
P.O. Box 7
Nazareth, TX 79063

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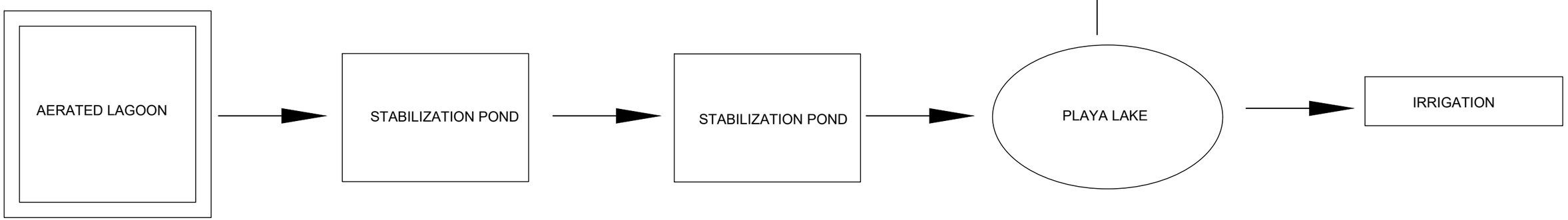
USGS Map

Issue:	Renewal
Date:	07/02/2025
Project No:	44995.25
Sheet:	2 OF 2

Appendix E

Flow Diagram



City of Nazareth Wastewater Treatment Plant Renewal

City of Nazareth
P.O Box 7
Nazareth, TX 79063

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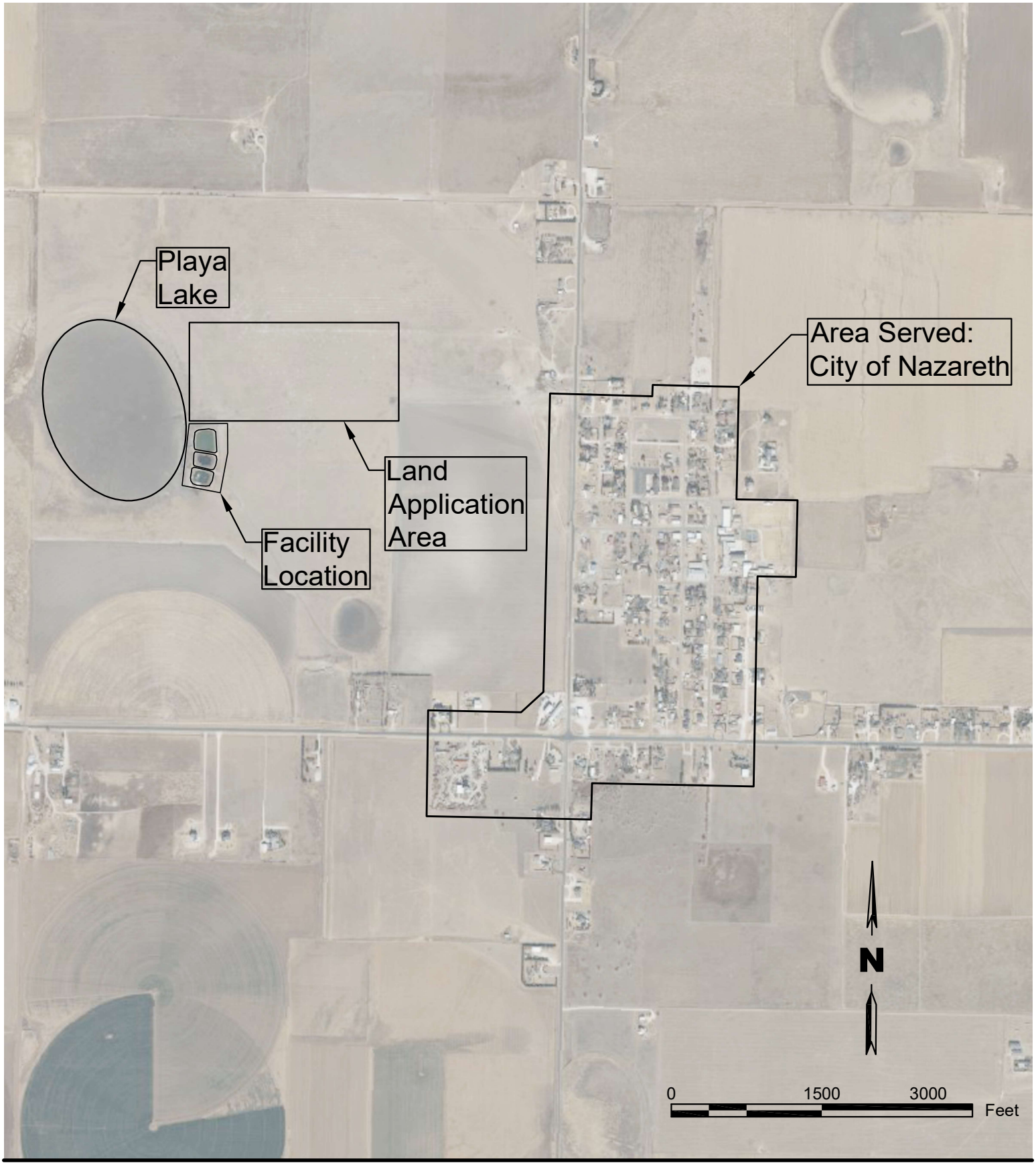
Flow Diagram

Issue:	Flow Diagram
Date:	07/15/2025
Project No:	44995.25
Sheet:	1 of 1

Appendix F

Site Map



City of Nazareth
WWTP Permit Renewal

City of Nazareth
P.O. Box 7
Nazareth , TX 79063

Parkhill

Parkhill.com

Site Map

Issue:	Renewal
Date:	07/03/2025
Project No:	44995.25
Sheet:	1 OF 1

Appendix G

Pollutant Analysis

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Parkhill
Kole Glover
800 S Polk St
Suite 200
Amarillo, TX 79124

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9:36

TABLE OF CONTENTS

This report consists of this Table of Contents and the following pages:

2600 Dudley Rd. Kilgore, Texas 75662
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SAMPLE CROSS REFERENCE

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Kole Glover
800 S Polk St
Suite 200
Amarillo, TX 79124

Sample	Sample ID	Taken	Time	Received
2401506	*WW NAZARETH WWTP*	04/22/2025	08:45:00	04/23/2025

Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 04 16 oz HNO3 Metals Plastic
Bottle 05 8 oz Plastic H2SO4 pH < 2
Bottle 06 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1171641) Volume: 6.00000 mL <== Derived from 05 (6 ml)
Bottle 07 BOD Titration Beaker A (Batch 1171661) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 08 BOD Analytical Beaker B (Batch 1171661) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 09 BOD Titration Beaker A (Batch 1171661) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 10 BOD Analytical Beaker B (Batch 1171661) Volume: 100.00000 mL <== Derived from 01 (100 ml)
Bottle 11 Prepared Bottle: ICP Preparation for Metals (Batch 1171667) Volume: 50.00000 mL <== Derived from 04 (50 ml)
Bottle 12 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1171690) Volume: 20.00000 mL <== Derived from 05 (20 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 300.0 2.1	01	1171822	04/23/2025	1171822	04/23/2025
EPA 200.7 4.4	11	1171667	04/24/2025	1171820	04/24/2025
SM 5210 B-2016 (TCMP Inhibitor)	01	1171661	04/29/2025	1171661	04/29/2025
SM 2510 B-2011	01	1171737	04/24/2025	1171737	04/24/2025
SM 4500-Cl F-2011	01	1171343	04/23/2025	1171343	04/23/2025
EPA 1664B (HEM)	03	1172389	04/28/2025	1172389	04/28/2025
EPA 350.1 2	06	1171641	04/23/2025	1171942	04/24/2025
SM 2540 C-2020	02	1172490	04/28/2025	1172490	04/28/2025
EPA 351.2 2	12	1171690	04/24/2025	1171872	04/24/2025
SM 2540 D-2020	01	1172119	04/24/2025	1172119	04/24/2025
SM 4500-H+ B-2011	01	1171740	04/24/2025	1171740	04/24/2025

Sample	Sample ID	Taken	Time	Received
2401512	*WW DIMMITT WWTP*	04/22/2025	09:46:00	04/23/2025

Email: Kilgore.ProjectManagement@spllabs.com

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SAMPLE CROSS REFERENCE

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Kole Glover
800 S Polk St
Suite 200
Amarillo, TX 79124

Bottle 01 Polyethylene 1/2 gal (White)
Bottle 02 Polyethylene Quart
Bottle 03 H2SO4 to pH <2 Glass Qt w/Teflon lined lid
Bottle 04 16 oz HNO3 Metals Plastic
Bottle 05 Client supplied H2SO4 plastic
Bottle 06 Prepared Bottle: NH3N TRAACS Autosampler Vial (Batch 1171641) Volume: 6.00000 mL <== Derived from 05 (6 ml)
Bottle 07 BOD Titration Beaker A (Batch 1171661) Volume: 100.00000 mL <== Derived from 02 (100 ml)
Bottle 08 BOD Analytical Beaker B (Batch 1171661) Volume: 100.00000 mL <== Derived from 02 (100 ml)
Bottle 09 Prepared Bottle: ICP Preparation for Metals (Batch 1171667) Volume: 50.00000 mL <== Derived from 04 (50 ml)
Bottle 10 Prepared Bottle: TKN TRAACS Autosampler Vial (Batch 1171690) Volume: 20.00000 mL <== Derived from 05 (20 ml)

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 300.0 2.1	01	1171822	04/23/2025	1171822	04/23/2025
EPA 300.0 2.1	01	1172923	04/30/2025	1172923	04/30/2025
EPA 200.7 4.4	09	1171667	04/24/2025	1171820	04/24/2025
SM 5210 B-2016 (TCMP Inhibitor)	02	1171661	04/29/2025	1171661	04/29/2025
SM 2510 B-2011	01	1171737	04/24/2025	1171737	04/24/2025
SM 4500-Cl F-2011	01	1171343	04/23/2025	1171343	04/23/2025
EPA 1664B (HEM)	03	1172389	04/28/2025	1172389	04/28/2025
EPA 350.1 2	06	1171641	04/23/2025	1172237	04/28/2025
SM 2540 C-2020	02	1172507	04/28/2025	1172507	04/28/2025
EPA 351.2 2	10	1171690	04/24/2025	1172250	04/28/2025
SM 2540 D-2020	01	1172119	04/24/2025	1172119	04/24/2025
SM 4500-H+ B-2011	01	1171740	04/24/2025	1171740	04/24/2025

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RESULTS

Sample Results

2401506 **WW NAZARETH WWTP** Received: 04/23/2025

Non-Potable Water Collected by: Client Parkhill PO:
Taken: 04/22/2025 08:45:00

EPA 1664B (HEM) Prepared: 1172389 04/28/2025 12:00:00 Analyzed 1172389 04/28/2025 12:00:00 BEK

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Oil and Grease (HEM)	<4.76	mg/L	4.76			03

EPA 200.7 4.4 Prepared: 1171667 04/24/2025 06:00:00 Analyzed 1171820 04/24/2025 10:58:00 CAS

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Phosphorus	1.47	mg/L	0.040		7723-14-0	11

EPA 300.0 2.1 Prepared: 1171822 04/23/2025 22:47:00 Analyzed 1171822 04/23/2025 22:47:00 KRA

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Chloride	246	mg/L	3.00			01
NELAC	Nitrate-Nitrogen Total	<0.1	mg/L	0.1		14797-55-8	01
NELAC	Sulfate	65.0	mg/L	3.00			01

EPA 350.1 2 Prepared: 1171641 04/23/2025 17:26:38 Analyzed 1171942 04/24/2025 08:32:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Ammonia Nitrogen	<0.020	mg/L	0.020			06

EPA 351.2 2 Prepared: 1171690 04/24/2025 08:43:46 Analyzed 1171872 04/24/2025 15:04:00 AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Kjeldahl Nitrogen	7.57	mg/L	0.050		7727-37-9	12

SM 2510 B-2011 Prepared: 1171737 04/24/2025 06:00:00 Analyzed 1171737 04/24/2025 06:00:00 JMJ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Lab Spec. Conductance at 25 C	1560	umhos/cm				01

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2401506 WW NAZARETH WWTP — Received: 04/23/2025

Non-Potable Water — Collected by: Client — Parkhill — PO:
Taken: 04/22/2025 08:45:00

SM 2540 C-2020 — Prepared: 1172490 04/28/2025 09:20:00 — Analyzed 1172490 04/28/2025 09:20:00 JMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Total Dissolved Solids**	**870**	**mg/L**	50.0			02

SM 2540 D-2020 — Prepared: 1172119 04/24/2025 13:50:00 — Analyzed 1172119 04/24/2025 13:50:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Total Suspended Solids**	**148**	**mg/L**	25.0			01

SM 4500-Cl F-2011 — Prepared: 1171343 04/23/2025 11:20:00 — Analyzed 1171343 04/23/2025 11:20:00 ANC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Cl2 Residual,Total(Lab)Titration**	**<0.100**	**mg/L**	0.100			01

SM 4500-H+ B-2011 — Prepared: 1171740 04/24/2025 04:40:00 — Analyzed 1171740 04/24/2025 04:40:00 JMJ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Laboratory pH**	**9.0@19c**	**SU**	2.00			01

SM 5210 B-2016 (TCMP Inhibitor) — Prepared: 1171661 04/24/2025 — Analyzed 1171661 04/29/2025 10:17:16 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**BOD Carbonaceous**	**31.6**	**mg/L**	3.00			01

2401512 WW DIMMITT WWTP — Received: 04/23/2025

Non-Potable Water — Collected by: Client — Parkhill — PO:
Taken: 04/22/2025 09:46:00

EPA 1664B (HEM) — Prepared: 1172389 04/28/2025 12:00:00 — Analyzed 1172389 04/28/2025 12:00:00 BEK

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Oil and Grease (HEM)**	**5.91**	**mg/L**	4.55			03

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2401512 WW DIMMITT WWTP — Received: 04/23/2025

Non-Potable Water — Collected by: Client — Parkhill — PO:
Taken: 04/22/2025 09:46:00

EPA 200.7 4.4 — Prepared: 1171667 04/24/2025 06:00:00 — Analyzed 1171820 04/24/2025 11:02:00 — CAS

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Phosphorus**	**6.75**	**mg/L**	0.040		**7723-14-0**	09

EPA 300.0 2.1 — Prepared: 1171822 04/23/2025 23:11:00 — Analyzed 1171822 04/23/2025 23:11:00 — KRA

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Chloride**	**108**	**mg/L**	3.00			01
NELAC	**Nitrate-Nitrogen Total**	**1.23**	**mg/L**	0.226		**14797-55-8**	01

