



Technical Package Cover Page

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 - English
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2. First notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
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3. Second notice (NAPD-Notice of Preliminary Decision)
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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.

CHTX Club, LLC CN606347763 proposes to operate CHTX Club, LLC Wastewater Treatment Facility RN112130869, a domestic on site treatment plant. The facility is located at 15641 County Road P, in Childress, Childress County, Texas 79201. CHTX Club, LLC will receive domestic wastewater from Childress Golf Village Childress, Texas for treatment and disposal. This permit will not authorize a discharge of pollutants into water in the state. <<For TLAP applications include the following sentence, otherwise delete:>>

Discharges from the facility are expected to contain domestic wastewater pollutants. The proposed output (flow) will be 0.0099 MGD. Wastewater will be treated by an activated sludge package plant that operates in a single state nitrification mode. The package plant process unit will include preliminary screening, flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PROPOSED PERMIT NO. WQ0016717001

APPLICATION. CHTX Club, LLC and Childress Hall, LLC, P.O. Box 298, Childress, Texas 79201, have applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Land Application Permit (TLAP) No. WQ0016717001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 9,999 gallons per day via irrigation of 250 acres of public access land. The domestic wastewater treatment facility and disposal area will be located at 15641 County Road P, near the city of Childress, in Childress County, Texas 79201. TCEQ received this application on January 30, 2025. The permit application will be available for viewing and copying at Childress City Hall, 315 Commerce Street, Childress, in Childress 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=-100.3041,34.531751&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.**

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 CHTX Club, LLC and Childress Hall, LLC at the address stated above or by calling Mr. Eric Greytok, Project Manager, at 940-585-8902.

Issuance Date: February 26, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR WATER QUALITY LAND APPLICATION PERMIT FOR MUNICIPAL WASTEWATER

NEW

PERMIT NO. WQ0016717001

APPLICATION AND PRELIMINARY DECISION. CHTX Club, LLC and Childress Hall, LLC, P.O. Box 298, Childress, Texas 79201, have applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit, TCEQ Permit No. WQ0016717001, to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 9,999 gallons per day via surface irrigation of 250 acres of public access land. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on January 30, 2025.

The wastewater treatment facility and disposal site will be located at 15641 County Road P, in Childress County, Texas 79201. The wastewater treatment facility and disposal site will be located in the drainage basin of Lower Prairie Dog Town Fork Red River in Segment No. 0207 of the Red River Basin. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-100.3041,34.531751&level=18>

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Childress City Hall, 315 Commerce Street, Childress, in Childress County, Texas. 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>.

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting about this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ holds 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 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 a contested case hearing or reconsideration of the Executive Director's decision.** A contested case hearing is a legal proceeding similar to a civil trial in a 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.**

EXECUTIVE DIRECTOR ACTION. The Executive Director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the Executive Director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

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.

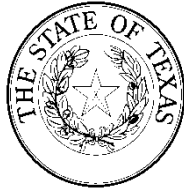
All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 or electronically at www.tceq.texas.gov/goto/comment within 30 days from the date of newspaper publication of this notice.

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. Public comments and requests must be submitted either electronically at www.tceq.texas.gov/goto/comment, 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. Any personal information you submit to the TCEQ will become part of the agency's record; this includes email addresses. 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 CHTX Club, LLC and Childress Hall, LLC at the address stated above or by calling Mr. Eric Greytok, CHTX Club, LLC, at 940-585-8902.

Issuance Date: June 23, 2025



PERMIT NO. WQ0016717001

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of Chapter 26
of the Texas Water Code

CHTX Club, LLC and Childress Hall, LLC

whose mailing address is

P.O. Box 298
Childress, Texas 79201

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 7997.

General Description and Location of Waste Disposal System:

Description: The Childress Hall Wastewater Treatment Facility consists of an activated sludge package plant that operates in the extended aeration mode with nitrification. Treatment units include a bar screens, a flow equalization basin, an aeration basin, a secondary clarifier, a chlorine contact basin, and an aerobic digester. The facility has not been constructed. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.0099 million gallons per day (MGD) via surface irrigation of 250 acres of public access land. The facility includes a storage pond with a total surface area of 3.4 acres and total capacity of 42.9 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 0.04 acre-feet per year per acre irrigated. The irrigated crops include bermuda grass.

Location: The wastewater treatment facility and disposal site are located at 15641 County Road P, in Childress County, Texas 79201. (See Attachment A.)

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Lower Prairie Dog Town Fork Red River in Segment No. 0207 of the Red River Basin. No discharge of pollutants into water in the state is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight, **five years from the date of issuance.**

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Conditions of the Permit: No discharge of pollutants into water in the state is authorized.

A. Effluent Limitations

Character: Treated Domestic Sewage Effluent

Volume: Daily Average Flow – 0.0099 MGD from the treatment system

Quality: The following effluent limitations are required:

<u>Parameter</u>	Effluent Concentrations			
	(Not to Exceed)			
	Daily <u>Average</u> mg/l	7-Day <u>Average</u> mg/l	Daily <u>Maximum</u> mg/	Single <u>Grab</u> mg/l
Biochemical Oxygen Demand (5-day)	20	30	45	65
Total Suspended Solids	20	30	45	65

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace total chlorine residual shall be maintained in the effluent at the point of irrigation application.

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Totalizing Meter
Biochemical Oxygen Demand (5-day)	One/week	Grab
Total Suspended Solids	One/week	Grab
pH	One/week	Grab
Total Chlorine Residual	Five/week	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

DEFINITIONS

All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- b. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.
- c. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

3. Sample Type

- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).
 - b. Grab sample - an individual sample collected in less than 15 minutes.
4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids which have not been classified as hazardous waste separated from wastewater by unit processes.
 6. The term "biosolids" is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.
 7. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING REQUIREMENTS

1. Monitoring Requirements

Monitoring results shall be collected at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling in accordance with 30 TAC §§ 319.4 - 319.12.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record or other document submitted or required to be maintained under this permit, including monitoring reports, records or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.

- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, or application. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in determining compliance with permit requirements.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:

- i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
- i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

PERMIT CONDITIONS

1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
 - b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
 - c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
 - d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.
 - e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
 - f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and Texas Water Code Section 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
 - g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Special Provisions section of this permit.
 - h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties).
3. Inspections and Entry
- a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.
 - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to

public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - ii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

- e. In accordance with the Texas Water Code § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

9. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

10. Notice of Bankruptcy.

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

- b. This notification must indicate:
- i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under Texas Water Code § 7.302(b)(6).
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information specified as not confidential in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

- a. Whenever flow measurements for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgement of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any

other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;

- iv. Identity of hauler or transporter;
- v. Location of disposal site; and
- vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

- 11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge or biosolids only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.
2. In all cases, if the person (permit holder) who prepares the sewage sludge or biosolids supplies the sewage sludge or biosolids to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge or biosolids to assure compliance with these regulations.
3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

B. Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 1) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 1) and the Enforcement Division (MC 224).

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentration</u> <u>(Milligrams per kilogram)*</u>
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

- a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(3)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

- b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

- c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.
- d. Three alternatives are available to demonstrate compliance with Class B biosolids criteria.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

- i. Food crops with harvested parts that touch the biosolids /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.
- vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
- ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.
4. Vector Attraction Reduction Requirements
- All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.
- Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

- i. Sewage sludge shall be injected below the surface of the land.
- ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10 -

- i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- once during the term of this permit
PCBs	- once during the term of this permit

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

<u>Amount of biosolids (*) metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) *The amount of bulk biosolids applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, sewage sludge or biosolids for disposal at a landfill) and whether the material is ultimately conveyed off-site in bulk or in bags.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B BIOSOLIDS PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

<u>Pollutant</u>	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge or biosolids enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A biosolids requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.
4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the Class A or AB biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.
 - c. The annual whole sludge application rate for the sewage sludge application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk biosolids will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.
2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period

of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

“I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.”

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
 - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee’s specific sludge or biosolids treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which sludge or biosolids are applied.
 - c. The number of acres in each site on which bulk sludge or biosolids are applied.
 - d. The date and time sludge or biosolids are applied to each site.
 - e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
 - f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 1) and the Enforcement Division (MC 224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.
3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
5. Toxicity Characteristic Leaching Procedure (TCLP) results.
6. PCB concentration in sludge or biosolids in mg/kg.
7. Identity of hauler(s) and TCEQ transporter number.
8. Date(s) of transport.
9. Texas Commission on Environmental Quality registration number, if applicable.
10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.
11. The concentration (mg/kg) in the sludge or biosolids of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.
14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.
17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.
18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk biosolids are applied.
 - c. The date and time bulk biosolids are applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.
 - e. The amount of biosolids (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

- A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge or biosolids meet the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge or biosolids and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 1) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 1) and the Enforcement Division (MC 224), by September 30th of each year.

- E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record Keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 1) and the Enforcement Division (MC224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. Toxicity Characteristic Leaching Procedure (TCLP) results.
3. Annual sludge or biosolids production in dry tons/year.
4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.
5. Amount of sludge or biosolids transported interstate in dry tons/year.
6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
7. Identity of hauler(s) and transporter registration number.
8. Owner of disposal site(s).
9. Location of disposal site(s).
10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

1. For sludge or biosolids transported by an approved pipeline, the permittee must maintain records of the following:
 - a. the amount of sludge or biosolids transported;
 - b. the date of transport;
 - c. the name and TCEQ permit number of the receiving facility or facilities;
 - d. the location of the receiving facility or facilities;
 - e. the name and TCEQ permit number of the facility that generated the waste; and
 - f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.
2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.
3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

C. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 1) and the Enforcement Division (MC 224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
2. the annual sludge or biosolids production;
3. the amount of sludge or biosolids transported;
4. the owner of each receiving facility;
5. the location of each receiving facility; and
6. the date(s) of disposal at each receiving facility.

SPECIAL PROVISIONS:

1. This permit is granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, if an area-wide system is developed; to require the delivery of the wastes authorized to be collected in, treated by, or discharged from the system, to an area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment, or disposal system.
2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category D facility must be operated by a chief operator or an operator holding a Class D* license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

*A Class D Wastewater Treatment Operator license is not renewable for operators of a facility listed in 30 TAC Section 30.342(c) and must be upgraded to a Class C Wastewater Treatment Operator license or higher prior to the expiration date of the Class D license.

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
4. The irrigated crops include Bermuda grass (warm season and cool season). Application rates to the irrigated land shall not exceed 0.04 acre-feet/acre/year. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. The records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
5. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least once during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.

6. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
7. Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. Crops or other ground cover shall be established and well maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
8. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
9. The permittee shall construct and maintain earthen berms to prevent runoff from leaving the irrigation site.
10. The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.
11. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
12. Irrigation to treated effluent on land with a slope of 10% or greater is prohibited. Irrigation of treated shall be limited to those tracts designated on Attachment A of this permit only after proper grading has been accomplished.
13. The permittee shall obtain representative soil samples from the root zones of the land application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no less than 10 to 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

Samples shall be analyzed annually according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum			Report in short tons/acre in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 1), the Water Quality Assessment Team (MC 150), and the Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

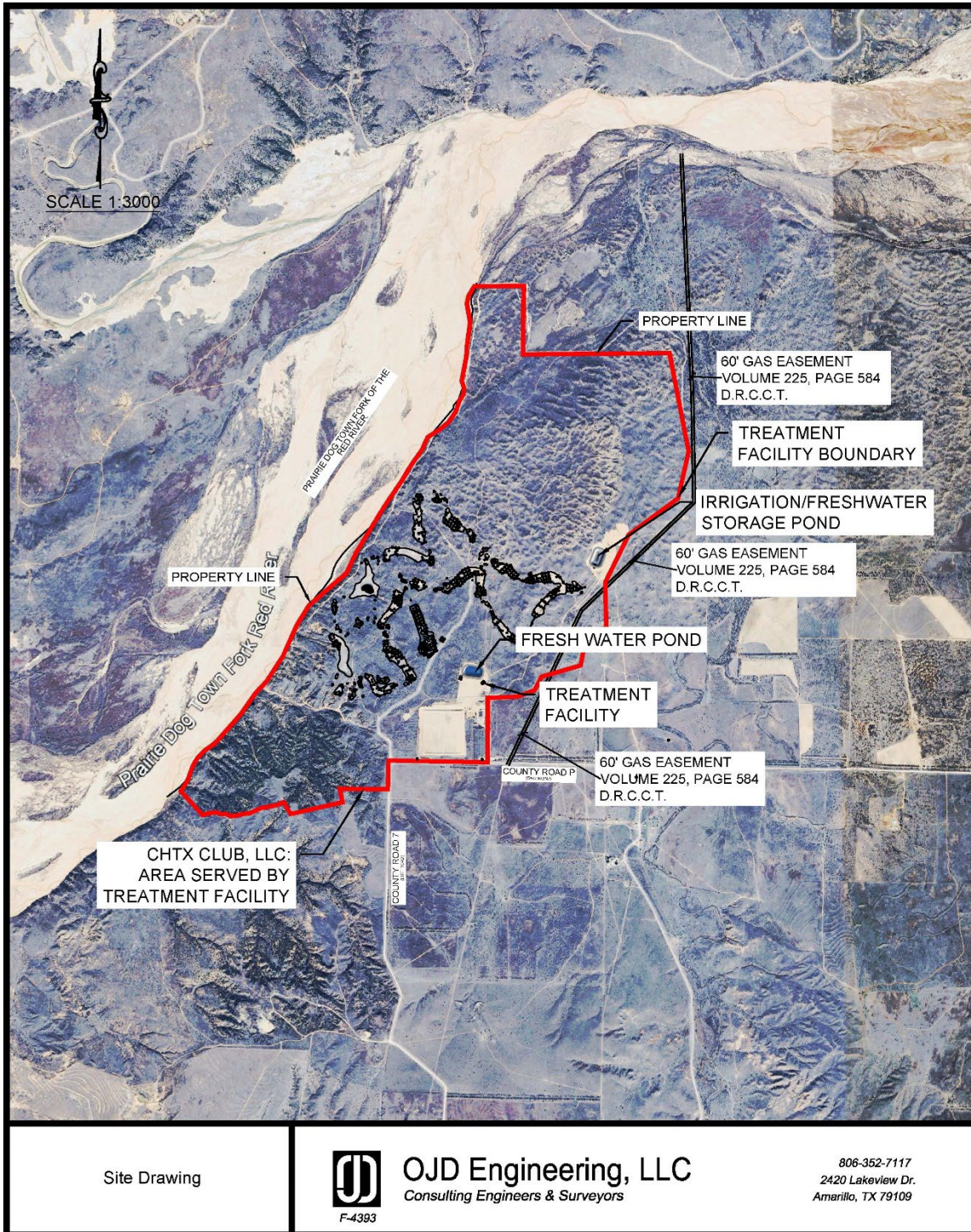
14. Irrigation with effluent shall be accomplished only when the area specified is not in use.