EPA 300.0 2.1 — Prepared: 1172923 04/30/2025 16:43:00 — Analyzed 1172923 04/30/2025 16:43:00 — KRA

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Sulfate**	**820**	**mg/L**	30.0			01

EPA 350.1 2 — Prepared: 1171641 04/23/2025 17:26:38 — Analyzed 1172237 04/28/2025 06:42:00 — AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Ammonia Nitrogen**	**181**	**mg/L**	2.00			06

EPA 351.2 2 — Prepared: 1171690 04/24/2025 08:43:46 — Analyzed 1172250 04/28/2025 08:35:00 — AMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Total Kjeldahl Nitrogen**	**228**	**mg/L**	5.00		**7727-37-9**	10

SM 2510 B-2011 — Prepared: 1171737 04/24/2025 06:00:00 — Analyzed 1171737 04/24/2025 06:00:00 — JMJ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Lab Spec. Conductance at 25 C**	**2540**	**umhos/cm**				01

SM 2540 C-2020 — Prepared: 1172507 04/28/2025 09:25:00 — Analyzed 1172507 04/28/2025 09:25:00 — JMB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Total Dissolved Solids**	**1180**	**mg/L**	50.0			02

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2401512 WW DIMMITT WWTP — Received: 04/23/2025

Non-Potable Water — Collected by: Client — Parkhill — PO:
Taken: 04/22/2025 09:46:00

SM 2540 D-2020 — Prepared: 1172119 04/24/2025 13:50:00 — Analyzed 1172119 04/24/2025 13:50:00 ADR

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Total Suspended Solids	77.0	mg/L	20.0			01

SM 4500-Cl F-2011 — Prepared: 1171343 04/23/2025 11:20:00 — Analyzed 1171343 04/23/2025 11:20:00 ANC

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Cl2 Residual,Total(Lab)Titration	<0.100	mg/L	0.100			01

SM 4500-H+ B-2011 — Prepared: 1171740 04/24/2025 04:40:00 — Analyzed 1171740 04/24/2025 04:40:00 JMJ

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	Laboratory pH	8.0@19c	SU	2.00			01

SM 5210 B-2016 (TCMP Inhibitor) — Prepared: 1171661 04/24/2025 — Analyzed 1171661 04/29/2025 10:18:47 ESN

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	BOD Carbonaceous	66.7	mg/L	15.0			02

Sample Preparation

2401506 WW NAZARETH WWTP — Received: 04/23/2025

04/22/2025

Prepared: 04/23/2025 10:17:33 — Calculated 04/23/2025 10:17:33 CAL

z	Enviro Fee (per Sampling Group)	Verified

EPA 1664B (HEM) — Prepared: 1172271 04/28/2025 12:00:00 — Analyzed 1172271 04/28/2025 12:00:00 BEK

NELAC	O&G HEM Started	Started

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2401506 **WW NAZARETH WWTP** Received: 04/23/2025

04/22/2025

	EPA 200.2 2.8	*Prepared:*	*1171667*	*04/24/2025*	*06:00:00*	*Analyzed*	*1171667*	*04/24/2025*	*06:00:00*	*HLT*
z	**Liquid Metals Digestion**	**50/50**	**ml**							04
	EPA 350.1, Rev. 2.0	*Prepared:*	*1171641*	*04/23/2025*	*17:26:38*	*Analyzed*	*1171641*	*04/23/2025*	*17:26:38*	*JR1*
NELAC	**Ammonia Distillation**	**6/6**	**ml**							05
	EPA 351.2, Rev 2.0	*Prepared:*	*1171690*	*04/24/2025*	*08:43:46*	*Analyzed*	*1171690*	*04/24/2025*	*08:43:46*	*MEG*
NELAC	**TKN Block Digestion**	**20/20**	**ml**							05
	SM 2540 C-2015	*Prepared:*	*1172186*	*04/28/2025*	*09:20:00*	*Analyzed*	*1172186*	*04/28/2025*	*09:20:00*	*JMB*
NELAC	**Total Dissolved Solids Started**	**Started**								
	SM 2540 D-2011	*Prepared:*	*1171670*	*04/24/2025*	*13:50:00*	*Analyzed*	*1171670*	*04/24/2025*	*13:50:00*	*ADR*
NELAC	**TSS Set Started**	**Started**								
	SM 5210 B-2016 (TCMP Inhibitor)	*Prepared:*	*1171661*	*04/24/2025*		*Analyzed*	*1171661*	*04/24/2025*	*06:51:46*	*ESN*
NELAC	**BODc Set Started**	**Started**								
	SUB Lab	*Prepared:*		*04/22/2025*	*12:24:00*	*Analyzed*		*04/22/2025*	*12:24:00*	*SUB*
NELAC	**E.Coli WW MPN Panhandle (SUB)**	**See Attached**						**EMLC**		

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2401512 **WW DIMMITT WWTP** Received: 04/23/2025

04/22/2025

	EPA 1664B (HEM)	*Prepared:*	*1172271*	*04/28/2025*	*12:00:00*	*Analyzed*	*1172271*	*04/28/2025*	*12:00:00*	*BEK*
NELAC	**O&G HEM Started**	**Started**								
	EPA 200.2 2.8	*Prepared:*	*1171667*	*04/24/2025*	*06:00:00*	*Analyzed*	*1171667*	*04/24/2025*	*06:00:00*	*HLT*
z	**Liquid Metals Digestion**	**50/50**	**ml**							04
	EPA 350.1, Rev. 2.0	*Prepared:*	*1171641*	*04/23/2025*	*17:26:38*	*Analyzed*	*1171641*	*04/23/2025*	*17:26:38*	*JR1*
NELAC	**Ammonia Distillation**	**6/6**	**ml**							05
	EPA 351.2, Rev 2.0	*Prepared:*	*1171690*	*04/24/2025*	*08:43:46*	*Analyzed*	*1171690*	*04/24/2025*	*08:43:46*	*MEG*
NELAC	**TKN Block Digestion**	**20/20**	**ml**							05
	SM 2540 C-2015	*Prepared:*	*1172187*	*04/28/2025*	*09:25:00*	*Analyzed*	*1172187*	*04/28/2025*	*09:25:00*	*JMB*
NELAC	**Total Dissolved Solids Started**	**Started**								
	SM 2540 D-2011	*Prepared:*	*1171670*	*04/24/2025*	*13:50:00*	*Analyzed*	*1171670*	*04/24/2025*	*13:50:00*	*ADR*
NELAC	**TSS Set Started**	**Started**								
	SM 5210 B-2016 (TCMP Inhibitor)	*Prepared:*	*1171661*	*04/24/2025*		*Analyzed*	*1171661*	*04/24/2025*	*06:51:46*	*ESN*
NELAC	**BODc Set Started**	**Started**								

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2401512 WW DIMMITT WWTP

Received: 04/23/2025

04/22/2025

SUB Lab		*Prepared:*	*04/22/2025*	*12:25:00*	*Analyzed*	*04/22/2025*	*12:25:00*	*SUB*
NELAC	**E.Coli WW MPN Panhandle (SUB)**	**See Attached**				**EMLC**		

Qualifiers:

We report results on an As Received (or Wet) basis unless marked Dry Weight.

Unless otherwise noted, testing was performed at SPL, Inc.- Kilgore laboratory which holds International, Federal, and state accreditations. Please see our Websites for details.

(N)ELAC - Covered in our NELAC scope of accreditation
z -- Not covered by our NELAC scope of accreditation

These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of SPL Kilgore. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Bill Peery

Bill Peery, MS, VP Technical Services

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Analytical Set 1171661 — SM 5210 B-2016 (TCMP Inhibitor)

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1171661	0.2	0.200	0.500	mg/L	127531443
BOD Carbonaceous	1171661	0.2	0.200	0.500	mg/L	127534205

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD		Limit%
BOD Carbonaceous	2401506	34.0	31.6	mg/L	7.32		30.0
BOD Carbonaceous	2401578	4.57	4.53	mg/L	0.879		30.0
BOD Carbonaceous	2401873	6.35	6.31	mg/L	0.632		30.0
BOD Carbonaceous	2402144	3.71	2.59	mg/L	35.6	*	30.0

Seed Drop

Parameter	PrepSet	Reading	MDL	MQL	Units	File
BOD Carbonaceous	1171661	0.237	0.200	0.500	mg/L	127531445
BOD Carbonaceous	1171661	0.393	0.200	0.500	mg/L	127534207

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
BOD Carbonaceous		211	198	mg/L	107	83.7 - 116	127531446
BOD Carbonaceous		213	198	mg/L	108	83.7 - 116	127534208

Analytical Set 1171872 — EPA 351.2 2

AWRL/LOQ C

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	0.054	0.050	mg/L	108	75.0 - 125	127536028

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Kjeldahl Nitrogen	1171690	ND	0.00712	0.050	mg/L	127536025

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	5.26	5.00	mg/L	105	90.0 - 110	127535954
Total Kjeldahl Nitrogen	5.45	5.00	mg/L	109	90.0 - 110	127535965
Total Kjeldahl Nitrogen	5.41	5.00	mg/L	108	90.0 - 110	127535976
Total Kjeldahl Nitrogen	5.47	5.00	mg/L	109	90.0 - 110	127535987
Total Kjeldahl Nitrogen	5.45	5.00	mg/L	109	90.0 - 110	127535998
Total Kjeldahl Nitrogen	5.39	5.00	mg/L	108	90.0 - 110	127536009
Total Kjeldahl Nitrogen	5.50	5.00	mg/L	110	90.0 - 110	127536020
Total Kjeldahl Nitrogen	5.48	5.00	mg/L	110	90.0 - 110	127536024
Total Kjeldahl Nitrogen	5.19	5.00	mg/L	104	90.0 - 110	127536029
Total Kjeldahl Nitrogen	5.30	5.00	mg/L	106	90.0 - 110	127536039
Total Kjeldahl Nitrogen	5.24	5.00	mg/L	105	90.0 - 110	127536048
Total Kjeldahl Nitrogen	5.13	5.00	mg/L	103	90.0 - 110	127536055

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Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Kjeldahl Nitrogen	2401622	0.297	0.306	mg/L	2.99	20.0
Total Kjeldahl Nitrogen	2401623	0.299	0.293	mg/L	2.03	20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Total Kjeldahl Nitrogen	5.19	5.00	mg/L	104	90.0 - 110	127535953

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Kjeldahl Nitrogen	1171690	5.38	5.32	5.00	90.0 - 110	108	106	mg/L	1.12	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File
Total Kjeldahl Nitrogen	2401622	5.87	0.306	5.00	mg/L	111	80.0 - 120	127536032
Total Kjeldahl Nitrogen	2401623	5.99	0.293	5.00	mg/L	114	80.0 - 120	127536035

Analytical Set 1171942 — EPA 350.1 2

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Ammonia Nitrogen	1171641	ND	0.00336	0.020	mg/L	127537401

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	127537304
Ammonia Nitrogen	2.03	2.00	mg/L	102	90.0 - 110	127537313
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	127537322
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	127537331
Ammonia Nitrogen	2.01	2.00	mg/L	100	90.0 - 110	127537342
Ammonia Nitrogen	2.06	2.00	mg/L	103	90.0 - 110	127537348
Ammonia Nitrogen	2.02	2.00	mg/L	101	90.0 - 110	127537356
Ammonia Nitrogen	2.08	2.00	mg/L	104	90.0 - 110	127537367
Ammonia Nitrogen	2.04	2.00	mg/L	102	90.0 - 110	127537377
Ammonia Nitrogen	1.96	2.00	mg/L	98.0	90.0 - 110	127537381
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127537392
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	127537399
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	127537400
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	127537409
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127537418
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127537428
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	127537439
Ammonia Nitrogen	2.12	2.00	mg/L	106	90.0 - 110	127537449
Ammonia Nitrogen	2.16	2.00	mg/L	108	90.0 - 110	127537460
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	127537469

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%

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Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Ammonia Nitrogen	2401099	2.25	2.20	mg/L	2.25	20.0
Ammonia Nitrogen	2401321	0.198	0.174	mg/L	12.9	20.0

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Ammonia Nitrogen	2.14	2.00	mg/L	107	90.0 - 110	127537303

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Ammonia Nitrogen	1171641	2.16	2.16	2.00	90.0 - 110	108	108	mg/L	0	20.0

Mat. Spike

Parameter	*Sample*	*Spike*	*Unknown*	*Known*	*Units*	*Recovery %*	*Limits %*	*File*	
Ammonia Nitrogen	2401099	3.62	2.20	2.00	mg/L	71.0	80.0 - 120	127537406	*
Ammonia Nitrogen	2401321	2.51	0.174	2.00	mg/L	117	80.0 - 120	127537410	

Analytical Set 1172237 — EPA 350.1 2

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Ammonia Nitrogen	1171641	ND	0.00336	0.020	mg/L	127543899

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127543891
Ammonia Nitrogen	2.07	2.00	mg/L	104	90.0 - 110	127543900
Ammonia Nitrogen	2.15	2.00	mg/L	108	90.0 - 110	127543911
Ammonia Nitrogen	2.03	2.00	mg/L	102	90.0 - 110	127543919
Ammonia Nitrogen	2.19	2.00	mg/L	110	90.0 - 110	127543930
Ammonia Nitrogen	2.16	2.00	mg/L	108	90.0 - 110	127543940
Ammonia Nitrogen	2.17	2.00	mg/L	108	90.0 - 110	127543948
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127543953
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127543958

Duplicate

Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Ammonia Nitrogen	2401099	2.51	2.52	mg/L	0.398	20.0

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Ammonia Nitrogen	2.13	2.00	mg/L	106	90.0 - 110	127543890

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Ammonia Nitrogen	1171641	2.16	2.19	2.00	90.0 - 110	108	110	mg/L	1.38	20.0

Mat. Spike

Parameter	*Sample*	*Spike*	*Unknown*	*Known*	*Units*	*Recovery %*	*Limits %*	*File*
Ammonia Nitrogen	2401099	4.74	2.52	2.00	mg/L	111	80.0 - 120	127543905

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Analytical Set 1172250 — EPA 351.2 2

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Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Total Kjeldahl Nitrogen	1171690	ND	0.00712	0.050	mg/L	127544376

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Total Kjeldahl Nitrogen	5.50	5.00	mg/L	110	90.0 - 110	127544371
Total Kjeldahl Nitrogen	5.41	5.00	mg/L	108	90.0 - 110	127544372
Total Kjeldahl Nitrogen	5.40	5.00	mg/L	108	90.0 - 110	127544373
Total Kjeldahl Nitrogen	5.46	5.00	mg/L	109	90.0 - 110	127544374
Total Kjeldahl Nitrogen	5.33	5.00	mg/L	107	90.0 - 110	127544375
Total Kjeldahl Nitrogen	5.49	5.00	mg/L	110	90.0 - 110	127544379
Total Kjeldahl Nitrogen	5.38	5.00	mg/L	108	90.0 - 110	127544387
Total Kjeldahl Nitrogen	5.47	5.00	mg/L	109	90.0 - 110	127544388
Total Kjeldahl Nitrogen	5.37	5.00	mg/L	107	90.0 - 110	127544391

Duplicate

Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Total Kjeldahl Nitrogen	2401622	0.336	0.317	mg/L	5.82	20.0

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Total Kjeldahl Nitrogen	5.33	5.00	mg/L	107	90.0 - 110	127544370

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Total Kjeldahl Nitrogen	1171690	5.08	4.98	5.00	90.0 - 110	102	99.6	mg/L	1.99	20.0

Mat. Spike

Parameter	*Sample*	*Spike*	*Unknown*	*Known*	*Units*	*Recovery %*	*Limits %*	*File*
Total Kjeldahl Nitrogen	2401622	5.52	0.317	5.00	mg/L	104	80.0 - 120	127544382

Analytical Set 1172119 — SM 2540 D-2020

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Total Suspended Solids	1172119	ND	2	2	mg/L	127541472

ControlBlk

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Total Suspended Solids	1172119	0.0002			grams	127541471

Duplicate

Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Total Suspended Solids	2401529	4500	4680	mg/L	3.92	20.0
Total Suspended Solids	2401530	5360	5560	mg/L	3.66	20.0
Total Suspended Solids	2401595	6840	6880	mg/L	0.583	20.0

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LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Suspended Solids	1172119	45.0	50.0	mg/L	90.0	90.0 - 110	127541505

Standard

Parameter	Sample	Reading	Known	Units	Recover%	Limits%	File
Total Suspended Solids		98.0	100	mg/L	98.0	90.0 - 110	127541504

Analytical Set 1172389 — EPA 1664B (HEM)

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1172389	ND	0.804	4.00	mg/L	127546214

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Oil and Grease (HEM)	1172389	-0.0001			grams	127546213
Oil and Grease (HEM)	1172389	0.0004			grams	127546228

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Oil and Grease (HEM)	1172389	36.4	40.0	mg/L	91.0	78.0 - 114	127546215

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Oil and Grease (HEM)	2401564	37.8	0	ND	40.0	78.0 - 114	94.5		mg/L		20.0

Analytical Set 1172490 — SM 2540 C-2020

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1172490	ND	5.00	5.00	mg/L	127547717

ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1172490	-0.0002			grams	127547704

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Dissolved Solids	2401414	640	650	mg/L	1.55	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Dissolved Solids	1172490	192	200	mg/L	96.0	85.0 - 115	127547705

Analytical Set 1172507 — SM 2540 C-2020

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1172507	ND	5.00	5.00	mg/L	127547886

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ControlBlk

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Total Dissolved Solids	1172507	0.0001			grams	127547873

Duplicate

Parameter	Sample	Result	Unknown	Unit	RPD	Limit%
Total Dissolved Solids	2401512	1210	1180	mg/L	2.51	20.0

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File
Total Dissolved Solids	1172507	192	200	mg/L	96.0	85.0 - 115	127547874

Analytical Set 1171822 — EPA 300.0 2.1

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1171822	ND	0.0593	0.300	mg/L	127534826
Nitrate-Nitrogen Total	1171822	ND	0.00331	0.0226	mg/L	127534826
Sulfate	1171822	ND	0.0605	0.300	mg/L	127534826

CCB

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Chloride	1171822	0.034	0.0593	0.300	mg/L	127534823
Chloride	1171822	0.042	0.0593	0.300	mg/L	127534843
Chloride	1171822	0.032	0.0593	0.300	mg/L	127534855
Nitrate-Nitrogen Total	1171822	0	0.00331	0.0226	mg/L	127534823
Nitrate-Nitrogen Total	1171822	0.0111	0.00331	0.0226	mg/L	127534843
Nitrate-Nitrogen Total	1171822	0.0115	0.00331	0.0226	mg/L	127534855
Sulfate	1171822	-0.161	0.0605	0.300	mg/L	127534823
Sulfate	1171822	-0.156	0.0605	0.300	mg/L	127534843
Sulfate	1171822	-0.158	0.0605	0.300	mg/L	127534855

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Chloride	9.77	10.0	mg/L	97.7	90.0 - 110	127534822
Chloride	10.1	10.0	mg/L	101	90.0 - 110	127534842
Chloride	10.0	10.0	mg/L	100	90.0 - 110	127534854
Nitrate-Nitrogen Total	2.36	2.26	mg/L	104	90.0 - 110	127534822
Nitrate-Nitrogen Total	2.48	2.26	mg/L	110	90.0 - 110	127534842
Nitrate-Nitrogen Total	2.40	2.26	mg/L	106	90.0 - 110	127534854
Sulfate	9.75	10.0	mg/L	97.5	90.0 - 110	127534822
Sulfate	10.1	10.0	mg/L	101	90.0 - 110	127534842
Sulfate	10.0	10.0	mg/L	100	90.0 - 110	127534854

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Chloride	1171822	4.91	5.02	5.00	85.0 - 115	98.2	100	mg/L	2.22	20.0
Nitrate-Nitrogen Total	1171822	1.13	1.17	1.13	86.3 - 117	100	104	mg/L	3.48	20.0
Sulfate	1171822	5.48	5.65	5.00	85.4 - 124	110	113	mg/L	3.05	20.0

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MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Chloride	2399946	212	211	163	50.0	80.0 - 120	98.0	96.0	mg/L	2.06	20.0
Nitrate-Nitrogen Total	2399946	8.09	8.08	1.35	11.3	80.0 - 120	59.6 *	59.6 *	mg/L	0.148	20.0
Sulfate	2399946	177	176	127	50.0	80.0 - 120	100	98.0	mg/L	2.02	20.0
Chloride	2400215	162	167	119	50.0	80.0 - 120	86.0	96.0	mg/L	11.0	20.0
Nitrate-Nitrogen Total	2400215	10.6	10.7	ND	11.3	80.0 - 120	93.8	94.7	mg/L	0.939	20.0
Sulfate	2400215	187	195	140	50.0	80.0 - 120	94.0	110	mg/L	15.7	20.0

Analytical Set 1172923 — EPA 300.0 2.1

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Sulfate	1172923	ND	0.0605	0.300	mg/L	127556459

CCB

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Sulfate	1172923	-0.200	0.0605	0.300	mg/L	127556455
Sulfate	1172923	-0.211	0.0605	0.300	mg/L	127556475
Sulfate	1172923	-0.182	0.0605	0.300	mg/L	127556487

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Sulfate	10.0	10.0	mg/L	100	90.0 - 110	127556454
Sulfate	10.1	10.0	mg/L	101	90.0 - 110	127556474
Sulfate	10.2	10.0	mg/L	102	90.0 - 110	127556486

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Sulfate	1172923	5.59	5.46	5.00	85.4 - 124	112	109	mg/L	2.35	20.0

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Sulfate	2401648	44.9	46.9	34.3	10.0	80.0 - 120	106	126 *	mg/L	17.2	20.0
Sulfate	2401649	38.5	38.0	26.5	10.0	80.0 - 120	120	115	mg/L	4.26	20.0

Analytical Set 1171820 — EPA 200.7 4.4

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Phosphorus	1171667	ND	0.0353	0.040	mg/L	127534739

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Phosphorus	0.962	1.00	mg/L	96.2	90.0 - 110	127534737
Phosphorus	1.01	1.00	mg/L	101	90.0 - 110	127534738
Phosphorus	1.04	1.00	mg/L	104	90.0 - 110	127534748
Phosphorus	1.06	1.00	mg/L	106	90.0 - 110	127534757
Phosphorus	1.08	1.00	mg/L	108	90.0 - 110	127534762

PHKG-P

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ICL

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Phosphorus	25.0	25.0	mg/L	100	95.0 - 105	127534735

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Phosphorus	1.02	1.00	mg/L	102	90.0 - 110	127534736

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Phosphorus	1171667	4.20	4.21	4.00	85.0 - 115	105	105	mg/L	0.238	25.0

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Phosphorus	2401145	4.33	4.36	0.0476	4.00	75.0 - 125	107	108	mg/L	0.698	25.0
Phosphorus	2401567	4.37	4.37	0.119	4.00	75.0 - 125	106	106	mg/L	0	25.0

Analytical Set 1171343 — SM 4500-Cl F-2011

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Cl2 Residual,Total(Lab)Titration	1171343	ND	0.100	0.100	mg/L	127526643

Duplicate

Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Cl2 Residual,Total(Lab)Titration	2399683	2.25	2.27	mg/L	0.885	20.0

Analytical Set 1171737 — SM 2510 B-2011

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Lab Spec. Conductance at 25 C	1171737	0.804			umhos/cm	127533681

Duplicate

Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Lab Spec. Conductance at 25 C	2400973	163	164	umhos/cm	0.612	20.0
Lab Spec. Conductance at 25 C	2401644	1.24	1.24	umhos/cm	0	20.0

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Lab Spec. Conductance at 25 C	13100	12900	umhos/cm	102	90.0 - 110	127533684

Standard

Parameter	*Sample*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Lab Spec. Conductance at 25 C	1171737	1410	1410	umhos/cm	100	90.0 - 110	127533682
Lab Spec. Conductance at 25 C	1171737	101	100	umhos/cm	101	90.0 - 110	127533683
Lab Spec. Conductance at 25 C	1171737	1420	1410	umhos/cm	101	90.0 - 110	127533696
Lab Spec. Conductance at 25 C	1171737	1420	1410	umhos/cm	101	90.0 - 110	127533705

Analytical Set 1171740 — SM 4500-H+ B-2011

QUALITY CONTROL

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Amarillo, TX 79124

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Duplicate

Parameter	*Sample*	*Result*	*Unknown*	*Unit*	*RPD*	*Limit%*
Laboratory pH	**2401506**	**9.00**	**9.00**	**SU**	0	20.0

Standard

Parameter	*Sample*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Laboratory pH	**1171740**	**6.04**	**6.00**	**SU**	**101**	**90.0 - 110**	**127533716**
Laboratory pH	**1171740**	**8.01**	**8.00**	**SU**	**100**	**90.0 - 110**	**127533717**
Laboratory pH	**1171740**	**6.07**	**6.00**	**SU**	**101**	**90.0 - 110**	**127533727**
Laboratory pH	**1171740**	**7.98**	**8.00**	**SU**	**99.8**	**90.0 - 110**	**127533728**

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank (reagent water or other blank matrices that contains all reagents except standard(s) and is processed simultaneously with and under the same conditions as samples; carried through preparation and analytical procedures exactly like a sample; monitors); ICV - Initial Calibration Verification; CCV - Continuing Calibration Verification (same standard used to prepare the curve; typically a mid-range concentration; verifies the continued validity of the calibration curve); MSD - Matrix Spike Duplicate (replicate of the matrix spike; same solution and amount of target analyte added to the MS is added to a third aliquot of sample; quantifies matrix bias and precision.); LCS Dup - Laboratory Control Sample Duplicate (replicate LCS; analyzed when there is insufficient sample for duplicate or MSD; quantifies accuracy and precision.); CCB - Continuing Calibration Blank; AWRL/LOQ C - Ambient Water Reporting Limit/LOQ Check Std; LCS - Laboratory Control Sample (reagent water or other blank matrices that is spiked with a known quantity of target analyte(s) and carried through preparation and analytical procedures exactly like a sample; typically a mid-range concentration; verifies that bias and precision of the analytical process are within control limits; determines usability of the data.); MS -Matrix Spike (same solution and amount of target analyte added to the LCS is added to a second aliquot of sample; quantifies matrix bias.)

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Office: 903-984-0551 * Fax: 903-984-5914

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CHAIN OF CUSTODY

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Amarillo, TX 79124

PHKG-P
103

Lab Number 2401506

PO Number

Phone 806/376-8600

WW Nazareth WWTP

☐ Hand Delivered by Client to Region or LAB

☆ Sub Dropped off @ sub lab CMLS ☆

Matrix: Non-Potable Water

Sample Collection Start
Date: 4/22/25 Time: 8:45

☆ CL2, pH in Lab ☆

Sampler Printed Name: Ray Hulen
Sampler Affiliation: PHKG
Sampler Signature:

Samples Radioactive? ☐ Samples Contains Dioxin? ☐ Samples Biological Hazard? ☐

1 On Site Testing

Cl2c Cl2 Res(Total)Analyzed by client

Cl2 Res(Total)Analyzed by client

Collected By RH Date 4/22/25 Time 8:45 Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1 _____ R2 _____ QC R1 _____ QC R2 _____

---

pHCl pH Client Provided SM 4500-H+ B-2011

pH Client Provided

Collected By RH Date 4/22/25 Time 8:45 Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

---

1 Na2S2O3 (0.008%) Polystyrene-100 mL Sterilized

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CHAIN OF CUSTODY

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Amarillo, TX 79124

PHKG-P
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NELAC	**Short HoldSubc**	ECPH	E.Coli WW MPN Panhandle (SUB)	SUB Lab CAS:EMLC (0.333 days)
	2	**H2SO4 to pH <2 GlQt w/Tef-lined lid**		
NELAC		HEM	Oil and Grease (HEM)	EPA 1664B (HEM) (28.0 days)
	1	**Polyethylene 1/2 gal (White)**		
NELAC	**Short Hold**	BODc	BOD Carbonaccous	SM 5210 B-2016 (TCMP Inhibitor) (2.04 days)
NELAC		TSS	Total Suspended Solids	SM 2540 D-2015 (7.00 days)
	0	**Z -- No bottle required**		
		SKL	Sub Hold: PM Attn	
	1	**HNO3 to pH <2 Polyethylene 500 mL for Metals**		
NELAC		*PI	Phosphorus	EPA 200.7 4.4 CAS:7723-14-0 (180 days)
		301L	Liquid Metals Digestion	EPA 200.2 2.8 (180 days)
	1	**H2SO4 to pH <2 250 ml Polyethylene**		
NELAC		NHaN	Ammonia Nitrogen	EPA 350.1 2 (28.0 days)
NELAC		TKN	Total Kjeldahl Nitrogen	EPA 351.2 2 CAS:7727-37-9 (28.0 days)
	1	**Polyethylene Quart**		
NELAC		!ClL	Chloride	EPA 300.0 2.1 (28.0 days)
NELAC	**Short Hold**	!N3L	Nitrate-Nitrogen Total	EPA 300.0 2.1 CAS:14797-55-8 (2.00 days)
NELAC		!S4L	Sulfate	EPA 300.0 2.1 (28.0 days)
NELAC		CONL	Lab Spec. Conductance at 25 C	SM 2510 B-2011 (28.0 days)
NELAC		TDS	Total Dissolved Solids	SM 2540 C-2015 (7.00 days)

Ambient Conditions/Comments

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PHKG-P
103

Date	Time	Relinquished		Received	
4/22/25	11:23	Printed Name: Ray Hyden	Affiliation: PHKG	Printed Name: Derek Crais	Affiliation: SPL
		Signature:		Signature:	
4-22-25	1500	Printed Name: Derek Crais	Affiliation: SPL	Printed Name: XPO	Affiliation:
		Signature:		Signature:	
4/23/25	0900	Printed Name: XPO	Affiliation:	Printed Name: Andy Owens - SPL, Inc.	Affiliation:
		Signature:		Signature:	
		Printed Name:	Affiliation:	Printed Name:	Affiliation:
		Signature:		Signature:	

Sample Received on Ice? ☒ Yes ☐ No
Cooler/Sample Secure? ☒ Yes ☐ No If Shipped: Tracking Number & Temp - See Attached

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, SPL shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement. SPL personnel collect samples as specified by SPL SOP #000323.