15. Holding or storage ponds shall conform to the design criteria for stabilization ponds with regard to construction and levee design and shall maintain a minimum freeboard of two feet according to 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems.
16. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
17. A wastewater treatment plant unit may not be located in wetlands per 30 TAC §309.13(b).
18. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.
19. The permittee shall comply with the buffer zone requirements of 30 TAC §309.13(c), specifically regarding water wells and waters in the state. The permittee must locate the wastewater irrigation fields a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water; 150 feet from private water wells; and 100 feet from surface waters in the state.
20. Any new or modified wastewater pond shall be adequately lined to control seepage in accordance with 30 TAC §217.203. New or modified wastewater ponds shall not be put into service until the permittee demonstrates that the pond liners meet the requirements of 30 TAC §217.203. The permittee shall demonstrate that the number, location, and test results of samples collected for geotechnical testing are in accordance with 30 TAC §217.203(d) and (e), and that the liner has a minimum thickness of 3 feet in accordance with 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer. The report providing this demonstration shall be submitted to the Water Quality Assessment Team (MC-150) and the TCEQ Regional Office (MC-Region 1) for review and approval prior to use of the wastewater ponds. If a synthetic liner is to be used, the liner thickness shall be a minimum of 40 mils and be constructed with an underground leak detection system with appropriate sampling points.
21. The permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 1), and the TCEQ Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203.
22. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the permittee shall inspect the sides and bottom (if visible) of the wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed.
23. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ

personnel for inspection and review.

24. Prior to construction of the wastewater treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary transmittal letter according to the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with the requirements of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2 of the permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.
25. Reporting requirements according to 30 TAC § 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 1) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first, on Notification of Completion Form 20007.
26. The permittee shall notify the TCEQ Regional Office (MC Region 1) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five (45) days prior to the completion of the new facilities on Notification of Completion Form 20007.
27. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).
28. Monitoring requirements contained in the permit are suspended from the effective date of the permit until plant startup. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 1) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup.

Attachment A
Site Plan Map
WQ0016717001, CHTX Club, LLC and Childress Hall, LLC



TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	CHTX Club, LLC and Childress Hall, LLC TCEQ Permit No. WQ0016717001
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	New Permit
Request:	New Permit
Authority:	Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 305, 309, 312, 319, and 30; and Commission policies.

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **five years from the date of issuance**, according to 30 TAC Section 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

CHTX Club, LLC and Childress Hall, LLC has applied to the Texas Commission on Environmental Quality (TCEQ) for new Permit No. WQ0016717001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.0099 million gallons per day (MGD) via surface irrigation of 250 acres of public access land/golf course. The facility includes a storage pond with a total surface area of 3.4 acres and total capacity of 42.9 acre-feet for storage of treated effluent prior to irrigation. The proposed wastewater treatment facility will serve the Childress Hall golf course, which includes a hotel, restaurants, and resort amenities.

The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).

PROJECT DESCRIPTION AND LOCATION

The Childress Hall Wastewater Treatment Facility consists of an activated sludge package plant that operates in the extended aeration mode with nitrification. Treatment units include a bar screens, a flow equalization basin, an aeration basin, a secondary clarifier, a chlorine contact basin, and an aerobic digester. The facility has not been constructed.

The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

CHTX Club, LLC and Childress Hall, LLC

Permit No. WQ0016717001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

The wastewater treatment facility and disposal site are located at 15641 County Road P in Childress County, Texas 79201.

The wastewater treatment facility and disposal site are located in the drainage basin of Lower Prairie Dog Town Fork Red River in Segment No. 0207 of the Red River Basin. No discharge of pollutants into water in the state is authorized by this permit.

SUMMARY OF EFFLUENT DATA

There is no effluent data since the facility has not been constructed.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.0099 MGD via surface irrigation of 250 acres of public access land/golf course. The facility includes a storage pond with a total surface area of 3.4 acres and total capacity of 42.9 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 0.04 acre-feet per year per acre irrigated. The irrigated crops include bermuda grass.

The effluent limitations in the draft permit, based on a daily average, are 20 mg/l biochemical oxygen demand (BOD₅) and 20 mg/l total suspended solids (TSS). The effluent limitation in the draft permit, based on a single grab, is 65 mg/l biochemical oxygen demand (BOD₅). The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

SUMMARY OF CHANGES FROM APPLICATION

None.

SUMMARY OF CHANGES FROM EXISTING PERMIT

This is a new permit, therefore there are no changes from a previous permit.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on January 30, 2025, and additional information received on February 25, 2025.

2. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment & Standards Section, Water Quality Division.

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Kimberly Kendall, P.E. at (512) 239-

CHTX Club, LLC and Childress Hall, LLC

Permit No. WQ0016717001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

4540.

Kimberly Kendall

Kimberly Kendall, P.E.
Municipal Permits Team
Wastewater Permitting Section (MC 148)

May 14, 2025

Date

Leah Whallon

From: Clint Green <Clint.Green@ojdengineering.com>
Sent: Tuesday, February 25, 2025 1:31 PM
To: Leah Whallon
Cc: Che Shadle
Subject: Application for Proposed Permit No. WQ0016717001; CHTX Club, LLC; Childress Hall
Attachments: Core Data Form - Childress Hall.pdf; TCEQ-10053 Signature Page.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Leah,

Attached are the documents that you requested for Childress Hall, LLC.

Please let me know if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer

OJD Engineering, LLC

2420 Lakeview Drive
Amarillo, Texas 79109
806.352.7117. ext. 105
806.352.7188 Fax
806.433.1138 Cell

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0016717001

Applicant: Childress Hall, LLC

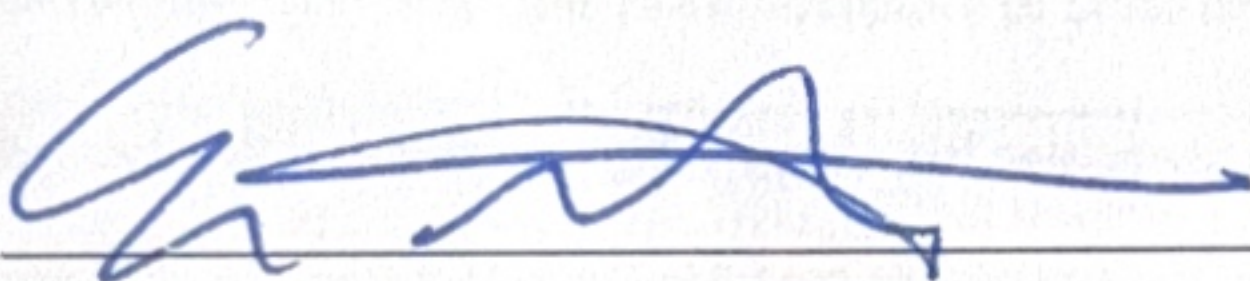
Certification:

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.

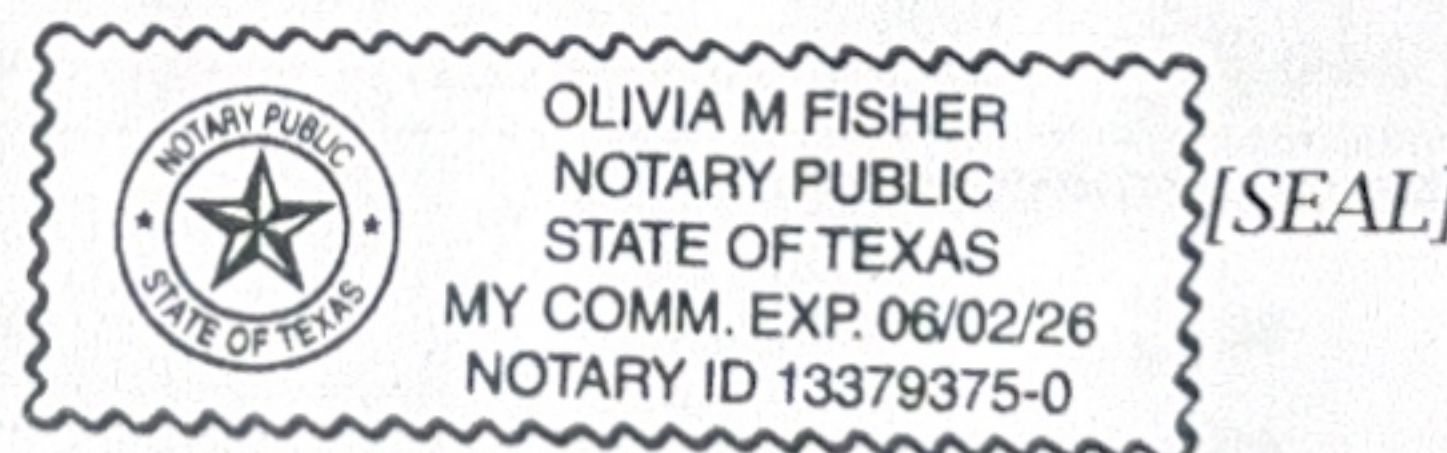
Signatory name (typed or printed): Eric Greytok

Signatory title: Project Manager

Signature:  Date: 2/25/25
(Use blue ink)

Subscribed and Sworn to before me by the said Eric Greytok
on this 25th day of February, 2025.
My commission expires on the 2nd day of June, 2026.

Olivia M. Fisher
Notary Public



Childress
County, Texas



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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> 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		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)						
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership								
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)								
<i>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).</i>								
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>						
Childress Hall, LLC								
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)					
0804917803	32088334217	92-3581316						
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited					
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input checked="" type="checkbox"/> Other: LLC						
12. Number of Employees		13. Independently Owned and Operated?						
<input type="checkbox"/> 0-20 <input checked="" type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following								
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other: _____								
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant								
15. Mailing Address:	124 1/2 Avenue B NW							
	City	Childress	State	TX	ZIP	79201	ZIP + 4	
16. Country Mailing Information (if outside USA)					17. E-Mail Address (if applicable)			
					egreytok@childresshall.com			
18. Telephone Number			19. Extension or Code		20. Fax Number (if applicable)			
(940) 585-8902					() -			

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.)

Childress Hall, LLC

23. Street Address of the Regulated Entity:

124 1/2 Avenue B NW

(No PO Boxes)

City

Childress

State

TX

ZIP

79201

ZIP + 4

24. County

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

25. Description to Physical Location:

26. Nearest City

State

Nearest ZIP Code

Childress

TX

79201

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:

34.531751°

28. Longitude (W) In Decimal:

-100.304113°

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

34

31

54.30

100

18

14.81

29. Primary SIC Code

30. Secondary SIC Code

31. Primary NAICS Code

32. Secondary NAICS Code

(4 digits)

(4 digits)

(5 or 6 digits)

(5 or 6 digits)

7997

713910

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

Golf/Recreation

34. Mailing

124 1/2 Avenue B NW

Address:

City

Childress

State

TX

ZIP

79201

ZIP + 4

35. E-Mail Address:

egreytok@childresshall.com

36. Telephone Number

37. Extension or Code

38. Fax Number (if applicable)

(940) 585-8902

() -

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

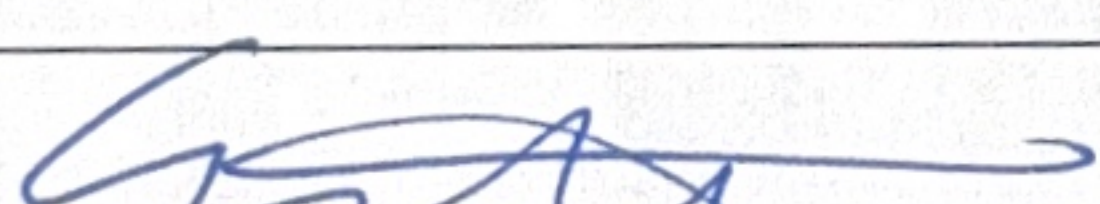
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Clint Green	41. Title:	Engineering Technician/Designer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(806) 352-7117		(806) 352-7188	clint.green@ojdengineering.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:	Childress Hall, LLC	Job Title:	Project Manager
Name (In Print):	Eric Greytok	Phone:	(940) 585- 8902
Signature:		Date:	2/25/25

Leah Whallon

From: Clint Green <Clint.Green@ojdengineering.com>
Sent: Tuesday, February 11, 2025 3:19 PM
To: Leah Whallon
Cc: Che Shadle
Subject: RE: Application for Proposed Permit No. WQ0016717001; CHTX Club, LLC; Childress Hall
Attachments: Administrative NOD Response Letter.pdf; 5 - Mailing Labels - Land Owners.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Leah,

Attached are the responses to the Notice of Deficiency letter dated February 7, 2025 requesting additional information. I have attached the landowner list formatted for mailing labels (Avery 5160) in a Microsoft Word document.