Comments

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Suite 200
Amarillo, TX 79124

PHKG-P
103

Lab Number J401512

PO Number

Phone 806/376-8600

WW Dimmitt WWTP

☐ Hand Delivered by Client to Region or LAB

★Dropped off @ Sub Lab EML★

Matrix: Non-Potable Water

Sample Collection Start
Date: 4/22/25 Time: 9:46

★ CL2, PH in Lab ★

Sampler Printed Name: Roy Haden
Sampler Affiliation: PHKG
Sampler Signature: Roy Haden

Samples Radioactive? ☐ Samples Contains Dioxin? ☐ Samples Biological Hazard? ☐

1 On Site Testing

Cl2c Cl2 Res(Total)Analyzed by client

Cl2 Res(Total)Analyzed by client

Collected By RH Date 4/22/25 Time 9:46 Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

R1 _____ R2 _____ QC R1 _____ QC R2 _____

---

pHCl pH Client Provided SM 4500-H+ B-2011

pH Client Provided

Collected By RH Date 4/22/25 Time 9:46 Analyzed By _____ Date _____ Time _____

Results _____ Units _____ Temp. _____ C Duplicate _____ Units _____ Temp. _____ C

---

1 Na2S2O3 (0.008%) Polystyrene-100 mL Sterilized

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CHAIN OF CUSTODY

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Amarillo, TX 79124

PHKG-P
103

NELAC	**Short HoldSubc**	ECPH	E.Coli WW MPN Panhandle (SUB)	SUB Lab CAS:EMLC (0.333 days)
	2	**H2SO4 to pH <2 GlQt w/Tef-lined lid**		
NELAC		HEM	Oil and Grease (HEM)	EPA 1664B (HEM) (28.0 days)
	1	**Polyethylene 1/2 gal (White)**		
NELAC	**Short Hold**	BODc	BOD Carbonaceous	SM 5210 B-2016 (TCMP Inhibitor) (2.04 days)
NELAC		TSS	Total Suspended Solids	SM 2540 D-2015 (7.00 days)
	0	**Z -- No bottle required**		
		SKL	Sub Hold: PM Attn	
	1	**HNO3 to pH <2 Polyethylene 500 mL for Metals**		
NELAC		*PI	Phosphorus	EPA 200.7 4.4 CAS:7723-14-0 (180 days)
		301L	Liquid Metals Digestion	EPA 200.2 2.8 (180 days)
	1	**H2SO4 to pH <2 250 ml Polyethylene**		
NELAC		NHaN	Ammonia Nitrogen	EPA 350.1 2 (28.0 days)
NELAC		TKN	Total Kjeldahl Nitrogen	EPA 351.2 2 CAS:7727-37-9 (28.0 days)
	1	**Polyethylene Quart**		
NELAC		!CIL	Chloride	EPA 300.0 2.1 (28.0 days)
NELAC	**Short Hold**	!N3L	Nitrate-Nitrogen Total	EPA 300.0 2.1 CAS:14797-55-8 (2.00 days)
NELAC		!S4L	Sulfate	EPA 300.0 2.1 (28.0 days)
NELAC		CONL	Lab Spec. Conductance at 25 C	SM 2510 B-2011 (28.0 days)
NELAC		TDS	Total Dissolved Solids	SM 2540 C-2015 (7.00 days)

Ambient Conditions/Comments

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CHAIN OF CUSTODY

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Amarillo, TX 79124

PHKG-P
103

Date	Time	Relinquished		Received	
4/22/25	11:23	Printed Name: Roy Haden	Affiliation: PHKG	Printed Name: Derek Crois	Affiliation: SPL
		Signature:		Signature:	
4-22-25	1800	Printed Name: Derek Crois	Affiliation: SPL	Printed Name: XPO	Affiliation:
		Signature:		Signature:	
4/23/25	0900	Printed Name: XPS	Affiliation:	Printed Name: Andy Owens - SPL, Inc.	Affiliation:
		Signature:		Signature:	
		Printed Name:	Affiliation:	Printed Name:	Affiliation:
		Signature:		Signature:	

Sample Received on Ice? ☒ Yes ☐ No
Cooler/Sample Secure? ☒ Yes ☐ No If Shipped: Tracking Number & Temp - See Attached

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, SPL shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement. SPL personnel collect samples as specified by SPL SOP #000323.

Comments

COOLER CHECKIN

Region/Driver/Client	Panhandle
Date / Time:	4/23 1 0900
Cooler:	of
Shipping Company:	XPS

Temp Label:

4/23 0900
Date Time Tech
Temp: 1.7 / 1.4 C

Therm#: 7242 Corr Fact: -0.3 C

1144711 CoC Print Group 001 of 001

Dropped off @ Sub Lab EML

Page 1 of 1

Environmental Monitoring Laboratory ◆ P.O. Box 477 / 6145 State Highway 171, Hillsboro, Texas 76645 ◆ Phone: (254) 582-2622

TCEQ Lab ID: T104704247

Purchase Order / Chain of Custody

EPA Lab ID: TX01547

Panhandle Division 13260 South US Hwy 287 Amarillo, Texas 79118 Office: 806-335-9393 Emergency: 806-786-0612

Southwest Division 811 E. Young Street Llano, Texas 78843 Office: 325-247-3295 Emergency: 254-582-2622

East Texas Division 14295 S.H. 155 North Winona, Texas 75792 Office: 903-877-9222 Emergency: 817-357-6535

Coastal Division 34 East Ave., Schulenburg, Texas 78956 Office: 979-743-7010 Emergency: 254-221-3201

Report To: Ray Heden	Report To: (Buyer)
Company: Parkhill	Purchase Order #:
	Address:
Email: rheden@parkhill.com	Email: kilgore-projectmanagement@spclabs.com
Phone: 806-683-1069	Phone:
Project Name:	Quote #:
Project Location: Nazareth WWTP	City, State: Nazareth, Texas
Hand Deliver: ☐ Pick-up: ☐	Sampler: (Please Print) Ray Heden

ANALYSES REQUESTED

NOTES:

Lab#	Client Sample ID	Matrix	Date	Time	*Pres. Code	tBottle Code	CBOD / BOD	TSS	pH	DO	NH3N (pH<2.0, H_2SO_4) SM4500-NH3 D or G unless specified	FECAL COLIFORM E.COLI (Sterile)	MLSS	ALKALINITY				Sample Remarks
	1. Nazareth 103	WW	4/22/25	8:45	6	1						X						
	2.																	
	3.																	
	4.																	
	5.																	
	6.																	
	7.																	
	8.																	
	9.																	
	10.																	

Relinquished By:	Date	Time	Received By:	Date	Time
1. Ray Heden	4/22/25	11:23	1.	4.22.25	11:23
2.	4.22.23	12:23	2. Lindsey Craig	04/22/25	12:23
3.			3.		
4.			4.		

IR GUN ID:_____
Ice: YES NO
Temperature: _____

* Preservation Codes: 1. None 2. Sulfuric 3. Nitric 4. NaOH + ZnAc 5. NaOH 6. Stanle + Thosulfate

t Bottle Codes: 1. Plastic 2. Glass + Tef. 3. 40 ml VOA

Complete sample information is vital for proper login and reporting. EML may need to subcontract some analyses due to equipment or procedural limitations.

Check us out on the web: http://www.yourwaterlab.com **Email us at: homeoffice@yourwaterlab.com**

Revised 06/2024

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☆ Dropped off @ sub lab EML ☆

Environmental Monitoring Laboratory ◆ P.O. Box 477 / 6145 State Highway 171, Hillsboro, Texas 76645 ◆ Phone: (254) 582-2622

Page 1 of 1

TCEQ Lab ID: T104704247

Purchase Order / Chain of Custody

EPA Lab ID: TX01547

Panhandle Division
13260 South US Hwy 287 Amarillo, Texas 79118
Office: 806-335-9393 Emergency: 806-786-0612

Southwest Division
811 E. Young Street Llano, Texas 78643
Office: 325-247-3295 Emergency: 254-582-2622

East Texas Division
14295 S.H. 155 North Winona, Texas 75792
Office: 903-877-9222 Emergency: 817-357-6535

Coastal Division
34 East Ave., Schulenburg, Texas 78956
Office: 979-743-7010 Emergency: 254-221-3201

Report To: Ray Haden	Report To: (Buyer)
Company: Parkhill	Purchase Order #:
	Address:
Email: rhaden@parkhill.com	Email: Kilgore.projectmanagement@spclabs.com
Phone: 806-683-1069	Phone:
Project Name:	Quote #:
Project Location: Dimmitt WWTP	City, State: Dimmitt, Texas
Hand Deliver: ☐ Pick-up: ☐	Sampler: (Please Print) Ray Haden

ANALYSES REQUESTED

NOTES:

Lab#	Client Sample ID	Matrix	Date	Time	*Pres. Code	‡Bottle Code	CBOD / BOD	TSS	pH	DO	NH3N (pH<2.0, H_2SO_4) SM4500-NH3 D or G unless specified	FECAL COLIFORM (E.COLI (Sterile))	MLSS	ALKALINITY				Sample Remarks
	1. Dimmitt 103	WW	4/22/25	9:46	6e	1						X						
	2.																	
	3.																	
	4.																	
	5.																	
	6.																	
	7.																	
	8.																	
	9.																	
	10.																	

Relinquished By:	Date	Time	Received By:	Date	Time
1. Ray Haden	4/22/25	11:23	1.	4-22-25	11:23
2.	4-22-25	12:23	2. Cindy Craig	04/22/25	12:23
3.			3.		
4.			4.		

IR GUN ID: _____
Ice: YES NO
Temperature: _____

* Preservation Codes: 1. None 2. Sulfuric 3. Nitric 4. NaOH + ZnAc 5. NaOH 6. Sterile + Thiosulfate

‡ Bottle Codes: 1. Plastic 2. Glass + Tef. 3. 40 ml VOA

Complete sample information is vital for proper login and reporting. EML may need to subcontract some analyses due to equipment or procedural limitations.

Check us out on the web: http://www.yourwaterlab.com Email us at: homeoffice@yourwaterlab.com

Revised 06/2024

Appendix H

Annual Cropping Plan

APPENDIX H

ANNUAL CROPPING PLAN

Nazareth, Texas

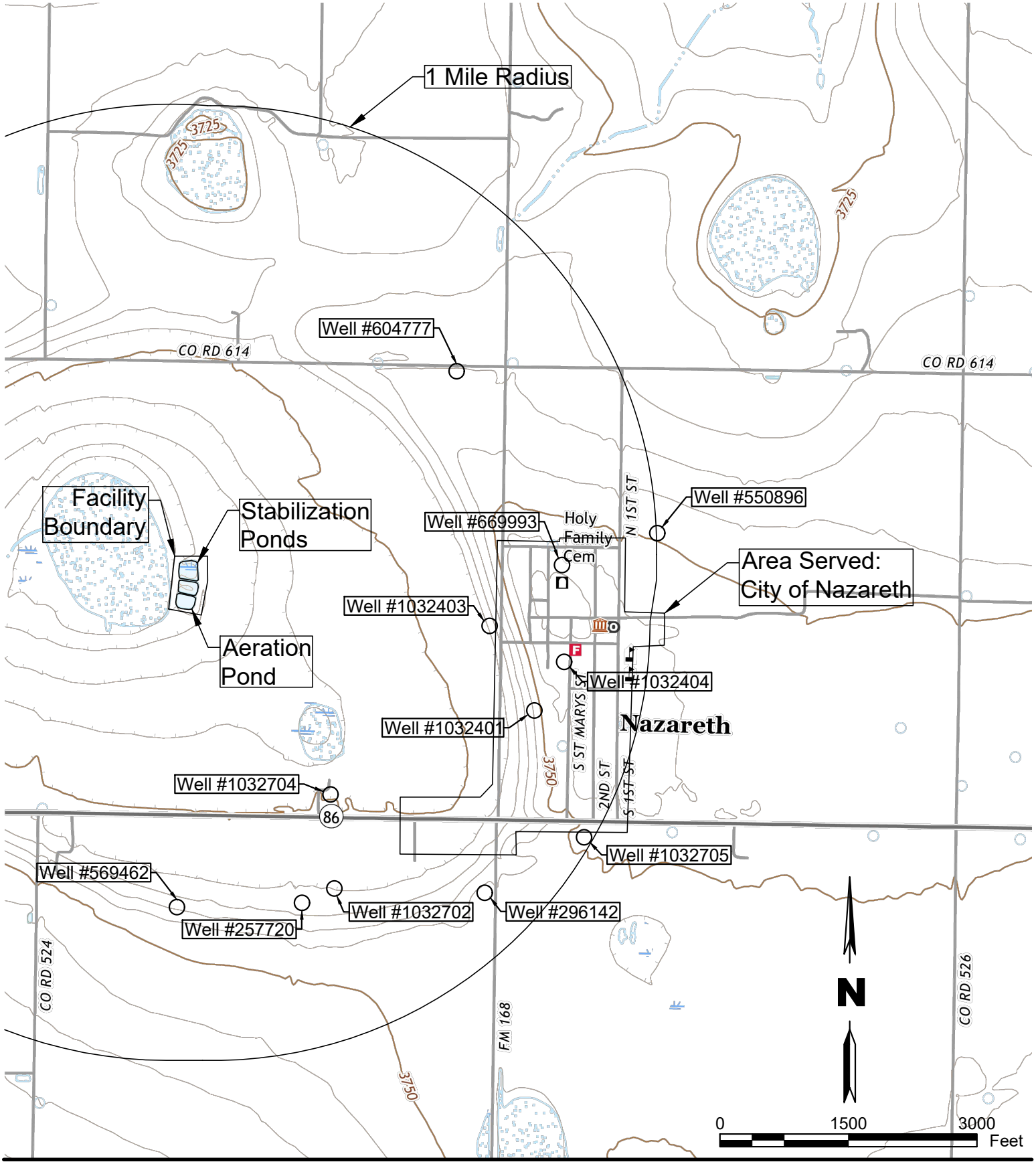
A. See attached Soil Map (Appendix K)
B. The City of Nazareth grows approximately 47 acres of Native Perennial Grass and Rye Grass, as shown on the attached map. These crops are capable of growing year-round.
C. Typical Annual Growing Season is as follows:

Month	Native Perennial and Rye Grass
January	X
February	X
March	X
April	X
May	X
June	X
August	X
September	X
October	X
November	X
December	X

D. The City of Nazareth will provide essential nutrients to keep the grasses healthy year-round.
E. Nutrient Removal Rates for Rye Grass
    a. Nitrogen: 117 lbs/acre
    b. Phosphorous: 43 lbs/acre
    c. Potassium: 165 lbs/acre
F. There is no minimum or maximum harvest height.
G. No additional water requirements are necessary.
H. According to Table 3 of TAC 309.20, rye grass is relatively salt tolerant with 6.0 – 8.0 millimhos/cm at 25° C
I. The land application area will be mowed as necessary.
J. No additional fertilization will be required.