Please feel free to contact me if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer
OJD Engineering, LLC
2420 Lakeview Drive
Amarillo, Texas 79109
806.352.7117. ext. 105
806.352.7188 Fax
806.433.1138 Cell

From: Che Shadle <Che.Shadle@ojdengineering.com>
Sent: Friday, February 7, 2025 4:12 PM
To: Clint Green <Clint.Green@ojdengineering.com>
Subject: FW: Application for Proposed Permit No. WQ0016717001; CHTX Club, LLC; Childress Hall

From: Leah Whallon <Leah.Whallon@Tceq.Texas.Gov>
Sent: Friday, February 7, 2025 4:06 PM
To: Che Shadle <Che.Shadle@ojdengineering.com>
Cc: egreytok@childresshall.com
Subject: Application for Proposed Permit No. WQ0016717001; CHTX Club, LLC; Childress Hall

Good Afternoon,

Please see the attached Notice of Deficiency letter dated February 7, 2025 requesting additional information needed to declare the application administratively complete. Please send the complete response by February 21, 2025.

Please let me know if you have any questions.

Thank you,



Leah Whallon

Texas Commission on Environmental Quality

Water Quality Division

512-239-0084

leah.whallon@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey



February 11, 2025

Ms. Leah Whallon
TCEQ
Applications Review and Processing Team (MC148)
P.O. Box 13087
Austin, TX 78711

Re: Administrative Notice of Deficiency Email
Application for Proposed Permit No.: WQ0016717001
Applicant Name: CHTX Club, LLC (CN606347763)
Site Name: Childress Hall (RN112130869)
Type of Application: New

VIA EMAIL

Dear Ms. Whallon:

Attached are the responses to each of the administrative comments for the CHTX Club, LLC sent via email on February 7, 2025. I have provided a response to each comment along with the corresponding documents.

Sincerely,

Clint Green

Wolfforth | Amarillo

ph: 806 352.7117

2420 Lakeview Dr. Amarillo, TX. 79109

fax: 806 352.7188

www.OJDEngineering.com

Engineering Firm # 4393 - Surveying Firm # 10090900



Deficiency Descriptions/Resolutions

1. Administrative Report 1.0, Section 8.D

The public viewing location must be a building that is supported by taxpayer funds. Please provide a revised page to list a public viewing location in the county where the facility will be located.

Administrative Report 1.0, Section 8.D has been revised to include a public viewing location that is supported by taxpayer funds. Please see attached the revised Administrative Report 1.0, Section 8.D.

2. Administrative Report 1.0, Section 8.F

The plain language summary does not list the proposed output (flow) for the facility. Please provide a revised summary that lists the flow. Please also include the now assigned RN and CN numbers referenced in the subject above.

Administrative Report 1.0, Section 8.F has been revised to list the output (flow) for the facility, as well as the assigned RN and CN numbers referenced. Please see attached the revised Administrative Report 1.0, Section 8.F.

3. Administrative Report 1.0, Section 9.D-E

The affected landowner map indicates the owner of the land where the facility and disposal site will be located is owned by Childress Hall LLC. This is not consistent with the application which lists the owner of the land as the applicant, CHTX Club, LLC. If the applicant does not own the land, where the facility and/or disposal site will be located, they must provide an executed lease agreement or deed recorded easement. Alternatively, the owner can apply as a co-applicant. Please clarify and revise the application appropriately.

Administrative Report 1.0, Section 3 has been revised to list Childress Hall, LLC as the co-owner. The two entities (Childress Hall, LLC and CHTX Club, LLC) are both owned by CHTX Holdings, LLC. Please see attached the revised Administrative Report 1.0, Section 3.

4. Administrative Report 1.0, Section 9.F

No sludge disposal is proposed on the land owned or controlled by the applicant. Please provide a revised page to remove the owner information or list "n/a" for this item.



Administrative Report 1.0, Section 9.F has been revised to list n/a for the items in this section. Please see attached the revised Administrative Report 1.0, Section 9.F.

5. Administrative Report 1.1, Section 1

The affected landowner map does not label all properties adjacent to the applicant's property boundaries and disposal site boundaries. Please provide a revised landowner map that numbers each property adjacent to the applicant's property boundaries. Please include an updated cross-reference landowner list and the landowner list formatted for mailing labels (Avery 5160) in a Microsoft Word document.

A revised landowner map has been provided to label all adjacent properties to the applicant's property boundaries and disposal site boundaries which includes numbers to each property adjacent to the applicant's property boundaries. An updated cross-reference landowner list and mailing labels in a Microsoft Word document are provided. Please see attached.

6. 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. CHTX Club, LLC, P.O. Box 298, Childress, Texas 79201, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Land Application Permit (TLAP) No. WQ0016717001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 9,999 gallons per day via irrigation of 250 acres of public access land. The domestic wastewater treatment facility and disposal area will be located at 15641 County Road P, near the city of Childress, in Childress County, Texas 79201. TCEQ received this application on January 30, 2025. The permit application will be available for viewing and published in the newspaper. The application, including and 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=-100.3041,34.531751&level=18>

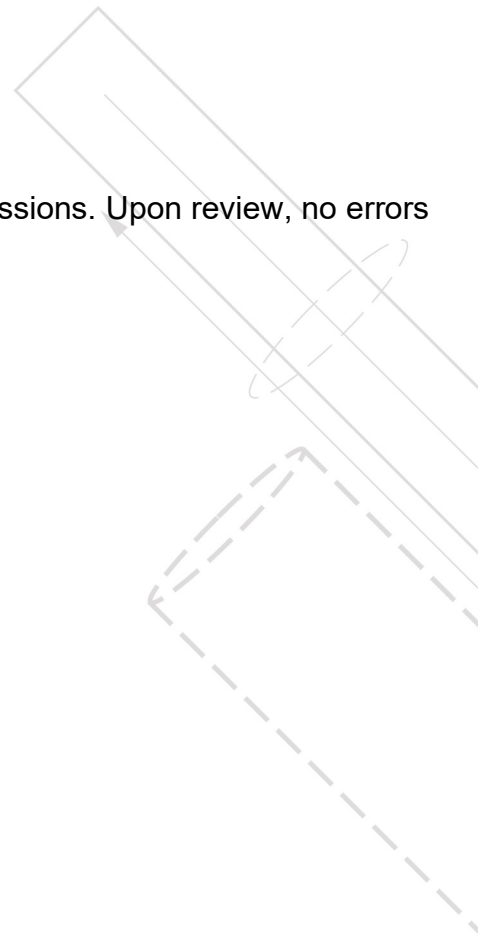
Further information may also be obtained from CHTX Club, LLC at the address stated above or by calling Mr. Eric Greytok, Project Manager, at 940-585-8902.

Wolfforth | Amarillo



OJD Engineering
The Benchmark

The information in the NORI has been read for errors and omissions. Upon review, no errors or omissions were noticed.



Wolfforth | Amarillo

ph: 806 352.7117

2420 Lakeview Dr. Amarillo, TX. 79109

fax: 806 352.7188

www.OJDEngineering.com

Engineering Firm # 4393 - Surveying Firm # 10090900

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.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: Childress City Hall

Location within the building: Front Desk

Physical Address of Building: 315 Commerce Street

City: Childress

County: Childress

Contact (Last Name, First Name): Kevin Hodges

Phone No.: 940.732.6011 Ext.: Click to enter text.

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.



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.

CHTX Club, LLC CN606347763 proposes to operate CHTX Club, LLC Wastewater Treatment Facility RN112130869, a domestic on site treatment plant. The facility is located at 15641 County Road P, in Childress, Childress County, Texas 79201. CHTX Club, LLC will receive domestic wastewater from Childress Golf Village Childress, Texas for treatment and disposal. This permit will not authorize a discharge of pollutants into water in the state. <<For TLAP applications include the following sentence, otherwise delete:>>

Discharges from the facility are expected to contain domestic wastewater pollutants. The proposed output (flow) will be 0.0099 MGD. Wastewater will be treated by an activated sludge package plant that operates in a single state nitrification mode. The package plant process unit will include preliminary screening, flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester.

☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

☒ New

☐ Major Amendment with Renewal

☐ Minor Amendment with Renewal

☐ Major Amendment without Renewal

☐ Minor Amendment without Renewal

☐ Renewal without changes

☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: [Click to enter text.](#)

f. For existing permits:

Permit Number: WQ00 [Click to enter text.](#)

EPA I.D. (TPDES only): TX [Click to enter text.](#)

Expiration Date: [Click to enter text.](#)

Section 3. Facility Owner (Applicant) and Co-Applciant 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?

CHTX Club, LLC

(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: [Click to enter text.](#)

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: Greytok, Eric

Title: Project Manager

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?

Childress Hall, LLC

(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: [Click to enter text.](#)

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: Gretytok, Eric

Title: Project Manager

Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: The two entities (Childress Hall, LLC and CHTX Club, LLC) are both owned by CHTX Holdings, LLC. .

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. A-1

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: Click to enter text. Last Name, First Name: Greytok, Eric
Title: Project Manager Credential: Click to enter text.
Organization Name: CHTX Club, LLC
Mailing Address: PO Box 298 City, State, Zip Code: Childress, TX 79201
Phone No.: 940.585.8902 E-mail Address: egreytok@childresshall.com
Check one or both: ☐ Administrative Contact ☒ Technical Contact
- B. Prefix: Click to enter text. Last Name, First Name: Shadle, Che
Title: P.E., President Credential: Click to enter text.
Organization Name: OJD Engineering, LLC
Mailing Address: 2420 Lakeview Drive City, State, Zip Code: Amarillo, TX 79109
Phone No.: 806.352.7117 E-mail Address: che.shadle@ojdengineering.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: Click to enter text. Last Name, First Name: Green, Clint
Title: Engineering Technician/Designer Credential: Click to enter text.
Organization Name: OJD Engineering, LLC
Mailing Address: 2420 Lakeview Drive City, State, Zip Code: Amarillo, TX 79109
Phone No.: 806.352.7117 E-mail Address: clint.green@ojdengineering.com
- B. Prefix: Click to enter text. Last Name, First Name: Click to enter text.
Title: Click to enter text. Credential: Click to enter text.
Organization Name: Click to enter text.
Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.
Phone No.: Click to enter text. E-mail Address: Click to enter text.

Attachment: A-2

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: A-3

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 Click to enter text.

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):

Childress Hall

- C. Owner of treatment facility: Childress Hall, LLC

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

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

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: Childress Hall, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.com

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: Click to enter text.

- E. Owner of effluent disposal site:

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: Childress Hall, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.com

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: Click to enter text.

- 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:

[Click to enter text.](#)

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:

[Click to enter text.](#)

City nearest the outfall(s): Childress

County in which the outfalls(s) is/are located: Childress

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.](#)

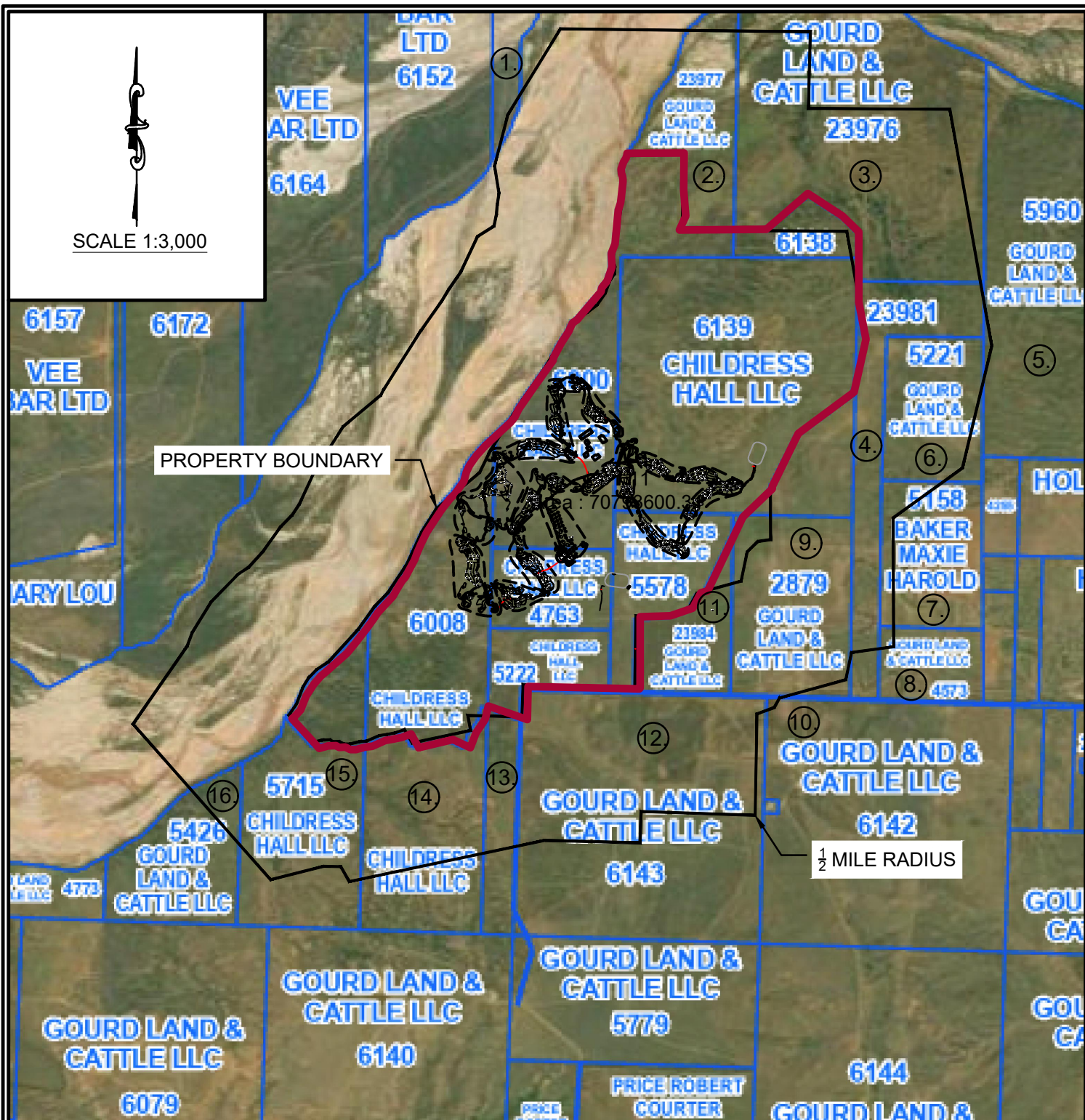
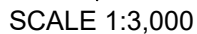
D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: [Click to enter text.](#)

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:



Adjacent Landowner Map



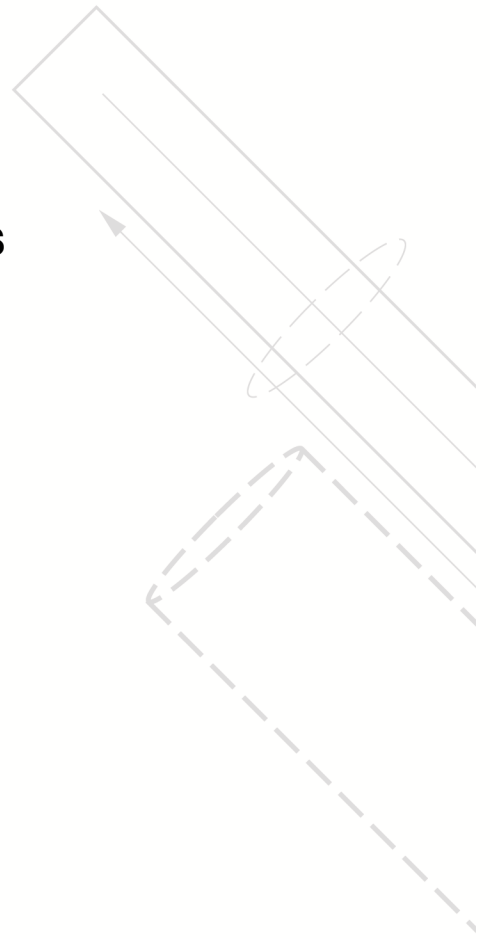
Amarillo | Wolfforth
www.OJDEngineering.com

WOLFFORTH
328 E. Hwy 62, Unit No. 1
Wolfforth, TX 79382
(806) 791-2300



ADJACENT LANDOWNERS

1. Vee Bar LTD
PO Box 1179
Kermit, TX 79745
2. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
3. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
4. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
5. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
6. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
7. Maxie and Harlod Baker
PO Box 144
Wildorado, TX 79098
8. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
9. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201





10. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201

11. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201

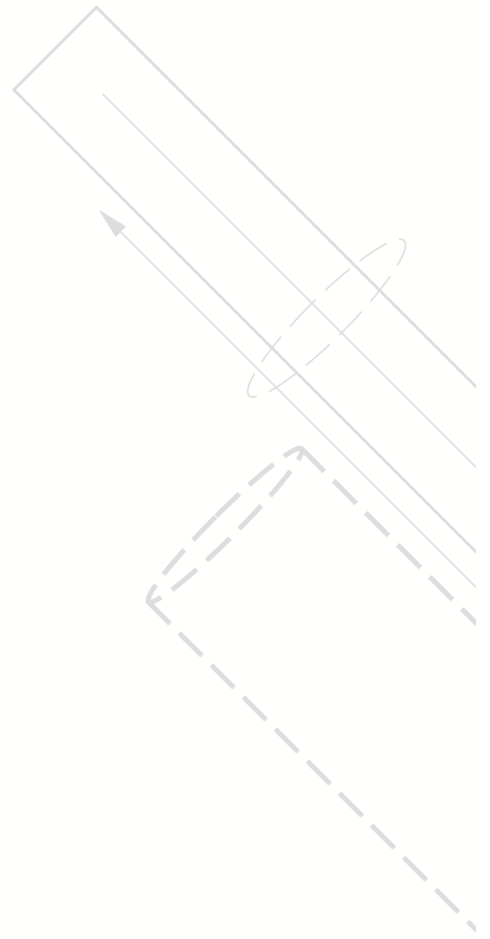
12. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201

13. Childress Hall LLC
PO Box 298
Childress, TX 79201

14. Childress Hall LLC
PO Box 298
Childress, TX 79201

15. Childress Hall LLC
PO Box 298
Childress, TX 79201

16. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201



VEE BAR LTD
PO BOX 1179
KERMIT, TX 79745

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

MAXIE AND HAROLD BAKER
PO BOX 144
WILDORADO, TX 79098

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201

CHILDRESS HALL LLC
PO BOX 298
CHILDRESS, TX 79201

CHILDRESS HALL LLC
PO BOX 298
CHILDRESS, TX 79201

CHILDRESS HALL LLC
PO BOX 298
CHILDRESS, TX 79201

GOURD LAND & CATTLE LLC
1547 CR 8
CHILDRESS, TX 79201



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: CHTX Club, LLC

PERMIT NUMBER (If new, leave blank): WQ00 [Click to enter text.](#)

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

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

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 <input checked="" type="checkbox"/>	\$315.00 <input type="checkbox"/>
≥0.05 but <0.10 MGD	\$550.00 <input type="checkbox"/>	\$515.00 <input type="checkbox"/>
≥0.10 but <0.25 MGD	\$850.00 <input type="checkbox"/>	\$815.00 <input type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input type="checkbox"/>	\$1,215.00 <input type="checkbox"/>
≥0.50 but <1.0 MGD	\$1,650.00 <input type="checkbox"/>	\$1,615.00 <input type="checkbox"/>
≥1.0 MGD	\$2,050.00 <input type="checkbox"/>	\$2,015.00 <input type="checkbox"/>

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 1025
Check/Money Order Amount: \$350.00
Name Printed on Check: CHTX Club, LLC

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

☐ Minor Amendment with Renewal

☐ Major Amendment without Renewal

☐ Minor Amendment without Renewal

☐ Renewal without changes

☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: [Click to enter text.](#)

f. For existing permits:

Permit Number: WQ00 [Click to enter text.](#)

EPA I.D. (TPDES only): TX [Click to enter text.](#)

Expiration Date: [Click to enter text.](#)

Section 3. Facility Owner (Applicant) and Co-Applcant 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?

CHTX Club, LLC

(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: [Click to enter text.](#)

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: Greytok, Eric

Title: Project Manager

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?

[Click to enter text.](#)

(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: [Click to enter text.](#)

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. A-1

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: [Click to enter text.](#) Last Name, First Name: Greytok, Eric
Title: Project Manager Credential: [Click to enter text.](#)
Organization Name: CHTX Club, LLC
Mailing Address: PO Box 298 City, State, Zip Code: Childress, TX 79201
Phone No.: 940.585.8902 E-mail Address: egreytok@childresshall.com
Check one or both: ☐ Administrative Contact ☒ Technical Contact
- B. Prefix: [Click to enter text.](#) Last Name, First Name: Shadle, Che
Title: P.E., President Credential: [Click to enter text.](#)
Organization Name: OJD Engineering, LLC
Mailing Address: 2420 Lakeview Drive City, State, Zip Code: Amarillo, TX 79109
Phone No.: 806.352.7117 E-mail Address: che.shadle@ojdengineering.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: [Click to enter text.](#) Last Name, First Name: Green, Clint
Title: Engineering Technician/Designer Credential: [Click to enter text.](#)
Organization Name: OJD Engineering, LLC
Mailing Address: 2420 Lakeview Drive City, State, Zip Code: Amarillo, TX 79109
Phone No.: 806.352.7117 E-mail Address: clint.green@ojdengineering.com
- B. Prefix: [Click to enter text.](#) Last Name, First Name: [Click to enter text.](#)
Title: [Click to enter text.](#) Credential: [Click to enter text.](#)
Organization Name: [Click to enter text.](#)
Mailing Address: [Click to enter text.](#) City, State, Zip Code: [Click to enter text.](#)
Phone No.: [Click to enter text.](#) E-mail Address: [Click to enter text.](#)

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: Click to enter text.

Last Name, First Name: Greytok, Eric

Title: Project Manager

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.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: Click to enter text.

Last Name, First Name: Greytok, Eric

Title: Project Manager

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Click to enter text.

Last Name, First Name: Greytok, Eric

Title: Project Manager

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.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: Click to enter text.

Last Name, First Name: Greytok, Eric

Title: Project Manager

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.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: CHTX Club, LLC

Location within the building: Front Desk

Physical Address of Building: 15641 County Road P

City: Childress

County: Childress

Contact (Last Name, First Name): Greytok, Eric

Phone No.: 940.585.8902 Ext.: Click to enter text.

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: A-2

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: A-3

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 Click to enter text.

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):

Childress Hall

- C. Owner of treatment facility: CHTX Club, LLC

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

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

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.com

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: Click to enter text.

- E. Owner of effluent disposal site:

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.com

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: Click to enter text.

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

Prefix: Click to enter text.

Last Name, First Name: Greytok, Eric

Title: Project Manager

Credential: Click to enter text.

Organization Name: CHTX Club, LLC

Mailing Address: PO Box 298

City, State, Zip Code: Childress, TX 79201

Phone No.: 940.585.8902

E-mail Address: egreytok@childresshall.com

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: [Click to enter text.](#)

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:

[Click to enter text.](#)

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:

[Click to enter text.](#)

City nearest the outfall(s): Childress

County in which the outfalls(s) is/are located: Childress

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:

15641 County Road P Childress, TX 79201. Disposal will occur through watering of golf course.

B. City nearest the disposal site: Childress

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

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

Waste water for the facility will be collected then go through a preliminary screening, then flow equalization/hydraulic retention, then to an aeration basin, then secondary clarifier, then to chlorine contact chamber/chemical disinfection, then to aerobic digester, and ultimately to outfall, irrigation pond, and golf course.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Grassy Creek-Prairie Dog Town Fork Red River

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.

Sludge will stay in the digester; clear liquor will be decanted off the digester and returned to the aeration basin. Sludge is wasted from the final clarifier to the aerobic digester. Some sludge from the clarifier is also returned to the aeration basin. Sludge will be disposed in City Landfill.

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: [Click to enter text.](#)

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: [Click to enter text.](#)

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: [Click to enter text.](#)

Applicant: CHTX Club, LLC

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): Eric Greytok

Signatory title: Project Manager

Signature: _____

(Use blue ink)

Date: _____

1/28/2025

Subscribed and Sworn to before me by the said Eric Greytok

on this 28th day of January, 2025.

My commission expires on the first day of March, 2025.

Shanon Wilks
Notary Public



[SEAL]

Childress
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: Childress County Appraisal District
- 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: A-7

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

Attachment: ADMINISTRATIVE REPORT 1.0 – 4.a.

A-1. CORE DATA FORM (TCEQ FORM 10400)



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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> 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		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership			
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
<i>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).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
CHTX Club, LLC			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0805130095	32090624514	92-3581316	
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input checked="" type="checkbox"/> Other: LLC	
12. Number of Employees		13. Independently Owned and Operated?	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input type="checkbox"/> Other:			
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant			
15. Mailing Address:	PO Box 298		
City	Childress	State	TX
ZIP	79201	ZIP + 4	
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		egreytok@childresshall.com	

18. Telephone Number (940) 585-8902	19. Extension or Code	20. Fax Number (if applicable) () -
---	------------------------------	--

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.) <input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information							
<i>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).</i>							
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.) CHTX Club, LLC							
23. Street Address of the Regulated Entity: (No PO Boxes)	15641 County Rd 7						
	City	Childress	State	TX	ZIP	79201	ZIP + 4
24. County							

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

25. Description to Physical Location:	Located approximately 1.6 miles West of Childress on US Highway 287 and approximately 5 .6 miles N of US Highway 287 on County Road 10 and travel 2.5 miles West on County Road P to the entrance of the Childress Golf Village, Childress County, Texas.						
26. Nearest City	State			Nearest ZIP Code			
Childress	TX			79201			
<i>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).</i>							
27. Latitude (N) In Decimal:		34.531751°		28. Longitude (W) In Decimal:			
Degrees		Minutes	Seconds	Degrees			
34		31	54.30	100			
				18			
				14.81			
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)		
7997			713910				
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.) Golf/Recreation							
34. Mailing Address:	PO Box 298						
	City	Childress	State	TX	ZIP	79201	ZIP + 4
35. E-Mail Address:	egreytok@childresshall.com						
36. Telephone Number	37. Extension or Code			38. Fax Number (if applicable)			
(940) 585-8902				() -			

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.

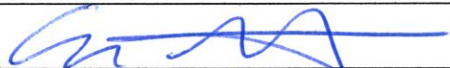
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Clint Green		41. Title:	Engineering Technician/Designer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(806) 352-7117		(806) 352-7188	clint.green@ojdengineering.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:	CHTX Club, LLC		Job Title:	Project Manager	
Name (In Print):	Eric Greytok			Phone:	(940) 585- 8902
Signature:				Date:	1/22/2025

Attachment: ADMINISTRATIVE REPORT 1.0 – 9.f.

A-2. PLAIN LANGUAGE TEMPLATE (TCEQ FORM 20972)



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.

CHTX Club, LLC (2. Enter Customer Number here (i.e., CN6#####)) proposes to operate CHTX Club, LLC Wastewater Treatment Facility (5. Enter Regulated Entity Number here (i.e., RN1#####)), a domestic on site treatment plant. The facility is located at 15641 County Road P, in Childress, Childress County, Texas 79201. CHTX Club, LLC will receive domestic wastewater from Childress Golf Village Childress, Texas for treatment and disposal. This permit will not authorize a discharge of pollutants into water in the state. <<For TLAP applications include the following sentence, otherwise delete:>>

Discharges from the facility are expected to contain domestic wastewater pollutants. Wastewater will be treated by an activated sludge package plant that operates in a single state nitrification mode. The package plant process unit will include preliminary screening, flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester.