Appendix I

Well Map and Information



City of Nazareth WWTP Permit Renewal

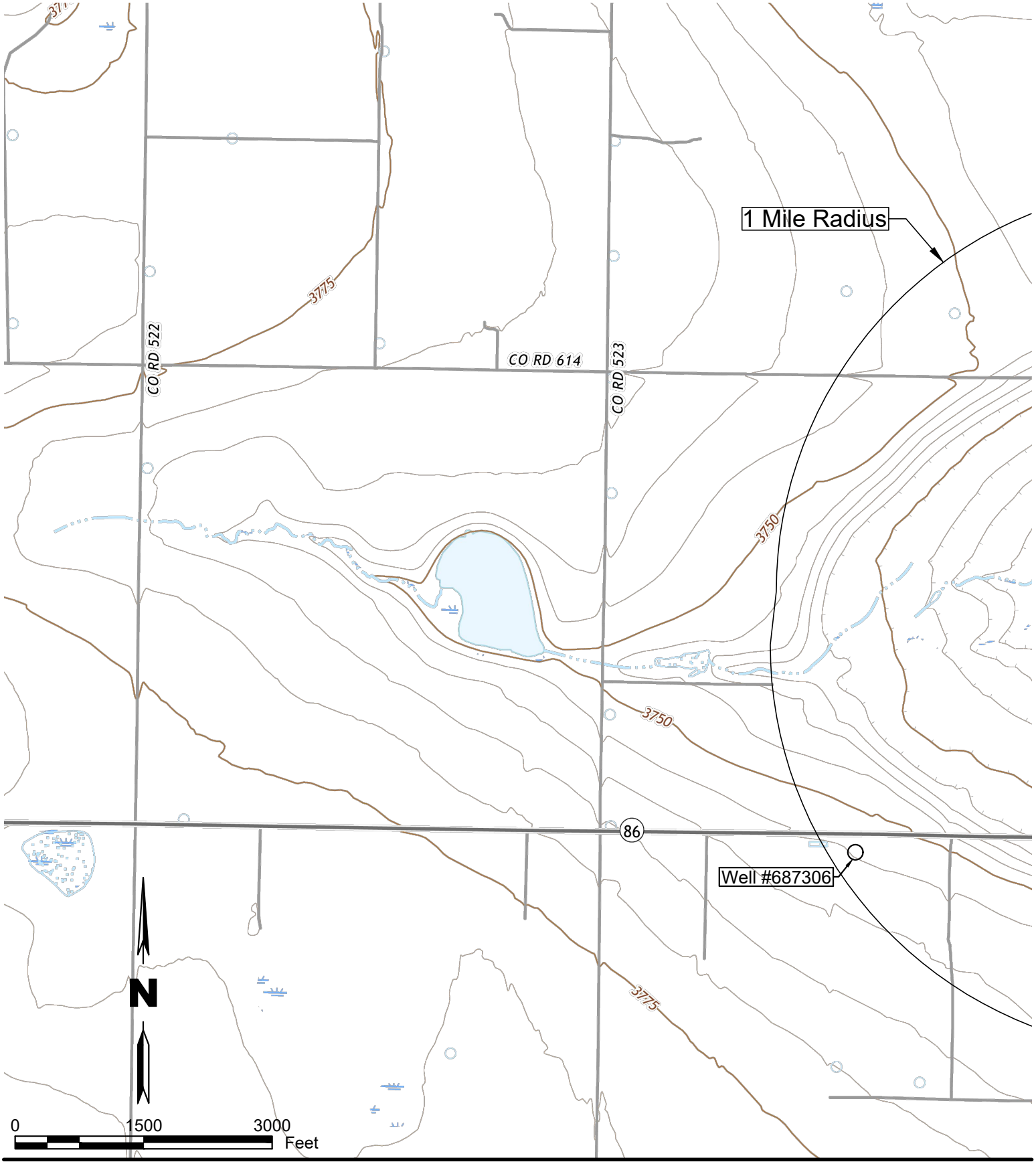
City of Nazareth
P.O. Box 7
Nazareth, TX 79063

Parkhill

Parkhill.com

Well Map

Issue:	New
Date:	07/03/2025
Project No:	44995.25
Sheet:	1 OF 1



City of Nazareth WWTP Permit Renewal

City of Nazareth
P.O. Box 7
Nazareth, TX 79063

Parkhill

Parkhill.com

Well Map

Issue:	New
Date:	07/03/2025
Project No:	44995.25
Sheet:	1 OF 1

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-704

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	1032704
County	Castro
River Basin	Red
Groundwater Management Area	2
Regional Water Planning Area	O - Llano Estacado
Groundwater Conservation District	High Plains UWCD #1
Latitude (decimal degrees)	34.539722
Latitude (degrees minutes seconds)	34° 32' 23" N
Longitude (decimal degrees)	-102.112501
Longitude (degrees minutes seconds)	102° 06' 45" W
Coordinate Source	+/- 1 Second
Aquifer Code	121OGLL - Ogallala Formation
Aquifer	Ogallala
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	3723
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	None
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Windmill
Annular Seal Method	
Surface Completion	
Owner	C. B. Wilhelm
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	
Last Update Date	

Remarks	

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 8/15/1978 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Groundwater Conservation District (general)

Sampled Aquifer: Ogallala Formation

Analyzed Lab: Texas Department of Health **Reliability:** From well not sufficiently pumped; not filtered or preserved

Collection Remarks: on 5 min.-faucet near house

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		307	mg/L as CACO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		374.65	mg/L	
00910	CALCIUM (MG/L)		45	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		15	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.8	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		318	mg/L as CACO3	
00920	MAGNESIUM (MG/L)		50	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		10	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		8.3	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SI02)		64	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.71		
00932	SODIUM, CALCULATED, PERCENT		16	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)		29	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		735	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		30	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		431	mg/L	

** Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..*

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-403

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	1032403
County	Castro
River Basin	Red
Groundwater Management Area	2
Regional Water Planning Area	O - Llano Estacado
Groundwater Conservation District	High Plains UWCD #1
Latitude (decimal degrees)	34.545278
Latitude (degrees minutes seconds)	34° 32' 43" N
Longitude (decimal degrees)	-102.105834
Longitude (degrees minutes seconds)	102° 06' 21" W
Coordinate Source	+/- 1 Second
Aquifer Code	121OGLL - Ogallala Formation
Aquifer	Ogallala
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	3737
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	279
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	2/5/1969
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Perforated or Slotted

Well Type	Withdrawal of Water
Well Use	Irrigation
Water Level Observation	None
Water Quality Available	Yes
Pump	Turbine
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	C. B. Wilhelm
Driller	Paul Garrison
Other Data Available	Drillers Log
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	
Last Update Date	

Remarks	Reported yield 325 gpm with 53 feet drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
14	Blank	Steel			0	165
14	Blank	Steel			165	279

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 7/10/1981 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Groundwater Conservation District (general)

Sampled Aquifer: Ogallala Formation

Analyzed Lab: Texas Department of Health **Reliability:** Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		303	mg/L as CACO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		369.76	mg/L	
00910	CALCIUM (MG/L)		45	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		16	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.8	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		190	mg/L as CACO3	
00920	MAGNESIUM (MG/L)		19	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.8	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		8.1	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		7	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		2.25		
00955	SILICA, DISSOLVED (MG/L AS SI02)		64	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		2.93		
00932	SODIUM, CALCULATED, PERCENT		51	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)		93	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		780	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		62	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		492	mg/L	

** Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..*

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-401

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	1032401
County	Castro
River Basin	Red
Groundwater Management Area	2
Regional Water Planning Area	O - Llano Estacado
Groundwater Conservation District	High Plains UWCD #1
Latitude (decimal degrees)	34.5427778
Latitude (degrees minutes seconds)	34° 32' 34" N
Longitude (decimal degrees)	-102.1038889
Longitude (degrees minutes seconds)	102° 06' 14" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	121OGLL - Ogallala Formation
Aquifer	Ogallala
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	3752
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	270
Well Depth Source	Person Other than Owner
Drilling Start Date	
Drilling End Date	1/27/1975
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	None
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	City of Nazareth Well #2
Driller	L. T. Davis
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0350003B
Groundwater Conservation District Well Number	
Owner Well Number	2
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	5/9/2000
Last Update Date	6/11/2024

Remarks	North of two wells. Original well reworked in 1975 to a reported depth of 270 ft. Reported yield 200 GPM. Owners well #2. PWS ID #0350003B.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 3/13/1996 **Sample Time:** 0840 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		285	mg/L as CACO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		1.5	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		6.3	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		180	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		347.79	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		138.9	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.23	mg/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		48.41	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		36.5	mg/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.2	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.38	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		326	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	5	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		106.8	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		49.31	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		3.4	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)		5.1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		8.39	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.896	mg/L as N	
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	<	0.01	mg/L as N	
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		0.065	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.29	SU	

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00935	POTASSIUM, DISSOLVED (MG/L AS K)		6.6	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)		15.3	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		63.88	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.94		
00932	SODIUM, CALCULATED, PERCENT		21	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		38.68	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1377	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		26.9	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		17	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		454	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		37.8	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		5.7	ug/L	

Water Quality Analysis

Sample Date: 5/9/2000 **Sample Time:** 1530 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		214	mg/L as CACO3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		221	mg/L as CACO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		3.91	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		74.1	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		269.69	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		160	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.11	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		37.2	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		17.5	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		4.75	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	2	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.17	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		194	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		77.6	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		24.3	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		2.18	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		5.62	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.27	mg/L as N	

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00400	PH (STANDARD UNITS), FIELD		7.38	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		6.51	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0.56		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		48.7	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.07		
00932	SODIUM, CALCULATED, PERCENT		28	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		34.3	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		544	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		882	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		28.6	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		15.8	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		338	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		18.1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		18.2	ug/L	

Water Quality Analysis

Sample Date: 5/9/2000 **Sample Time:** **Sample Number:** 1 **Collection Entity:** Texas Commission on Environmental Quality

Sampled Aquifer: Ogallala Formation

Analyzed Lab: Immunoassay at TCEQ **Reliability:** Sampled using TWDB protocols, but NOT filtered

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39033	ATRAZINE, TOTAL, UG/L		0.09	ug/L	

Water Quality Analysis

Sample Date: 8/12/2008 **Sample Time:** 1035 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: Anacon, Inc **Reliability:** Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		202	mg/L as CACO3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	2	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		305	mg/L as CACO3	
01503	ALPHA, DISSOLVED (PC/L)		5.78	PC/L	2.13
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		2.3	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	0.836	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		5.83	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		161	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	0.835	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		372.2	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		180	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)	<	0.1	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	0.654	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		47.9	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		24.2	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1.17	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	0.593	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		2.78	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.83	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		271	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)		490	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	0.843	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		144	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		36.5	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		1.07	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	1.14	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		2.58	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		5.98	mg/L as NO3	

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.36	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.65	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		5.9	mg/L	
09511	RADIUM 226, DISSOLVED, RADON METHOD, PC/L	<	0.652	PC/L	0.466
81366	RADIUM 228, DISSOLVED (PC/L AS RA-228)	<	0.619	PC/L	0.342
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0.7		
01145	SELENIUM, DISSOLVED (UG/L AS SE)		5.5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		64.2	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.02		
00932	SODIUM, CALCULATED, PERCENT		24	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		38.8	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		694	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1300	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		45.8	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		17.2	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	0.363	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		456	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		7.81	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		38.5	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		26.4	ug/L	

Water Quality Analysis

Sample Date: 7/9/2012 **Sample Time:** 1020 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

Collection Remarks: Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		298	mg/L as CACO3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	2	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		283	mg/L as CACO3	
01503	ALPHA, DISSOLVED (PC/L)		5.3	PC/L	2.1
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		0.16	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		5.2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		162	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		345.35	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		207	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.25	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		47.1	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		44.4	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		2	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.18	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		300	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		123	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		44	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		3.3	ug/L	

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		12.09	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.73	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.37	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		6.26	mg/L	
09511	RADIUM 226, DISSOLVED, RADON METHOD, PC/L		0.29	PC/L	0.12
81366	RADIUM 228, DISSOLVED (PC/L AS RA-228)	<	1.1	PC/L	0.7
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)		7.1	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		62.7	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.1		
00932	SODIUM, CALCULATED, PERCENT		24	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		44	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		730	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1350	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		37.2	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		17.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		472	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		8.5	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		29.7	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		8.1	ug/L	

Water Quality Analysis

Sample Date: 7/11/2016 **Sample Time:** 1505 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

Collection Remarks: Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		292	mg/L as CACO3	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		287	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB	<	20	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB	<	20	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		287	mg/L as CACO3	
01503	ALPHA, DISSOLVED (PC/L)		3.45	PC/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-2.6825	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		4.3	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		133	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
03503	BETA, DISSOLVED (PC/L)		7.42	PC/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		350.239	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		178	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.274	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		41.6	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		45.7	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.85	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.57	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.1	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		276.977	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		111	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		41.7	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		3.13	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		6.154	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.39	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		6.99	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		5.84	mg/L	
09503	RADIUM 226, DISSOLVED, PC/L	<	1	PC/L	0.22
81366	RADIUM 228, DISSOLVED (PC/L AS RA-228)	<	1	PC/L	0.82
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0.233		
01145	SELENIUM, DISSOLVED (UG/L AS SE)		6.15	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		62.6	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.271		
00932	SODIUM, CALCULATED, PERCENT		27.698	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		48.5	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		706	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1170	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		44.7	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		17.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		473.276	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		7.27	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		32.8	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		6.76	ug/L	