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.

Attachment: ADMINISTRATIVE REPORT 1.0 – 9.g.

A-3. PUBLIC INVOLVEMENT PLAN (PIP) (TCEQ FORM 20960)



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

New Permit or Registration Application

New Activity - modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

Requires public notice,

Considered to have significant public interest, and

Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

**If all the above boxes are not checked, a Public Involvement Plan is not necessary.
Stop after Section 2 and submit the form.**

Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air	Initial	Federal	Amendment	Standard Permit	Title V
Waste	Municipal Solid Waste	Industrial and Hazardous Waste		Scrap Tire	
	Radioactive Material Licensing			Underground Injection Control	

Water Quality

- Texas Pollutant Discharge Elimination System (TPDES)
- Texas Land Application Permit (TLAP)
- State Only Concentrated Animal Feeding Operation (CAFO)
- Water Treatment Plant Residuals Disposal Permit
- Class B Biosolids Land Application Permit
- Domestic Septage Land Application Registration

Water Rights New Permit

- New Appropriation of Water
- New or existing reservoir

Amendment to an Existing Water Right

- Add a New Appropriation of Water
- Add a New or Existing Reservoir
- Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

(City)

(County)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.

City

County

Census Tract

- (a) Percent of people over 25 years of age who at least graduated from high school
- (b) Per capita income for population near the specified location
- (c) Percent of minority population and percent of population by race within the specified location
- (d) Percent of Linguistically Isolated Households by language within the specified location
- (e) Languages commonly spoken in area by percentage
- (f) Community and/or Stakeholder Groups
- (g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

Yes No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

Yes No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

Yes No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

Publish in alternative language newspaper

Posted on Commissioner's Integrated Database Website

Mailed by TCEQ's Office of the Chief Clerk

Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

Yes No

(e) If a public meeting is held, will a translator be provided if requested?

Yes No

(f) Hard copies of the application will be available at the following (check all that apply):

TCEQ Regional Office

TCEQ Central Office

Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

Yes No

What types of notice will be provided?

Publish in alternative language newspaper

Posted on Commissioner's Integrated Database Website

Mailed by TCEQ's Office of the Chief Clerk

Other (specify)

Attachment: ADMINISTRATIVE REPORT 1.0 – 11.b.

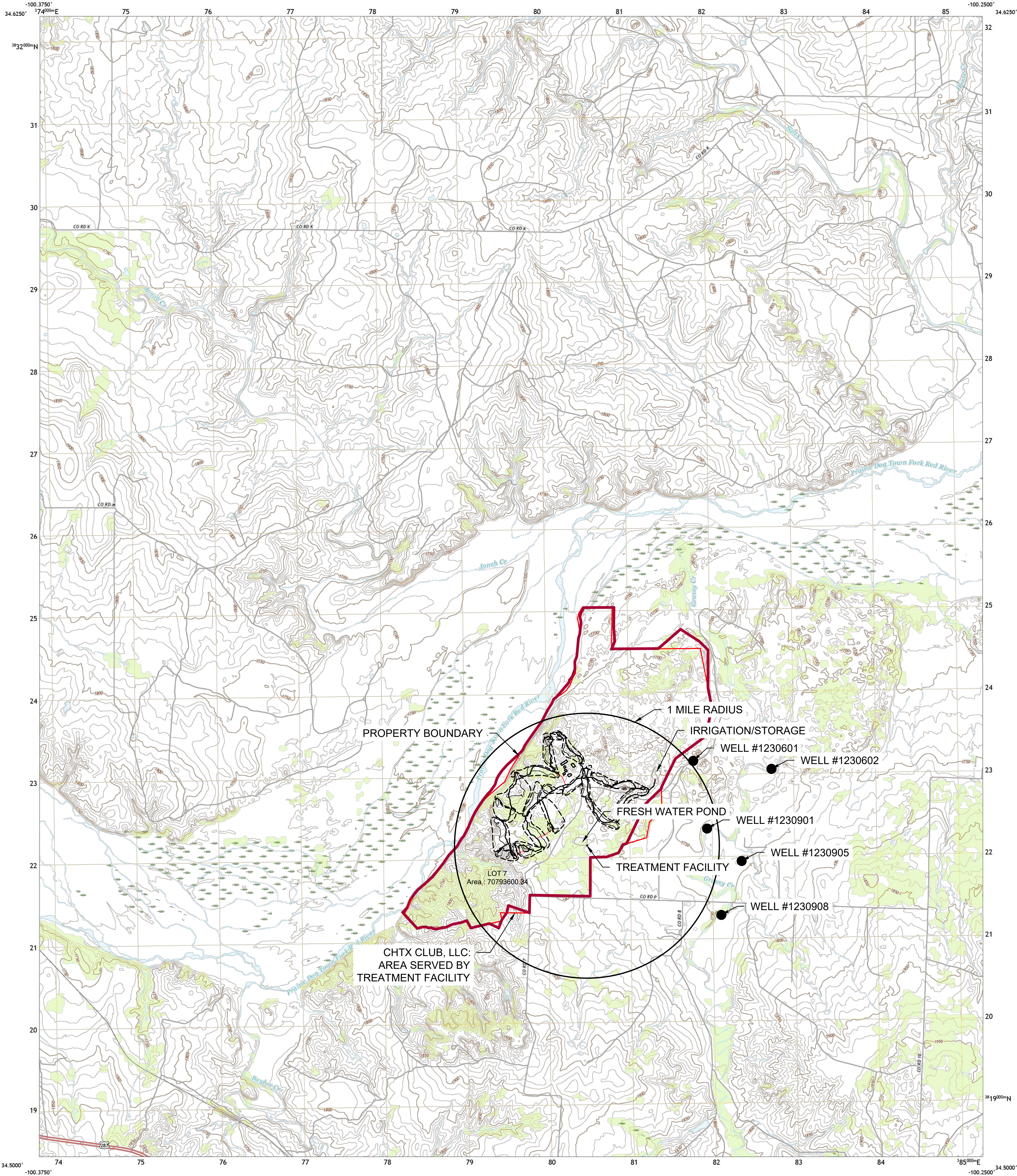
A-4. USGS TOPO MAP



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

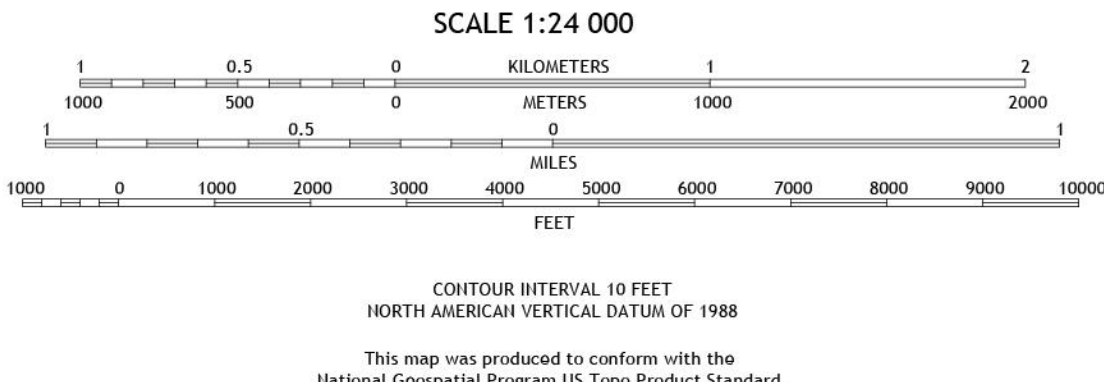
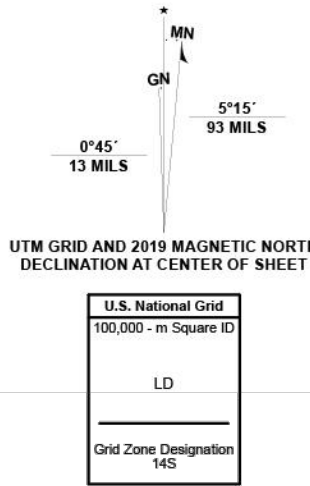


ESTELLINE SE QUADRANGLE
TEXAS - CHILDRESS COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 14S.
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery:.....IAP, September 2016 - November 2016
Roads:.....U.S. Census Bureau, 2015 - 2018
Names:.....GHS, Not Available
Hydrography:.....National Hydrography Dataset, 2002 - 2018
Contours:.....National Elevation Dataset, 2019
Boundaries:.....Multiple sources; see metadata file 2019 - 2021
Wetlands:.....FWS National Wetlands Inventory Not Available



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

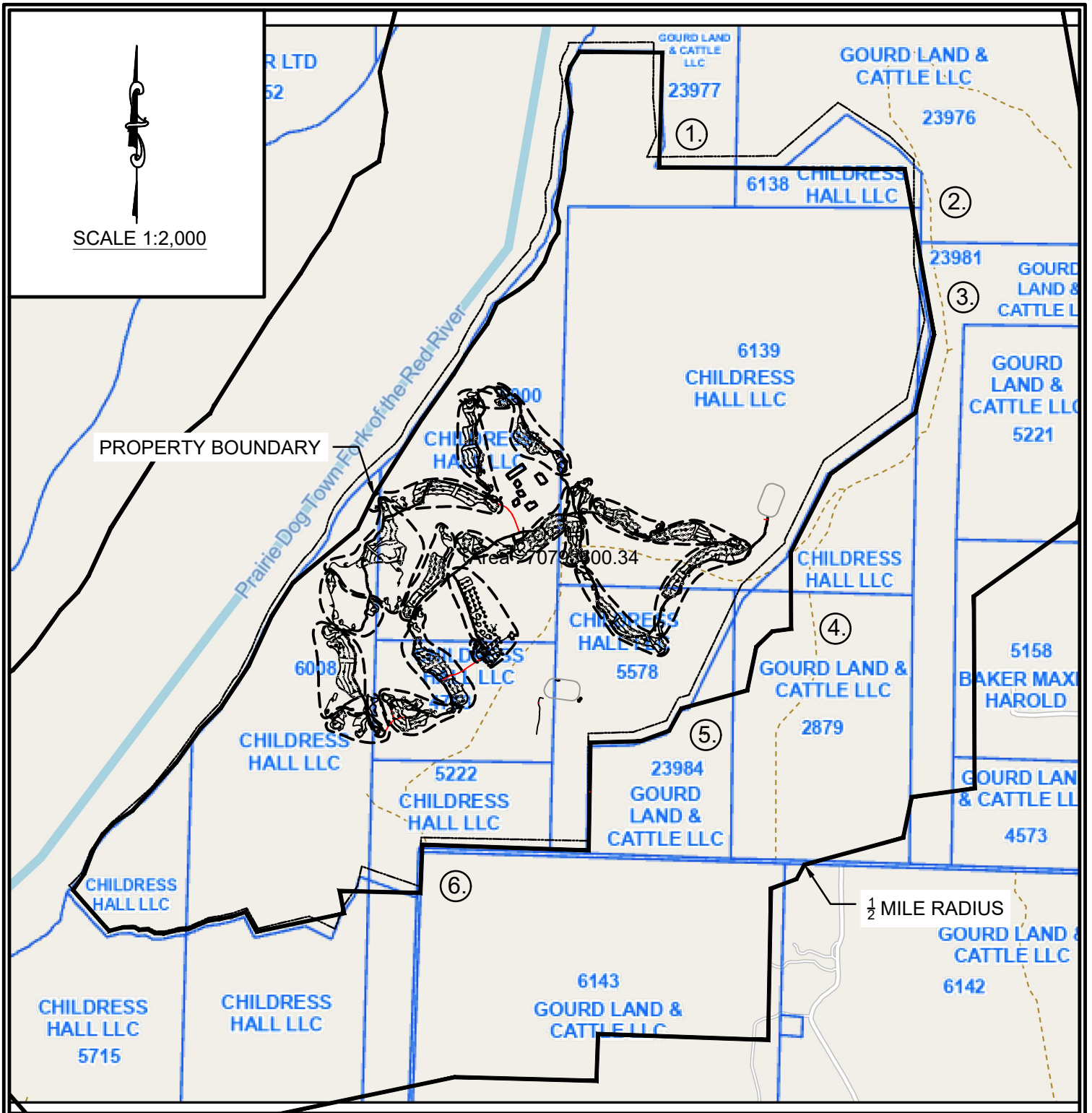
ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

ESTELLINE SE, TX
2022



Attachment: ADMINISTRATIVE REPORT 1.1 - ITEM 1

A-5. LANDOWNERS MAP



Adjacent Landowner Map



OJD Engineering, LLC
The Benchmark

F-4393

Amarillo | Wolfforth
www.OJDEngineering.com

AMARILLO
2420 Lakewood Drive
Amarillo, TX 79109
(806) 352-7117

WOLFFORTH
328 E. Hwy 62, Unit No. 1
Wolfforth, TX 79382
(806) 791-2300



ADJACENT LANDOWNERS

1. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
2. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
3. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
4. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
5. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201
6. Gourd Land and Cattle LLC
1547 CR 8
Childress, TX 79201

Wolfforth | Amarillo

ph: 806 352.7117

2420 Lakeview Dr. Amarillo, TX. 79109

www.OJDEngineering.com

Engineering Firm # 4393 - Surveying Firm # 10090900

fax: 806 352.7188

Attachment: ADMINISTRATIVE REPORT

A-6. BUFFER ZONE MAP



Buffer Zone Map



F-4393

OJD Engineering, LLC
Consulting Engineers & Surveyors

806-352-7117
2420 Lakeview Dr.
Amarillo, TX 79109

Attachment: ADMINISTRATIVE REPORT

**A-7. SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)
(TCEQ FORM 20971)**

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

____ Texas Historical Commission

____ U.S. Fish and Wildlife

____ Texas Parks and Wildlife Department

____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. 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.

The following applies to all applications:

1. Permittee: CHTX Club LLC

Permit No. WQ00 15641EPA ID No. TX 15641

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

15641 County Road P Childress, Texas 79201, Childress County

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Eric Greytok

Credential (P.E, P.G., Ph.D., etc.):

Title: Project Manager

Mailing Address: PO Box 298

City, State, Zip Code: Childress, Texas 79201

Phone No.: (940) 585-8902 Ext.: Fax No.:

E-mail Address: egreytok@childresshall.com

2. List the county in which the facility is located: Childress
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☒ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☐ Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

Irrigation pond excavation - 30' deep

2. Describe existing disturbances, vegetation, and land use:

Disturbance of land where irrigation pond and wastewater plant are to be constructed

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

4. Provide a brief history of the property, and name of the architect/builder, if known.



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): 0.0099

2-Hr Peak Flow (MGD): 0.0199

Estimated construction start date: 7/1/2025

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD): Click to enter text.

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.0099

2-Hr Peak Flow (MGD): 0.0199

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: Click to enter text.

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 proposed WWTP will be designed as an activated sludge package plant that operates in the extended aeration mode with nitrification, with the ability to treat a design flow of 9,999 gpd average daily flow and an unattenuated peak flow rate of 28 gpm; an influent flow equalization basin will provide sufficient retention time to reduce the peak factor to 2Q, or a peak flow of 14 gpm and which will serve as the peak flow rate for hydraulically-sensitive processes and piping. The package plant process units will include preliminary screening, (1) flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester. A chlorine feed system will be provided for chemical disinfection. The flow equalization basin will be sized to provide 8 hours of hydraulic retention time at the average daily flow rate. The aeration basins and digesters will be sized to provide the treatment volume required to treat the organic loadings at the design flow. The secondary clarifier and the chlorine contact basin will be designed to handle the peak flow rate. Effluent of 150 GPD freshwater applied to 250 acres of golf course.

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)
Aeration	1	12'-0" x 12'-0" x 10.50'
Digester	1	4'-0" x 12'-0" x 10.67'
Clarifier	1	9'-0" x 5'-0" x 6.75'
Disinfection	1	5'-0" x 3'-0" x 4'
EQ Basin	1	6'-0" x 12'-0" x 10.67'

C. Process Flow Diagram

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

Attachment: T-1

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

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

- Latitude: [Click to enter text.](#)
- Longitude: [Click to enter text.](#)

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

- Latitude: 34.531751°
- Longitude: -100.304113°

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: T-2

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

Childress Hall golf course is the area that will be served by the treatment facility. This includes hotel, restaurants, and resort amenities.

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
		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.**

Click to enter text.

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.

[Click to enter text.](#)

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: [Click to enter text.](#)

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.

All buffer zones are contained within owners' property.

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*.

Click to enter text.

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.

Click to enter text.

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.

[Click to enter text.](#)

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 BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

[Click to enter text.](#)

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 BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

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.

Click to enter text.

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). **Water 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					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*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: To be determined

Facility Operator's License Classification and Level: Click to enter text.

Facility Operator's License Number: Click to enter text.

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 \geq 1 MGD
- ☐ Serves \geq 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
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.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): [Click to enter text.](#)

D. Disposal site

Disposal site name: [Childress Landfill](#)

TCEQ permit or registration number: [2263](#)

County where disposal site is located: [Childress](#)

E. Transportation method

Method of transportation (truck, train, pipe, other): [Click to enter text.](#)

Name of the hauler: [Click to enter text.](#)

Hauler registration number: [Click to enter text.](#)

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	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Marketing and Distribution of Biosolids	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Sludge Surface Disposal or Sludge Monofill	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Temporary storage in sludge lagoons	<input type="checkbox"/> Yes	<input type="checkbox"/> 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: [Click to enter text.](#)
- USDA Natural Resources Conservation Service Soil Map:
Attachment: [Click to enter text.](#)
- Federal Emergency Management Map:
Attachment: [Click to enter text.](#)
- Site map:
Attachment: [Click to enter text.](#)

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: [Click to enter text.](#)

Total Kjeldahl Nitrogen, mg/kg: [Click to enter text.](#)

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: [Click to enter text.](#)

Phosphorus, mg/kg: [Click to enter text.](#)

Potassium, mg/kg: [Click to enter text.](#)

pH, standard units: [Click to enter text.](#)

Ammonia Nitrogen mg/kg: [Click to enter text.](#)

Arsenic: [Click to enter text.](#)

Cadmium: [Click to enter text.](#)

Chromium: [Click to enter text.](#)

Copper: [Click to enter text.](#)

Lead: [Click to enter text.](#)

Mercury: [Click to enter text.](#)

Molybdenum: [Click to enter text.](#)

Nickel: [Click to enter text.](#)

Selenium: [Click to enter text.](#)

Zinc: [Click to enter text.](#)

Total PCBs: [Click to enter text.](#)

Provide the following information:

Volume and frequency of sludge to the lagoon(s): [Click to enter text.](#)

Total dry tons stored in the lagoons(s) per 365-day period: [Click to enter text.](#)

Total dry tons stored in the lagoons(s) over the life of the unit: [Click to enter text.](#)

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

☐ Yes ☐ No

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

[Click to enter text.](#)

D. Site development plan

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

[Click to enter text.](#)

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
Attachment: [Click to enter text.](#)
- Copy of the closure plan
Attachment: [Click to enter text.](#)
- Copy of deed recordation for the site
Attachment: [Click to enter text.](#)
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
Attachment: [Click to enter text.](#)
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: [Click to enter text.](#)
- Procedures to prevent the occurrence of nuisance conditions
Attachment: [Click to enter text.](#)

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: [Click to enter text.](#)

Section 12. Authorizations/Compliance/Enforcement (Instructions)

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:

Click to enter text.

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:

Click to enter text.

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: [Click to enter text.](#)

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: Eric Greytok

Title: Project Manager

Signature: _____

Date: _____

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.

CHTX Club, LLC is a golf facility that is proposing a WWTP to be designed as an activated sludge package plant that operates in the extended aeration mode with nitrification, with the ability to treat a design flow of 9,999 gpd average daily flow and an unattenuated peak flow rate of 28 gpm; an influent flow equalization basin will provide sufficient retention time to reduce the peak factor to 2Q, or a peak flow of 14 gpm and which will serve as the peak flow rate for hydraulically-sensitive processes and piping. The package plant process units will include preliminary screening, (1) flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester. A chlorine feed system will be provided for chemical disinfection. The flow equalization basin will be sized to provide 8 hours of hydraulic retention time at the average daily flow rate. The aeration basins and digesters will be sized to provide the treatment volume required to treat the organic loadings at the design flow. The secondary clarifier and the chlorine contact basin will be designed to handle the peak flow rate.

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.](#)

¹ <https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater>

2. *Utility CCN areas*

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

☐ Yes ☒ No

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 BOD₅ Concentration in mg/l: [Click to enter text.](#)

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): [Click to enter text.](#)

Provide the source of the average organic strength or BOD₅ 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: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

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: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

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 20 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: T-3

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.

Area unmapped by FEMA, but is over 60 feet above river bed.

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: N/A

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: T-4

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: T-5

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 to 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

☐ Urban runoff

☐ Upstream discharges

☐ Agricultural runoff

☐ Septic tanks

☐ Other(s), specify: [Click to enter text.](#)

B. Waterbody uses

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

- | | |
|--|--|
| <input type="checkbox"/> Livestock watering | <input type="checkbox"/> Contact recreation |
| <input type="checkbox"/> Irrigation withdrawal | <input type="checkbox"/> Non-contact recreation |
| <input type="checkbox"/> Fishing | <input type="checkbox"/> Navigation |
| <input type="checkbox"/> Domestic water supply | <input type="checkbox"/> Industrial water supply |
| <input type="checkbox"/> Park activities | <input type="checkbox"/> 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:

- | | |
|---|--|
| <input type="checkbox"/> Surface application | <input type="checkbox"/> Subsurface application |
| <input checked="" type="checkbox"/> Irrigation | <input type="checkbox"/> Subsurface soils absorption |
| <input type="checkbox"/> Drip irrigation system | <input type="checkbox"/> Subsurface area drip dispersal system |
| <input type="checkbox"/> Evaporation | <input type="checkbox"/> Evapotranspiration beds |
| <input type="checkbox"/> Other (describe in detail): Click to enter text. | |

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

For existing authorizations, provide Registration Number: [Click to enter text.](#)

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
Bermuda Grass – Golf Course	250	9,999	Y

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
1	3.4	42.9	300 x 500 x 30	Synthetic

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

Attachment: T-6

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.

Click to enter text.

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

Area unmapped by FEMA, but is over 60 feet above river bed.

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

The site is watered w/ golf course irrigation equipment. Control equipment is used to control irrigation, so runoff does not occur.

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:** T-7

- 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:** A-4

- 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
1230601	Stock	Unknown	Open	
1230901	Unused	No	Open	

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

Attachment: T-8

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: T-9

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: T-10

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: T-7

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
Hardeman fine sandy loam - EFB		N/A	N/A	39
Hillgrave very gravelly sandy loam - Gr		N/A	N/A	39
Grandfield fine sandy loam - MfC		N/A	N/A	39
Yomont silt loam - No		N/A	N/A	39
Riverwash - RW		N/A	N/A	39
Devol loamy sand - SfB		N/A	N/A	39
Devol and Nobsoot soils - Sn3		N/A	N/A	39
Likes fine sand - Tv		N/A	N/A	39

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

[illegible]

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: 250

Design application frequency:

hours/day 5 And days/week 7

Land grade (slope):

average percent (%): 1%

maximum percent (%): 10%

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

Design total nitrogen loading rate, in lbs N/acre/year: To be determined. Info provided as part of special conditions in the permit after plant is operational.

Soil conductivity (mmhos/cm): 0.13

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: T-11

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 BOD₅ loading rate, in lbs BOD₅/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

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
Endosulfan II (beta)				0.02

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
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
Parathion (ethyl)				0.1
Pentachlorobenzene				20

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
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
Fluorene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
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 Equivalenc y 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:

Number of IUs: [Click to enter text.](#)

Average Daily Flows, in MGD: [Click to enter text.](#)

Significant IUs – non-categorical:

Number of IUs: [Click to enter text.](#)

Average Daily Flows, in MGD: [Click to enter text.](#)

Other IUs:

Number of IUs: [Click to enter text.](#)

Average Daily Flows, in MGD: [Click to enter text.](#)

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.

[Click to enter text.](#)

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.

Click to enter text.

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.

Click to enter text.

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.

Click to enter text.

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

A. General information

Company Name: [Click to enter text.](#)

SIC Code: [Click to enter text.](#)

Contact name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Telephone number: [Click to enter text.](#)

Email address: [Click to enter text.](#)

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).

[Click to enter text.](#)

C. Product and service information

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

[Click to enter text.](#)

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: [Click to enter text.](#)

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: [Click to enter text.](#)

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ 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: [Click to enter text.](#)

[Click or tap here to enter text.](#) [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

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.

[Click to enter text.](#)

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.): [Click to enter text.](#)

Program ID: [Click to enter text.](#)

Contact Name: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

2. Agent/Consultant Contact Information

Contact Name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

3. Owner/Operator Contact Information

☐ Owner ☐ Operator

Owner/Operator Name: [Click to enter text.](#)

Contact Name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

4. Facility Contact Information

Facility Name: [Click to enter text.](#)

Address: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Location description (if no address is available): [Click to enter text.](#)

Facility Contact Person: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

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

Latitude: [Click to enter text.](#)

Longitude: [Click to enter text.](#)

Method of determination (GPS, TOPO, etc.): [Click to enter text.](#)

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: [Click to enter text.](#)

7. Purpose

Detailed Description regarding purpose of Injection System:

[Click to enter text.](#)

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

8. Water Well Driller/Installer

Water Well Driller/Installer Name: [Click to enter text.](#)

City, State, and Zip Code: [Click to enter text.](#)

Phone Number: [Click to enter text.](#)

License Number: [Click to enter text.](#)

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: [Click to enter text.](#)

System(s) Construction: [Click to enter text.](#)

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: [Click to enter text.](#)
2. Receiving Formation Name of Injection Zone: [Click to enter text.](#)
3. Well/Trench Total Depth: [Click to enter text.](#)
4. Surface Elevation: [Click to enter text.](#)
5. Depth to Ground Water: [Click to enter text.](#)
6. Injection Zone Depth: [Click to enter text.](#)
7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No
Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:
Name: [Click to enter text.](#)
Thickness: [Click to enter text.](#)
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: [Click to enter text.](#)
13. Maximum injection Rate/Volume/Pressure: [Click to enter text.](#)
14. Water wells within 1/4 mile radius (attach map as Attachment I): [Click to enter text.](#)
15. Injection wells within 1/4 mile radius (attach map as Attachment J): [Click to enter text.](#)
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): [Click to enter text.](#)
17. Sampling frequency: [Click to enter text.](#)
18. Known hazardous components in injection fluid: [Click to enter text.](#)

Section 5. Site History

1. Type of Facility: [Click to enter text.](#)
2. Contamination Dates: [Click to enter text.](#)
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): [Click to enter text.](#)
4. Previous Remediation (attach results of any previous remediation as attachment M): [Click to enter text.](#)