Water Quality Analysis

Sample Date: 7/29/2021 **Sample Time:** 1014 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		285	mg/L as CACO3	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		287	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		287	mg/L as CACO3	
01503	ALPHA, DISSOLVED (PC/L)		3.26	PC/L	5.25
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-3.39	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		4.82	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		152	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		350.239	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		275	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.279	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		45.6	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		50.8	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		3.62	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.38	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.96	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		293.305	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		137	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		43.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		3.46	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		13.015	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.94	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.3	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		6.82	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)		7.71	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		62.7	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.185		
00932	SODIUM, CALCULATED, PERCENT		25.757	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		46.5	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		768	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1310	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		52	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		17.2	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		497.118	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		8.12	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		37.6	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Water Quality Analysis

Sample Date: 6/11/2024 **Sample Time:** 1207 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Ogallala Formation

Analyzed Lab: LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CACO3		306	mg/L as CACO3	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		288	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		288	mg/L as CACO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-2.4	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		4.2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		141	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		351.46	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		214	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.253	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		43.1	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		45.1	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.05	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		282.942	mg/L as CACO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		126	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		42.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		3.37	ug/L	

Texas Water Development Board

Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 10-32-401

groundwater division

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		11.377	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.57	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.48	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.0204	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		6.44	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0.137		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		62.5	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.313		
00932	SODIUM, CALCULATED, PERCENT		28.131	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		50.6	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		866.4	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1310	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		50.5	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		17.4	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		488.99	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		6.88	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		34.4	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		79.3	ug/L	

** Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..*

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-404

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	1032404
County	Castro
River Basin	Red
Groundwater Management Area	2
Regional Water Planning Area	O - Llano Estacado
Groundwater Conservation District	High Plains UWCD #1
Latitude (decimal degrees)	34.543889
Latitude (degrees minutes seconds)	34° 32' 38" N
Longitude (decimal degrees)	-102.103056
Longitude (degrees minutes seconds)	102° 06' 11" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	121OGLL - Ogallala Formation
Aquifer	Ogallala
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	3759
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	None
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	City of Nazareth
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0350003D
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	12/8/2010
Last Update Date	12/8/2010

Remarks	PWS ID #0350003D. Capped PS well.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis - No Data Available

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-705

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	1032705
County	Castro
River Basin	Red
Groundwater Management Area	2
Regional Water Planning Area	O - Llano Estacado
Groundwater Conservation District	High Plains UWCD #1
Latitude (decimal degrees)	34.5383333
Latitude (degrees minutes seconds)	34° 32' 18" N
Longitude (decimal degrees)	-102.1022222
Longitude (degrees minutes seconds)	102° 06' 08" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	121OGLL - Ogallala Formation
Aquifer	Ogallala
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	3749
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	335
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	4/24/1969
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	None
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	City of Nazareth #1 or South Well
Driller	Bud Gibbons
Other Data Available	Drillers Log
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G0350003A
Groundwater Conservation District Well Number	
Owner Well Number	#1 or South
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	12/14/1989
Last Update Date	2/8/2022

Remarks	Capped PS well. Still listed as Active on TCEQ DWW.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	230
16	Screen	Steel			230	335

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis - No Data Available

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-702

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	1032702
County	Castro
River Basin	Red
Groundwater Management Area	2
Regional Water Planning Area	O - Llano Estacado
Groundwater Conservation District	High Plains UWCD #1
Latitude (decimal degrees)	34.535834
Latitude (degrees minutes seconds)	34° 32' 09" N
Longitude (decimal degrees)	-102.112778
Longitude (degrees minutes seconds)	102° 06' 46" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	121OGLL - Ogallala Formation
Aquifer	Ogallala
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	3735
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	126
Well Depth Source	Measured
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Historical
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	F.J. Huseman Estate
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	
Last Update Date	

Remarks	Well 202 in M-034.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
4	Blank	Steel			0	

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

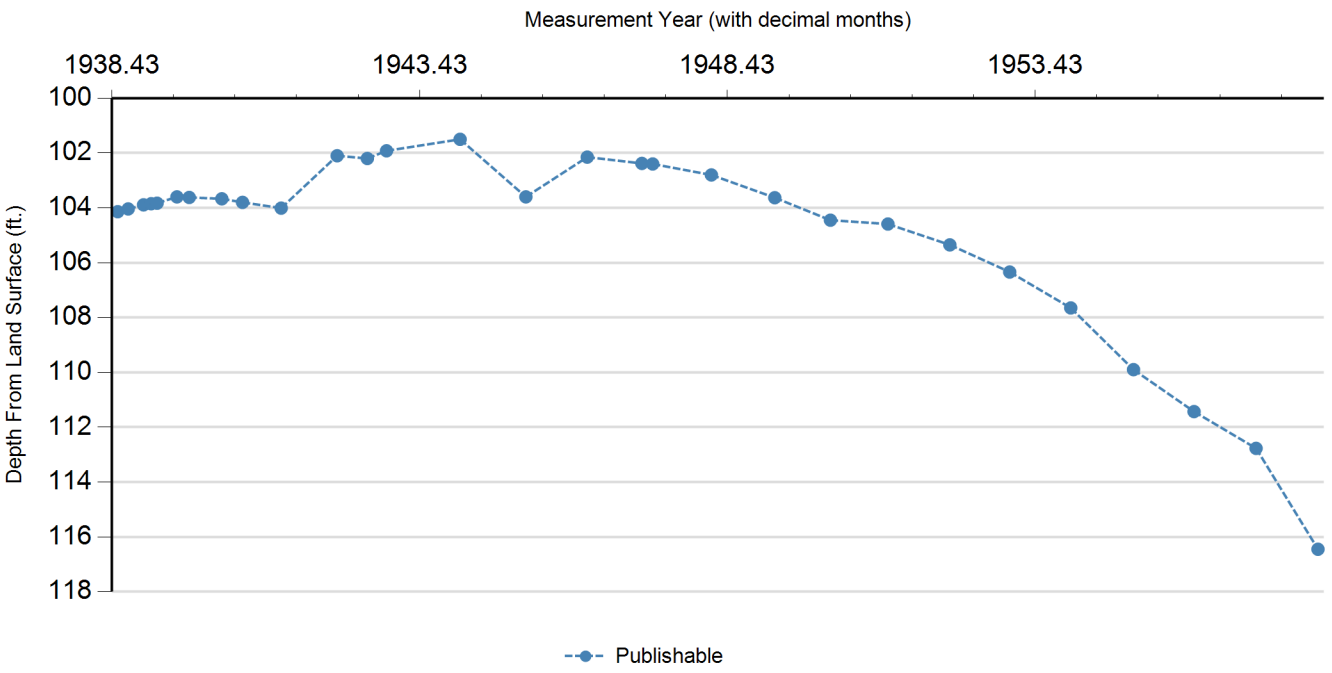
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



Status Code	Date	Time	Water Level (ft. below land surface)	Change value in ( ) indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	7/13/1938		104.14		3630.86	1	Other or Source of Measurement Unknown	Unknown	1	
P	9/15/1938		104.04	(0.10)	3630.96	1	Other or Source of Measurement Unknown	Unknown	1	
P	12/16/1938		103.89	(0.15)	3631.11	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/26/1939		103.85	(0.04)	3631.15	1	Other or Source of Measurement Unknown	Unknown	1	
P	3/1/1939		103.83	(0.02)	3631.17	1	Other or Source of Measurement Unknown	Unknown	1	
P	6/29/1939		103.6	(0.23)	3631.4	1	Other or Source of Measurement Unknown	Unknown	1	
P	9/12/1939		103.62	0.02	3631.38	1	Other or Source of Measurement Unknown	Unknown	1	
P	3/20/1940		103.67	0.05	3631.33	1	Other or Source of Measurement Unknown	Unknown	1	
P	7/23/1940		103.8	0.13	3631.2	1	Other or Source of Measurement Unknown	Unknown	1	
P	3/7/1941		104.01	0.21	3630.99	1	Other or Source of Measurement Unknown	Unknown	1	
P	2/4/1942		102.1	(1.91)	3632.9	1	Other or Source of Measurement Unknown	Unknown	1	
P	8/3/1942		102.2	0.10	3632.8	1	Other or Source of Measurement Unknown	Unknown	1	
P	11/27/1942		101.92	(0.28)	3633.08	1	Other or Source of Measurement Unknown	Unknown	1	
P	2/3/1944		101.5	(0.42)	3633.5	1	Other or Source of Measurement Unknown	Unknown	1	

Texas Water Development Board

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 10-32-702

groundwater division

Status Code	Date	Time	Water Level (ft. below land surface)	Change value in ( ) indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	2/28/1945		103.6	2.10	3631.4	1	Other or Source of Measurement Unknown	Unknown	1	
P	2/27/1946		102.15	(1.45)	3632.85	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/16/1947		102.38	0.23	3632.62	1	Other or Source of Measurement Unknown	Unknown	1	
P	3/20/1947		102.4	0.02	3632.6	1	Other or Source of Measurement Unknown	Unknown	1	
P	3/3/1948		102.8	0.40	3632.2	1	Other or Source of Measurement Unknown	Unknown	1	
P	3/14/1949		103.63	0.83	3631.37	1	Other or Source of Measurement Unknown	Unknown	1	
P	2/9/1950		104.45	0.82	3630.55	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/15/1951		104.59	0.14	3630.41	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/17/1952		105.35	0.76	3629.65	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/7/1953		106.34	0.99	3628.66	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/4/1954		107.65	1.31	3627.35	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/11/1955		109.9	2.25	3625.1	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/5/1956		111.43	1.53	3623.57	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/8/1957		112.77	1.34	3622.23	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/10/1958		116.45	3.68	3618.55	1	Other or Source of Measurement Unknown	Unknown	1	

Code Descriptions

Status Code	Status Description
P	Publishable

Remark ID	Remark Description
1	Accurately reflects water level conditions

Water Quality Analysis - No Data Available

STATE OF TEXAS WELL REPORT for Tracking #604777

Owner:	**Shelby Wilhelm**	Owner Well #:	**No Data**
Address:	**1402 FM 168 Dimmitt, TX 79027**	Grid #:	**10-32-4**
Well Location:	**1402 FM 168 Nazareth, TX 79027**	Latitude:	**34° 33' 11.25" N**
		Longitude:	**102° 06' 29.56" W**
Well County:	**Castro**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Start Date: **4/6/2022** Drilling End Date: **4/6/2022**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**9**	**0**	**281**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**23**	**281**	**Gravel**	**#1 Fine**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**3**	**23**	**Cement 8 Bags/Sacks**

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **DRILL PRO WATER WELL DRILLING**

PO BOX 1281
SEMINOLE, TX 79360

Driller Name: **Johny Loewen** License Number: **59027**

Apprentice Name: **Diedrich Dyck Neufeld** Apprentice Number: **59866**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**4**	**Topsoil**
4	**12**	**Sandy Clay**
12	**233**	**Sand - Sandstone**
233	**271**	**Coarse Sand - Gravel**
271	**281**	**Red Bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	**Blank**	**New Plastic (PVC)**	**40**	**0**	**241**
5	**Perforated or Slotted**	**New Plastic (PVC)**	**40**	**241**	**281**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #550896

Owner:	**Nathan Wheeler**	Owner Well #:	**No Data**
Address:	**Nazareth Plainview, TX 79072**	Grid #:	**10-32-4**
Well Location:	**Nazareth Nazareth, TX**	Latitude:	**34° 32' 52" N**
		Longitude:	**102° 05' 58" W**
Well County:	**Castro**	Elevation:	**No Data**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/16/2020** Drilling End Date: **6/16/2020**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**10**	**0**	**273**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**20**	**273**	**Gravel**	**8/ 16 screens**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Sealed By: **Driller**

Distance to Property Line (ft.): **75**

Distance to Septic Field or other concentrated contamination (ft.): **150**

Distance to Septic Tank (ft.): **150**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Rodgers Well Service**

3012 Dimmitt rd
Plainview, TX 79072

Driller Name: **Chad Brunson** License Number: **58174**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**60**	**red sand ,sandrock , clay**
60	**205**	**sand , sand rock , sandy clay streaks**
205	**240**	**sand , sand rock , fine gravel streaks**
240	**253**	**med. coarse sand , honey colmb sand rock , sandy clay streaks**
253	**263**	**med sand , coarse gravel , sand rock**
263	**270**	**coarse sand graqvel and san drock**
270	**273**	**red bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	**Blank**	**New Steel**	**40**	**0**	**3**
5	**Blank**	**New Plastic (PVC)**	**40**	**3**	**253**
5	**Blank**	**New Plastic (PVC)**	**80**	**253**	**273**

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STATE OF TEXAS WELL REPORT for Tracking #669993

Owner:	**Holy Family Catholic Church**	Owner Well #:	**No Data**
Address:	**PO Box 100 Nazareth, TX 79063**	Grid #:	**10-32-4**
Well Location:	**210 ST Joseph St. Nazareth, TX 79063**	Latitude:	**34° 32' 49.8" N**
		Longitude:	**102° 06' 11.6" W**
Well County:	**Castro**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Start Date: **5/7/2024** Drilling End Date: **5/7/2024**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**10**	**0**	**300**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**24**	**300**	**Gravel**	**#1 Fine**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**3**	**24**	**Cement 12 Bags/Sacks**

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **75**

Distance to Septic Field or other concentrated contamination (ft.): **NA**

Distance to Septic Tank (ft.): **NA**

Method of Verification: **Tape Measure**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **DRILL PRO WATER WELL DRILLING**

PO BOX 1281
SEMINOLE, TX 79360

Driller Name: **Johny Loewen** License Number: **59027**

Apprentice Name: **Johan Wieler** Apprentice Number: **57881**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**4**	**Topsoil**
4	**80**	**Sand - Clay**
80	**100**	**Sand**
100	**140**	**Sand - Sandstone**
140	**160**	**Sand**
160	**200**	**Sand - Sandstone**
200	**226**	**Sand**
226	**257**	**Sandstone - Coarse Sand**
257	**278**	**Coarse Sand**
278	**283**	**Green Clay - Gravel - Red Clay**
283	**290**	**Red Bed - Green Clay**
290	**300**	**Red Bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	**Blank**	**New Plastic (PVC)**	**40**	**0**	**260**
5	**Perforated or Slotted**	**New Plastic (PVC)**	**40**	**260**	**300**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #296142