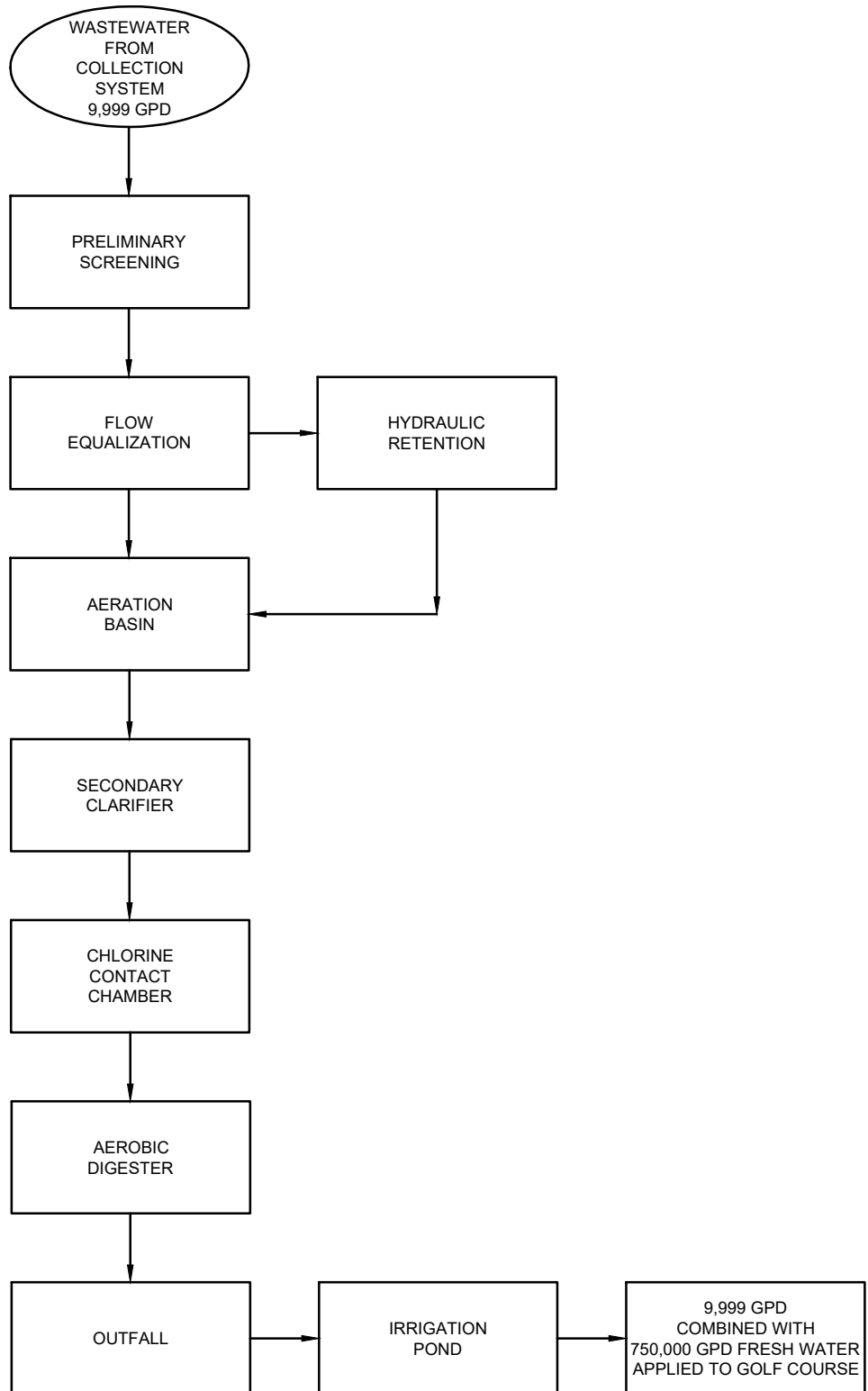
NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

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 WTP 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)

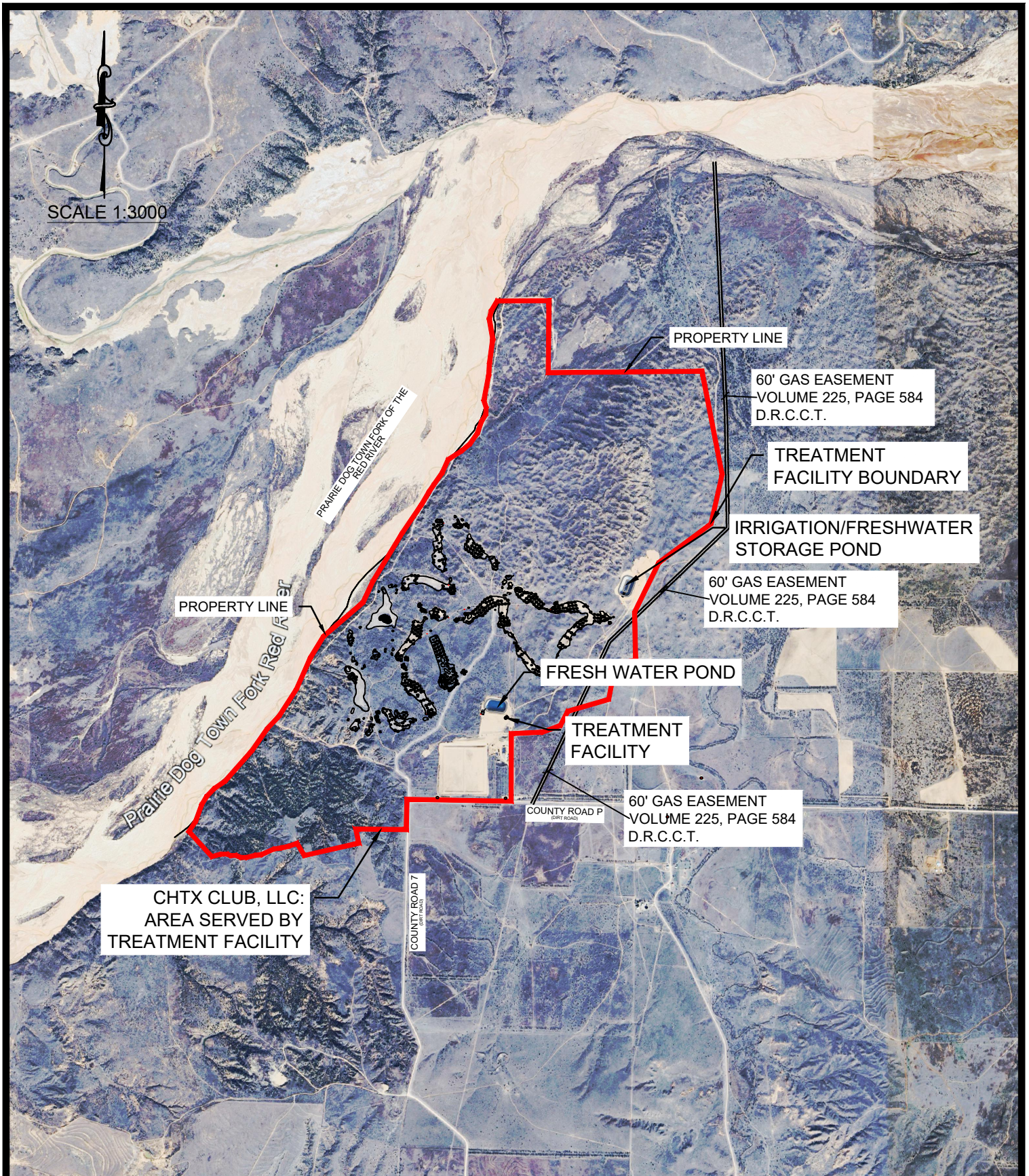
Attachment: TECHNICAL REPORT

T-1. FLOW DIAGRAM



Attachment: TECHNICAL REPORT

T-2. SITE DRAWINGS



Site Drawing



F-4393

OJD Engineering, LLC
Consulting Engineers & Surveyors

806-352-7117
2420 Lakeview Dr.
Amarillo, TX 79109



SCALE 1:100

FRESH WATER POND
(NO WASTEWATER)

9,999 GPD
PLANT

PUMP STATION

TO IRRIGATION
/ STORAGE POND

Site Drawing
(Plant & Fresh Water Pond)



OJD Engineering, LLC
Consulting Engineers & Surveyors

806-352-7117
2420 Lakeview Dr.
Amarillo, TX 79109



SCALE 1:100

IRRIGATION/STORAGE POND/
FRESHWATER POND
(14 MILLION GALLON)

IRRIGATION PUMP STATION
TO GOLF COURSE

PLANT EFFLUENT & FORCE MAIN IRRIGATION STORAGE POND

Site Drawing
(Irrigation Pump Station)



OJD Engineering, LLC
Consulting Engineers & Surveyors

806-352-7117
2420 Lakeview Dr.
Amarillo, TX 79109

Attachment: TECHNICAL REPORT

T-3. DESIGN CALCULATIONS

Project: Childress WWTP
 Job Number: W0000
 Design By: HES
 Checked By: HES
 Date: 1/17/2025

Description: Process Calculations
 Phase I - 9,999 GPD

Final Process Calculations (Based on TCEQ Criteria Only)

Design Parameters

Influent Flow Characteristics - The hydraulic design of the facility must ensure that the plant will operate under the most extreme conditions anticipated. The plant process and hydraulic design for this facility are as follows:

Average Design Flow	0.009999 MGD	Influent BOD ₅	300 mg / l
Peaking Factor	2 Post EQ Basin		25 lbs / day
Peak Flow	0.019998 MGD	Influent TSS	300 mg/L
	14 gpm		25 lbs / day
Effluent Characteristics		Influent NH ₃ -N	40 mg/L
BOD ₅ S _e	10 mg/L		3 lbs / day
TSS TSS _e	15 mg/L	Influent TKN	mg/L
NH ₃ -N N _e	3 mg/L	Influent Phosphorus	mg/L
P P _e	mg/L	Reactor temp	20 °C
		Elevation	1900 feet ASL

Process Design - In order to achieve the required removal efficiencies, activated sludge process operated in the extended aeration mode with nitrification has been chosen.

Aeration Basin

	Value	Regulation
TCEQ Maximum Organic Loading	15 lbs BOD / day / 1000 cu. ft.	217.154(b)(Table F.1)
Aeration Volume Required	1,668 cu. ft.	
MLSS	3,000 mg/L	
MLVSS/MLSS	0.7	
MLVSS	2,100 mg/L	
Tanks		
Length	12 ft	
Width	12 ft	
Height	12.17	
SWD	10.50 ft	
# Tanks	1	
Volume	1,512 cu. ft.	
Capacity	0.009 MGD Average Flow	
Total Volume	1,512 cu. ft.	
Volume greater than required	NO	
Organic Loading	16.55 lbs BOD5/day	
Hydraulic Retention time, τ	27.15 hours	
Solids Retention Time, SRT	15.1 days	
f.m	0.13 lbs BOD5/lbs MLVSS/day	

Project: Childress WWTP
 Job Number: W0000
 Design By: HES
 Checked By: HES
 Date: 1/17/2025

Description: Process Calculations
 Phase I - 9,999 GPD

Final Process Calculations (Based on TCEQ Criteria Only)

Clarifier

	Value	Regulation
TCEQ Maximum surface Loading (Qpk)	800 gal / day / sq. ft. at peak flow	217.154(c)(Table F.2)
TCEQ Minimum detention time (Qpk)	2.2 hours at peak flow	217.154(c)(Table F.2)
TCEQ Maximum weir Loading (Qpk)	20,000 gal/day/ft	217.152(c)(4)
TCEQ Minimum Side Water Depth (SWD)	8 feet	217.152(g)(2)(A)/(B)
TCEQ Maximum Stilling Well Velocity	0.15 feet/second	217.152(a)(4)
Surface area required	25 sq. ft.	5.6 ft. min. dia. for one clarifier
Volume required	245 cu. ft.	4.0 ft. min. dia. for two clarifiers
Stilling Well Diameter	3.5 feet	Typ. value is 15-20% of total tank diameter (M&E, p.401)
Stilling Well Velocity at Qpk	0.01 fps	Meets Requirement? YES
Clarifier(s) Provided:	1 tank(s)	
Length	9 ft	Width 5 ft
Height	12.17 ft	
Static WL	11.75 ft	
SWD	6.75 ft	
Surface area	45 sq. ft.	
Volume	304 cu. ft.	
Capacity	0.012 MGD Average Flow 0.02479 MGD Peak Flow	
Total Surface Area	45 sq. ft.	Greater than required? YES
Total Volume	304 cu. ft.	Greater than required? YES
	<u>Qaverage</u>	<u>Qpeak</u>
Clarifier Surface Loading	222 GPD/SF	444 GPD/SF
Clarifier Detention Time	5.45 Hours	2.73 Hours
Solids Loading Rate	0.65 lb/ft ² /hr	0.88 lb/ft ² /hr
Clarifier Wall to Weir Length	12 inches	
Weir Length	22.0 Ft.	
Weir Loading	909 GPD/LF	

RAS/WAS Pumping & Piping

	Value	Regulation
TCEQ Minimum Sludge Pipe Diameter	4 inches	217.152(e)(2), 217.158(e)(3)
Clarifier Surface Area	45 sq. ft.	
TCEQ Min. RAS Pumping Capacity @200 g	6 gpm	Qr/Q = 0.90 217.152(j)(3)
TCEQ Max. RAS Pumping Capacity @ 400	13 gpm	Qr/Q = 1.80 217.152(j)(3)
RAS/WAS Pipe Diameter	4 inches	
Velocity in RAS/WAS Pipe @ Min. Rate	0.16 fps	
Velocity in RAS/WAS Pipe @ Max. Rate	0.32 fps	
WAS Volume to Digester	253 gpd	
Number of WAS Cycles Per Day	1	
Duration of WAS Cycles	1 minutes	
WAS Flow Rate During Each Cycle	253 gpm	
WAS Pipe Diameter	6 inches	
Velocity in WAS Pipe	2.862 fps	

Scum Flow Rate

Launder Width	6 inches
Scum Flow Rate	7.14 gpm
Scum Collector Pipe Diameter	4 inches
Scum Airlift Diameter	4 inches
Water Height in Launder	0.72 inches

Project: Childress WWTP
 Job Number: W0000
 Design By: HES
 Checked By: HES
 Date: 1/17/2025

Description: Process Calculations
 Phase I - 9,999 GPD

Final Process Calculations (Based on TCEQ Criteria Only)