Owner:	**Tyler Schacher**	Owner Well #:	**1**
Address:	**1530 cm 168 Nazareth, TX 79063**	Grid #:	**10-32-7**
Well Location:	**1530 cm 168 Nazareth, TX 79063**	Latitude:	**34° 32' 08" N**
		Longitude:	**102° 06' 23" W**
Well County:	**Castro**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Start Date: **6/22/2012** Drilling End Date: **6/23/2012**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**9.875**	**0**	**318**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**20**	**318**	**Gravel**	**1/4**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**1**	**2**	**topsoil**
	2	**20**	**15 bags sac cre**

Seal Method: **cement**

Sealed By: **Rodgers Well Service**

Distance to Property Line (ft.): **75**

Distance to Septic Field or other concentrated contamination (ft.): **120**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **measure**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Rodgers Well Service**

3012 Dimmitt RD
Plainview, TX 79072

Driller Name: **Chad Brunson** License Number: **58174**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**10**	**Sandy topsoil**
10	**15**	**caliche**
15	**70**	**Sandy clay,fine white shale**
70	**165**	**sandy Brown clay,fine sand rock streaks**
165	**250**	**med.sand,coarse sand rock**
250	**295**	**sand,sand rock,sandy clay streaks**
295	**311**	**coarse river sand**
311	**318**	**red bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
+2-3	**5" New**	**steel**	
5-298	**5"**	**PVC**	
298-318	**.035**	**PVC perf**	

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #257720

Owner:	**Greg Gerber**	Owner Well #:	**No Data**
Address:	**NCR 2** **Hart, TX 79043**	Grid #:	**10-32-7**
Well Location:	**Rt.1** **Nazareth, TX 79063**	Latitude:	**34° 32' 08" N**
		Longitude:	**102° 06' 52" W**
Well County:	**Castro**	Elevation:	**No Data**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **9/18/2006** Drilling End Date: **9/20/2006**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**9.875**	**0**	**288**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**23**	**288**	**Gravel**	**pea**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**3**	**23**	**20 Cement**

Seal Method: **Sack-crete**

Sealed By: **Driller**

Distance to Property Line (ft.): **150**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Estimated**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **280**

Well Tests: **Estimated** **Yield: 14 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Goyne Drilling**

2104 Way Road
Plainview, TX 79072

Driller Name: **Coy V. Goyne** License Number: **2103**

Comments: **$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**15**	**Top Soil,Caliche**
15	**166**	**Sand Clay Sandrock**
166	**179**	**Brown Clay**
179	**255**	**Sandy Clay Sandrock**
255	**270**	**Brown Clay**
270	**284**	**River Sand Clay**
284	**290**	**Red Bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	**New**	**Plastic**	**3 268**
5	**New**	**Perforated**	**268 288 035**

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #569462

Owner:	**Leslie Homes**	Owner Well #:	**No Data**
Address:	**PO Box 112 Bushland, TX 79012**	Grid #:	**10-32-7**
Well Location:	**3/4 West of Nazareth Nazareth, TX**	Latitude:	**34° 32' 08.3" N**
		Longitude:	**102° 07' 06.4" W**
Well County:	**Castro**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Start Date: **2/2/2021** Drilling End Date: **2/2/2021**

Borehole:

Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
10.625	**0**	**25**
9	**25**	**335**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
25	**260**	**Gravel**	**#5**
260	**335**	**Gravel**	**8/16**

Annular Seal Data:

Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
2	**25**	**Cement 7 Bags/Sacks**

Seal Method: **Positive Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **60+**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **Estimated**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Wilson Drilling Inc.**

2900 W American Blvd
Muleshoe, TX

Driller Name: **Travis Kent Childs**

License Number: **60578**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**3**	**Top Soil**
3	**20**	**Caliche**
20	**60**	**Sandy Clay**
60	**100**	**Sand**
100	**210**	**Sand, Sandstone**
210	**240**	**Sand, Sandy Clay, Sandstone Streaks**
240	**290**	**Sandstone, Sandy Clay**
290	**325**	**Sand, Gravel**
325	**335**	**Red Bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	**Blank**	**New Plastic (PVC)**	**200**	**0**	**275**
5	**Perforated or Slotted**	**New Plastic (PVC)**	**200 0.035**	**275**	**335**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #687306

Owner:	**Alec Braddock**	Owner Well #:	**No Data**
Address:	**2364 Hwy 86 Nazareth, TX 79063**	Grid #:	**10-31-9**
Well Location:	**2364 Hwy 86 Nazareth, TX 79063**	Latitude:	**34° 32' 16.9" N**
		Longitude:	**102° 07' 52.49" W**
Well County:	**Castro**	Elevation:	**No Data**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **12/9/2024** Drilling End Date: **12/11/2024**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**9**	**0**	**336**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**105**	**336**	**Gravel**	**#1 Fine**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**3**	**24**	**Cement 11 Bags/Sacks**
	24	**105**	**Bentonite 45 Bags/Sacks**

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **25**

Distance to Septic Field or other concentrated contamination (ft.): **NA**

Distance to Septic Tank (ft.): **NA**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **251 ft.** below land surface on **2024-12-13** Measurement Method: **Drawdown Gauge**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **DRILL PRO WATER WELL DRILLING**

PO BOX 1281
SEMINOLE, TX 79360

Driller Name: **Johnny Loewen** License Number: **59027**

Apprentice Name: **Martin Thiessen** Apprentice Number: **61352**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	**3**	**Topsoil**
3	**45**	**Sand/Clay**
45	**280**	**Sandstone**
280	**331**	**Sand/Gravel**
331	**336**	**Red Bed**

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	**Blank**	**New Plastic (PVC)**	**40**	**0**	**296**
5	**Perforated or Slotted**	**New Plastic (PVC)**	**40**	**296**	**336**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

Appendix J

Groundwater Quality

Groundwater Quality Report

The City of Nazareth Wastewater Treatment Plant and effluent disposal site are located in central Castro County, west of Nazareth, Texas. The site is located within the boundaries of the Ogallala Aquifer, a major aquifer in West Texas. The map and following information was obtained from Texas Water Development Board Groundwater Database.

The Ogallala Aquifer – is unconfined and the largest aquifer in the United States. The aquifer consists of sand, gravel, clay and silt and has a maximum thickness of 800 feet. Freshwater saturated thickness of the aquifer averages 95 feet.

The proposed plant is expected to have minimal to no impact on groundwater in the area. Year-round operation at maximum permitted flow would result in 2.7 acre-ft/year of applied effluent over 47 acres of non-public access land. Effluent will be applied at a rate to not penetrate past the root zone into the groundwater. The City conducts biannual groundwater monitoring to ensure the quality of the water has not been affected.

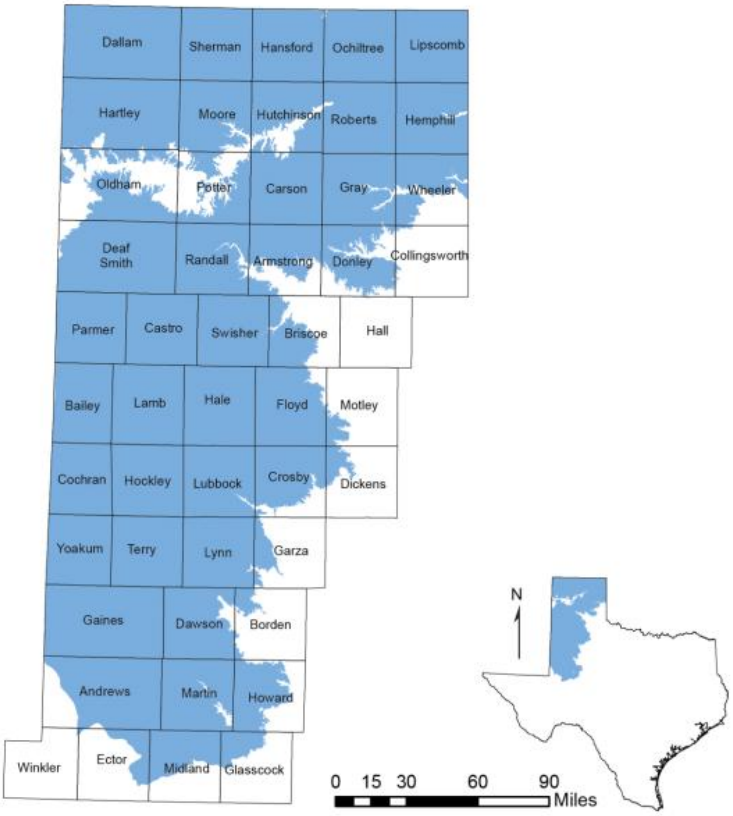


Figure 6-24. Extent of the Ogallala Aquifer in Texas.

Appendix K

Soil Map

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Castro County, Texas

February 10, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

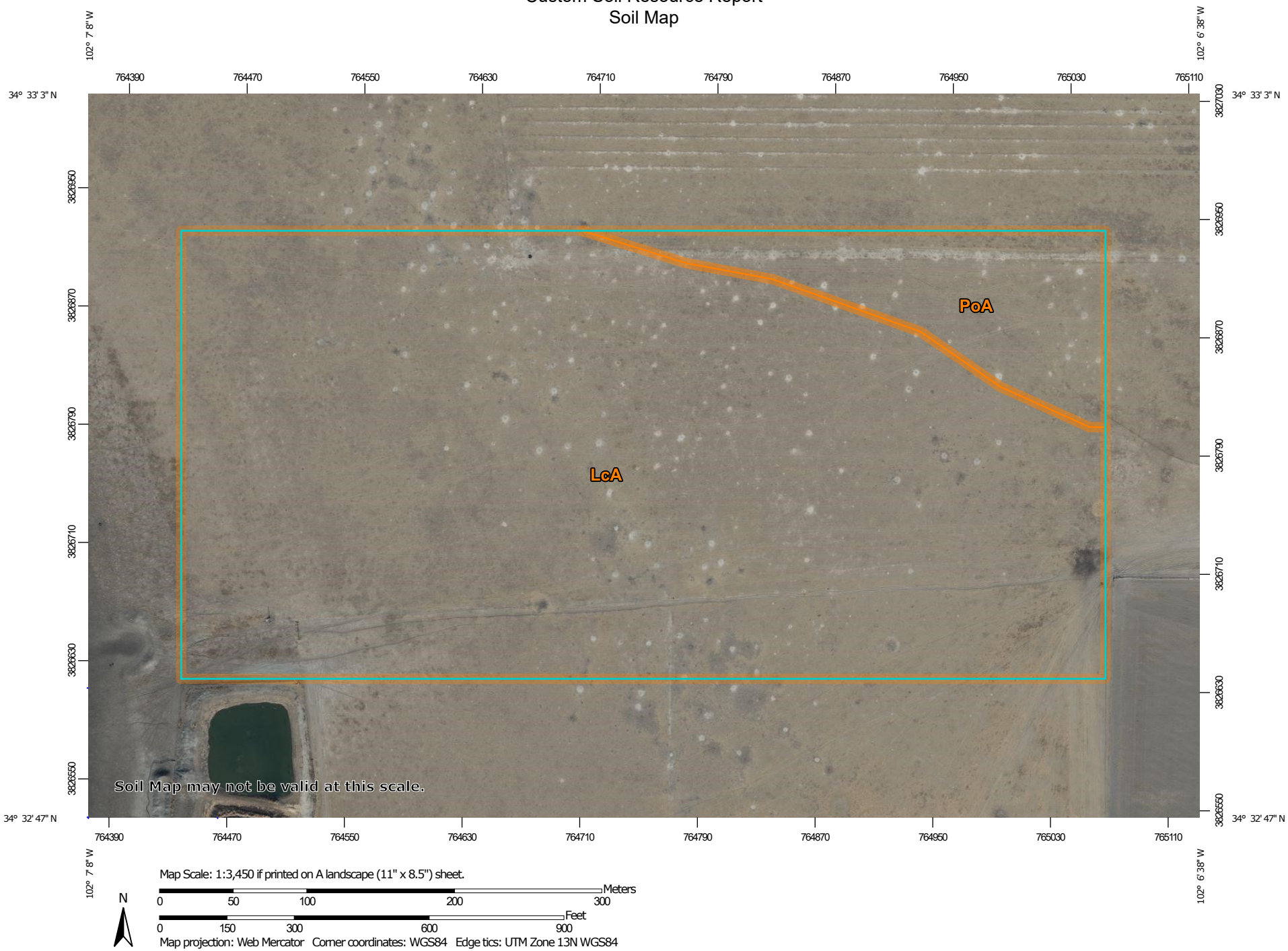
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castro County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 16, 2022—Jan 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LcA	Lazbuddie clay, 0 to 1 percent slopes, occasionally ponded	42.1	89.1%
PoA	Posey loam, 0 to 1 percent slopes	5.2	10.9%
Totals for Area of Interest		**47.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Castro County, Texas

LcA—Lazbuddie clay, 0 to 1 percent slopes, occasionally ponded

Map Unit Setting

National map unit symbol: f5rd
Elevation: 3,200 to 4,700 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 185 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lazbuddie and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lazbuddie

Setting

Landform: Playa steps
Landform position (three-dimensional): Tread
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Calcareous clayey lacustrine deposits

Typical profile

Ap - 0 to 4 inches: clay
Bss1 - 4 to 13 inches: clay
Bss2 - 13 to 53 inches: clay
Bkk - 53 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 60 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 5w
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: D
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Minor Components

Mclean

Percent of map unit: 5 percent
Landform: Playa floors
Landform position (three-dimensional): Dip
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R077CY027TX - Playa 16-21" PZ
Hydric soil rating: No

Lofton

Percent of map unit: 5 percent
Landform: Depressions, playa steps
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex
Across-slope shape: Concave, linear
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Lockney

Percent of map unit: 5 percent
Landform: Playa steps
Landform position (three-dimensional): Tread
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Convex
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

PoA—Posey loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 308qx
Elevation: 3,100 to 4,700 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 185 to 220 days
Farmland classification: Farmland of statewide importance, if irrigated

Map Unit Composition

Posey and similar soils: 82 percent
Minor components: 18 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Posey

Setting

Landform: Draws, scarps

Landform position (two-dimensional): Summit, shoulder
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous loamy eolian deposits from the blackwater draw formation of pleistocene age

Typical profile

Ap - 0 to 6 inches: loam
Btk1 - 6 to 17 inches: clay loam
Btk2 - 17 to 29 inches: clay loam
Btkk - 29 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 55 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: B
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Forage suitability group: Unnamed (G077CH000TX)
Other vegetative classification: Unnamed (G077CH000TX)
Hydric soil rating: No

Minor Components

Posey

Percent of map unit: 13 percent
Landform: Draws, scarps
Landform position (two-dimensional): Summit, shoulder
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Tulia

Percent of map unit: 3 percent
Landform: Draws, scarps
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Bovina

Percent of map unit: 2 percent
Landform: Playa slopes, plains
Down-slope shape: Concave, convex
Across-slope shape: Linear
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

References

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Rainee Trevino

From: Paul Krueger <PKrueger@Parkhill.com>
Sent: Wednesday, October 22, 2025 11:17 AM
To: Rainee Trevino; Preston Tracy
Cc: Kyra Heinisch
Subject: RE: NORI for Permit No. WQ0010979001,Ciy of Nazareth, City of Nazareth WWTP

No problem, and I do not believe it has been published yet. We are having issues with the newspaper as they changed ownership.

Paul Krueger, PE
Civil Engineer

Parkhill
806.473.3715 | Parkhill.com

From: Rainee Trevino <Rainee.Trevino@tceq.texas.gov>
Sent: Wednesday, October 22, 2025 11:02 AM
To: Paul Krueger <PKrueger@Parkhill.com>; Preston Tracy <Preston.Tracy@tceq.texas.gov>
Cc: Kyra Heinisch <kheinisch@parkhill.com>
Subject: RE: NORI for Permit No. WQ0010979001,Ciy of Nazareth, City of Nazareth WWTP

Good morning, Paul,

I apologize for the error. Has the NORI been published?

Rainee Trevino
Water Quality Division | ARP Team
Texas Commission on Environmental Quality
512-239-4324

From: Paul Krueger <PKrueger@Parkhill.com>
Sent: Wednesday, October 22, 2025 10:19 AM
To: Rainee Trevino <Rainee.Trevino@tceq.texas.gov>; Preston Tracy <Preston.Tracy@tceq.texas.gov>
Cc: Kyra Heinisch <kheinisch@parkhill.com>
Subject: RE: NORI for Permit No. WQ0010979001,Ciy of Nazareth, City of Nazareth WWTP

Good Morning,

I am reaching out to request a revision in the language of the NORI for the city of Nazareth WWTP. The first sentence states the flowrate is 5,000 gallons per day. The actual permitted flow rate is 50,000 gallons per day. Is it possible for this to be revised?

Rainee Trevino

From: Paul Krueger <PKrueger@Parkhill.com>
Sent: Tuesday, August 12, 2025 4:43 PM
To: Rainee Trevino
Cc: cityofnazareth@yahoo.com; Kyra Heinisch
Subject: RE: Application to Renew Permit No. WQ0010979001- Notice of Deficiency Letter
Attachments: TCEQ KEH.pdf

Categories: NOD Response Review

Good Afternoon,

Please find the attached response to your NOD from August 8, 2025.

Thank you,

Paul Krueger, PE
Civil Engineer

Parkhill
806.473.3715 | Parkhill.com

From: Rainee Trevino <Rainee.Trevino@tceq.texas.gov>
Sent: Friday, August 8, 2025 12:22 PM
To: Paul Krueger <PKrueger@Parkhill.com>
Cc: cityofnazareth@yahoo.com
Subject: Application to Renew Permit No. WQ0010979001- Notice of Deficiency Letter

Dear Mr. Krueger,

The attached Notice of Deficiency letter sent on August 8, 2025, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by August 22, 2025

Thank you,

Rainee Trevino
Water Quality Division | ARP Team
Texas Commission on Environmental Quality
512-239-4324

Parkhill

August 12, 2025

Ms. Rainee Trevino
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Application to Renew Permit No.: WQ0010979001
City of Nazareth (CN600671838)
City of Nazareth Wastewater Treatment Plant (RN10198159)
Renewal

Dear Ms. Rainee Trevino:

We have received the Notice of Deficiency letter on the above-mentioned application in your e-mail dated August 8, 2025, and provide the following response.

1. Comment: *Core Data Form, Section III, Item 25: The description of the physical location is not accurate. Please review and resubmit the Core Data Form with the updated description to the location of the facility. The description must include the distance in feet or miles from a road intersection.*

   Response: Please see Attachment 1 for the updated Core Data Form with the correct location description.

2. Comment: *In addition, the Plain Language Summary will also need to be resubmitted with the updated location description.*

   Response: Please see Attachment 2 for the updated Plain Language Summary with the correct location description.

3. Comment: *USGS Topographic Map: The map submission does not include the applicant's property boundary labeled. Please resubmit the map to include the applicant's property boundary labeled.*

   Response: Please see Attachment 3 for the updated USGS Map with the labeled property boundary.

4222 85th Street | Lubbock, Texas 79423 | 806.473.2200 Parkhill.com

4. Comment: *The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.*

   APPLICATION. City of Nazareth, P.O. Box 7, Nazareth, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0010979001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 5,000 gallons per day via evaporation and surface irrigation of 47 acres of non-public access perennial pastureland. The domestic wastewater facility and disposal area are located at "pending applicant response", near the city of Nazareth, in Castro County, Texas 79063. TCEQ received this application on July 31, 2025. The permit application will be available for viewing and copying at Nazareth City Hall, Main Entrance, 106 2nd street, Nazareth, in Castro County, Texas, prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlapapplications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-102.116944,34.548611&level=18

   Further information may also be obtained from City of Nazareth at the address stated above or by calling Ms. Lacey Farris, City Manager, at (806) 945-2285.

   Response: The updated location for the domestic wastewater treatment facility and disposal area is located approximately 4500 feet northwest of the intersection of State Highway 86 and Farm to Market Road 168 in Castro County, Texas, 79063. We believe the rest of the information above is correct and contains no errors or omissions.

Thank you for reviewing the submitted application. If you have any questions or would like to discuss further, please feel free to call me at 806.473.3715.

Sincerely,

PARKHILL

By 

Paul Kruger, PE
Civil Engineer

PSK/keh/*al*
Enclosures: Attachment 1: Core Data Form
Attachment 2: Plain Language Summary
Attachment 3: USGS Map

Attachment 1:

Core Data Form

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal *(Core Data Form should be submitted with the renewal form)*

☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 600671838		**RN 101918159**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

City of Nazareth

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☒ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☐ **Yes** ☒ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

P.O. Box 7

City	Nazareth	**State**	TX	**ZIP**	79063	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	cityofnazareth@yahoo.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(806) 945-2285		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

City of Nazareth

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County								

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Approximately 4500 feet northwest of the intersection of State Highway 86 and Farm to Market Road 168 in Castro County, Texas.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Nazareth			TX	79063	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	34.547556		**28. Longitude (W) In Decimal:**	-102.117222	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
34	32	51	-102	7	2

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952		221320	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Domestic Wastewater Treatment

34. Mailing Address:	**P.O. Box 7**							
	City	**Nazareth**	**State**	**TX**	**ZIP**	**79063**	**ZIP + 4**	
35. E-Mail Address:	**cityofnazareth@yahoo.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(806) 945-2285		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0010979001			

SECTION IV: Preparer Information

40. Name:	Paul Krueger, P.E.	**41. Title:**	Civil Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(806) 473-3715		( ) -	PKrueger@Parkhill.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	City of Nazareth	**Job Title:**	City Manager
Name *(In Print):*	Lacey Farris	**Phone:**	(806) 945- **2285**
Signature:	Lacey Farris	**Date:**	8/11/2025

Attachment 2:

Plain Language Summary

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER
The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

City of Nazareth (CN600671838) operates City of Nazareth Wastewater Treatment Plant (RN101918159), an aerated lagoon, followed by 2 stabilization ponds. The facility is located at approximately 4500 feet northwest of the intersection of State Highway 86 and Farm to Market Road 168, in Nazareth, Castro County, Texas 79063. This permit is a renewal to dispose of up to 0.05 million gallons per day of treated domestic wastewater via evaporation and surface irrigation of 47 acres of non-public access land. This permit will not authorize the discharge of pollutants into waters of the State.

Discharges from the facility are expected to contain BOD_5. Domestic wastewater is treated by an aerated lagoon and 2 stabilization ponds.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/AGUAS PLUVIALES**

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

1. Introduzca el nombre del solicitante aquí (2. Introduzca el número de cliente aquí (es decir, CN6########).) 3. Elija del menú desplegable 4. Introduzca el nombre de la instalación aquí 5. Introduzca el número de entidad regulada aquí (es decir, RN1########), 6. Elija del menú desplegable 7. Introduzca la descripción de la instalación aquí. La instalación 8. Elija del menú desplegable. ubicada en 9. Introduzca la ubicación aquí, en 10. Introduzca el nombre de la ciudad aquí, Condado de 11. Introduzca el nombre del condado aquí, Texas 12. Introduzca el código postal aquí. 13. Introduzca el resumen de la petición de solicitud aquí. *<<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>>* Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan 14. Liste todos los contaminantes esperados aquí. 15. Introduzca los tipos de aguas residuales descargadas aquí. 16. Elija del menú desplegable tratado por 17. Introduzca una descripción del tratamiento de aguas residuales utilizado en la instalación aquí.

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose “operates” in this section for existing facility applications or choose “proposes to operate” for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose “is” for an existing facility or “will be” for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division’s Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example 1: Industrial Wastewater TPDES Application (ENGLISH)

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

ABC Corporation (CN600000000) operates the Starr Power Station (RN10000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as "previously monitored effluents" (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN600000000, PWS 00000) supplies the facility's potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Example 2: Domestic Wastewater TPDES Renewal application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to discharge at an annual average flow of 1,200,000 gallons per day of treated domestic wastewater via Outfalls 001 and 002.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent and Domestic Worksheet 4.0 in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 3: Domestic Wastewater TPDES New Application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Texas (CN000000000) proposes to operate the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the extended aeration mode. The facility will be located at 123 Texas Street, in the City of More Texas, Texas County, Texas 71234.

This application is for a new application to discharge at a daily average flow of 200,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process plant and the treatment units will include a bar screen, a grit chamber, aeration basins, final clarifiers, sludge digesters, a belt filter press, chlorine contact chambers and a dechlorination chamber.

Example 4: Domestic Wastewater TLAP Renewal application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations

of the permit application.

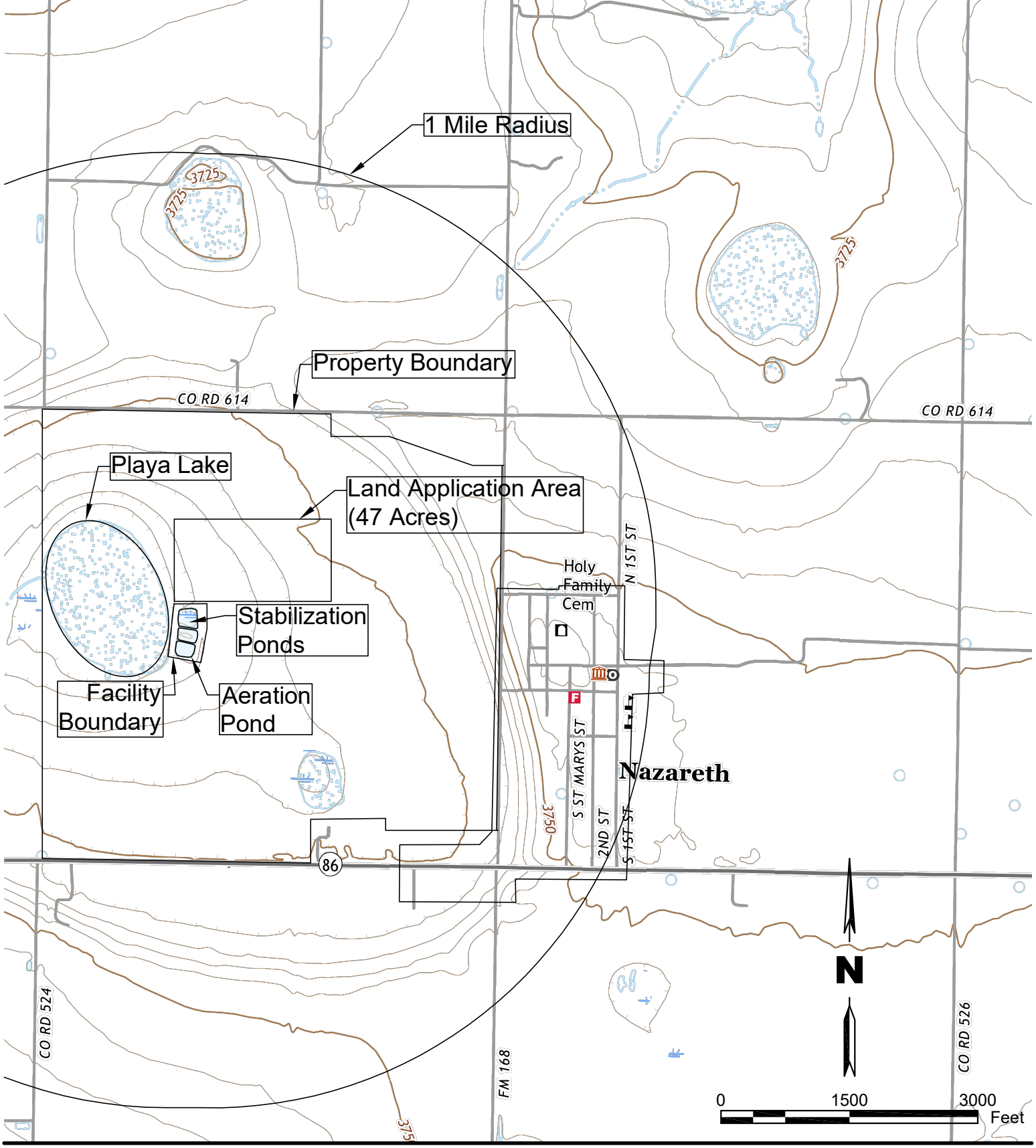
The City of Texas (CN000000000) operates the City of Texas wastewater treatment plant (RN000000000), an activated sludge process plant operated in the complete mix mode. The facility is located at 123 Texas Street, near the City of More Texas, Texas County, Texas 71234.

This application is for a renewal to dispose a daily average flow not to exceed 76,500 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 32 acres. This permit will not authorize a discharge of pollutants into water in the state.

Land application of domestic wastewater from the facility are expected to contain five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, tertiary filters, and a chlorine contact chamber. In addition, the facility includes a temporary storage that equals to at least three days of the daily average flow.

Attachment 3:

USGS Map



City of Nazareth Wastewater Treatment Plant Renewal

City of Nazareth
P.O. Box 7
Nazareth, TX 79063

Parkhill

Parkhill.com

USGS Map

Issue:	Renewal
Date:	07/02/2025
Project No:	44995.25
Sheet:	1 OF 2