Digesters

	Value	Regulation
TCEQ Minimum Sludge Retention Time	40 days	217.249(t)(4)(B)(Table J.2)
TCEQ Min. Volatile Solids Loading Rate	100 lb / day / 1,000 cu. ft.	217.249(t)(7)(D)
TCEQ Max. Volatile Solids Loading Rate	200 lb / day / 1,000 cu. ft.	217.249(t)(7)(D)
Influent BOD ₅	25 lb/ day	
Effluent BOD ₅	1 lb/ day	
BOD ₅ to Digester	24 lb/ day	

Volume Required from Metcalf and Eddy, "Wastewater Engineering," 4th Edition

Hydraulic Detention Time of the Aeration Basins

$$\theta \text{ (Gal)} = \left(\frac{\text{Volume of Aeration Basins in Gallons}}{\text{Average Influent Flow in Gallons / Day}} \right) * 24 \text{ hrs/day}$$

BOD₅ Utilized

$$\text{BOD}_5 \text{ utilized} \left(\frac{\text{lbs BOD}_5}{\text{day}} \right) = Q * (S_i - S_e)$$

NH₃-N Utilized

$$\text{NH}_3 \text{ utilized} \left(\frac{\text{lbs NH}_3}{\text{day}} \right) = Q * (N_i - N_e)$$

Hydraulic Detention Time of Aeration Basin	27.15 Hours
BOD ₅ utilized	24 lb BOD ₅ / day
NH ₃ utilized	3 lb NH ₃ -N / day

S	BOD ₅ Concentration
N	NH ₃ -N Concentration
i	Influent (subscript)
e	Effluent (subscript)
Q	Average Design Flow
Q _{design}	Peak Flow
Q _W	Waste Sludge Flow to Digester
X _W	Waste Sludge Concentration
Y	Yield Coefficient
Y _n	Yield Coefficient (nitrification)
k _d	Endogenous Decay Coefficient
k _{dn}	Endogenous Decay Coeff. (nitrification)
P _n	Volatilization Fraction of X
	MLVSS/MLSS Ratio
S _{sl}	Specific Gravity of Sludge
X	Sludge Concentration in Digester
P _s	Percent Solids in Digester
TSS _%	% of TSS that is inert
ρ _w	Specific Weight of Water

Typical Values			
Variable	Range		Source
X _W	0.8	2.5	M&E, 4th ed., pg. 1457
Y	0.4	0.8	M&E, 4th ed., pg. 585
Y _n	0.04	0.29	WEF MoP 8, Vol I, p. 53
k _d	0.06	0.15	M&E, 4th ed., pg. 585
k _{dn}	0.3	3.0	WEF MoP 8, Vol I, p. 53
P _n	0.59	0.88	M&E, 4th ed., pg. 1454
S _{sl}	1.005	1.005	M&E, 4th ed., pg. 1456
X	15,000	40,000	M&E, 4th ed., pg. 1457
P _s	1.5	4	M&E, 4th ed., pg. 1457

Project: Childress WWTP
 Job Number: W0000
 Design By: HES
 Checked By: HES
 Date: 1/17/2025

Description: Process Calculations
 Phase I - 9,999 GPD

Final Process Calculations (Based on TCEQ Criteria Only)

Carbonaceous Yield Coefficient Observed

$$Y_{c,obs} = \left(\frac{Y}{1 + k_d * \theta} \right) \quad \text{M\&E, 4th ed. Pg. 595}$$

Nitrogenous Yield Coefficient M&E, 4th ed. Pg. 595

$$Y_{n,obs} = \left(\frac{Y_n}{1 + k_{dn} * \theta} \right)$$

Carbonaceous Sludge Production (MLVSS)

M&E Pg. 681

Nitrogenous Sludge Production (MLVSS)

M&E, 4th ed. Pg. 681

$$P_{x,c} \left(\frac{\text{lb}}{\text{day}} \right) = Y_{c,obs} * Q * (S_i - S_e) = Y_{c,obs} * \text{BOD}_5 \text{ utilized} \quad P_{x,n} \left(\frac{\text{lb}}{\text{day}} \right) = Y_{n,obs} * Q * (N_i - N_e) = Y_{n,obs} * \text{NH}_3 \text{ utilized}$$

Inert Sludge Production

M&E, 4th ed. Pg. 681

$$P_{x,i} \left(\frac{\text{lb}}{\text{day}} \right) = Q_{\text{design}} * \text{TSS}_{\%} * (\text{TSS}_i - \text{TSS}_e) * 8.34$$

Total Sludge Production

M&E, 4th ed. Pg. 682

$$P_x \left(\frac{\text{lb}}{\text{day}} \right) = P_{x,c} + P_{x,n} + P_{x,i}$$

Waste Sludge Flow to Digester M&E, 4th ed. Pg. 1458

$$Q_w = \frac{\text{Total Sludge Production, Dry Solids}}{\rho_w S_s / P_s}$$

Required Volume

M&E, 4th ed. Pg. 1537

$$V \text{ (Gal)} = \left(\frac{Q_w}{X} \right) \left(\frac{(X_w + Y * S_i)}{k_d * P_n + \frac{1}{\text{SRT}}} \right)$$

$Y_{c,obs}$	Carbonaceous Yield Coefficient	0.56
$P_{x,c}$	Carbonaceous Sludge Production	14 lb / day (MLVSS) 19 lb / day (MLSS)
$Y_{n,obs}$	Nitrogenous Yield Coefficient	0.11
$P_{x,n}$	Nitrogenous Sludge Production	0.35 lb / day (MLVSS) 0.49 lb / day (MLSS)
	Inert Sludge Production (TSS), Dry Solids	12 lb / day
	Total Sludge Production, Volatile Solids	14 lb / day
	Volatile Solids Loading Rate	27 lb / day / 1,000 cu. ft.
	Total Sludge Production, Dry Solids	32 lb / day
Q_w	Waste Sludge Flow to Digester	253 gallons / day
	Digester Volume Required	2,184 gallons 292 cu. ft.

Tank

Length	4 ft
Width	12 ft
Height	12.17 ft
SWD	10.67 ft
# Tanks	1
Volume	512 cu. ft.

Total Digester Vol. available	512 cu. ft.
Volume greater than required	YES

Project: Childress WWTP
Job Number: W0000
Design By: HES
Checked By: HES
Date: 1/17/2025

Description: Process Calculations
Phase I - 9,999 GPD

Final Process Calculations (Based on TCEQ Criteria Only)

Chlorine Contact Chamber

	<i>Value</i>	<i>Regulation</i>
TCEQ Minimum detention time (Qpk)	20 min	217.281(b)(1)

Volume required 37 cu. ft.

Proposed Tank

Length 5.00 ft

Width 3.00 ft

Height 11.17 ft

Static WL 8.75 ft

SWD 4.00 ft

Tanks 1

Volume 60 cu. ft.

Capacity 0.016 MGD Average Flow

Total Capacity 60 cu. ft.

Detention Time 32.32 Minutes Meets Capacity

Volume greater than required YES

Project:	Childress WWTP	Description:	Process Calculations
Job Number:	W0000		Phase I - 9,999 GPD
Design By:	HES		
Checked By:	HES		
Date:	1/17/2025		

Final Process Calculations (Based on TCEQ Criteria Only)

Project: Childress WWTP
 Job Number: W0000
 Design By: HES
 Checked By: HES
 Date: 1/17/2025

Description: Process Calculations
 Phase I - 9,999 GPD

Final Process Calculations (Based on TCEQ Criteria Only)

Air Requirements

	Value	Regulation
Air requirements for Aeration basins $O_2R = \frac{1.2(BOD_5) + 4.3(NH_3 - N)}{BOD_5}$	1.77 lb oxygen per lb BOD	217.155(a)(3)(Equation F.2)
Use	2.20 lb oxygen per lb BOD	
Air Requirements for Digesters	20 SCFM /1000 cu. ft.	217.249 (t)(7)(G)
Use	30 SCFM /1000 cu. ft.	
Minimum Mixing Requirements for Aeration	20 SCFM / 1000 cu. ft.	217.155 (b)(3)(B)
Diffuser Transfer Efficiency	6.6% (In wastewater)	217.155 (b)(2)(B)
Design Submergence	9.00 feet	

Table F.5 Diffuser Submergence Correction Factors	
Diffuser Submergence Depth	Airflow Rate Correction Factor
feet	
8	1.82
10	1.56
12	1
15	0.91
18	0.73
20	0.64

Diffuser Submergence Correction Factor 1.69 @ design flow depth 217.155 (b)(2)(D)(Table F.5)

Aeration Basins: Corrected Air Flowrate @ Design Subme 56 SCFM

$$= \frac{\{(lb\ BOD) * (lb\ Oxygen / lb\ BOD)\} * Correction\ Factor}{(T.E.) (lb\ Oxygen / lb\ air) (lb\ air / cu.\ ft.) (min / day)}$$
 217.155 (b)(2)(C)

Verify Mixing Requirements for Aeration Basins: 37 OK

Air Required for Digesters: 15 SCFM

Air Required for Post Aeration - Chlorine Basin 1 SCFM 20 scfm/1000cf
 Air Required for Air Lifts 17 SCFM
 Air for Initial Mixing 0 SCFM

Total Air Required 90 SCFM

Maximum Water Depth Over Diffuser 9.00 feet
 Pressure Loss in Piping 1.1 psi *
 Pressure @ Blowers 5.0 psi

Air Flow per Blower @ Required Pressure 95 SCFM
 Blowers Required w/o Standby 1.0

Total Blowers Required 2.0

Attachment: TECHNICAL REPORT

T-4. WIND ROSE

AMA Jan-Dec 1984-92

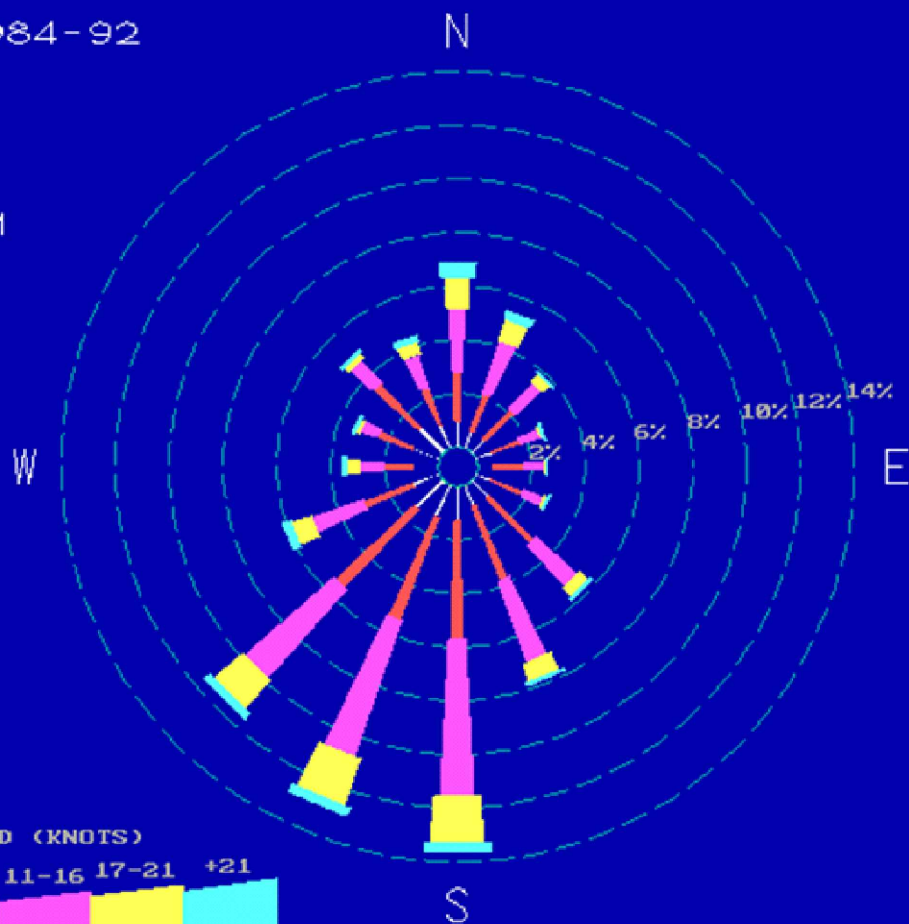
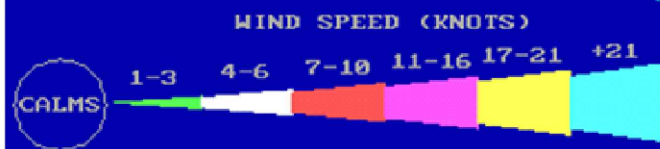
January 1

December 31

Midnight-11 PM

NOTE: Frequencies
indicate direction
from which the
wind is blowing.

CALM WINDS 1.36%



WIND ROSE



F-4393

OJD Engineering, LLC
Consulting Engineers & Surveyors

806-352-7117
2420 Lakeview Dr.
Amarillo, TX 79109

Attachment: TECHNICAL REPORT

T-5. SLUDGE MANAGEMENT

Domestic Technical Report 1.1 - 7
Sewage Sludge Solids Management Plan

Planning Considerations

Influent Design Flow	0.009999 MGD
Total Sludge Holding Tank Volume	512 cubic feet
Dimensions	4' L x 12' W x 10.67' SWD
Aeration Basin MLSS (mg/L)	1,500 to 3,000 mg/l
BOD ₅ Removal	Influent Concentration = 300 mg/l
	Effluent Concentration = 10 mg/l
	Net Removal = 290 mg/l

<u>Solids Generated</u>	<u>100% Flow</u>	<u>75% Flow</u>	<u>50% Flow</u>	<u>25% Flow</u>
Pounds BOD ₅ /day Removed	24	18	12	6
Pounds/Day of Dry Sludge Produced	8	6	4	2
Pounds/Day of Wet Sludge Produced	508	381	254	127
Gallons/Day of Wet Sludge Produced	61	46	30	15

Sludge will stay in the digester; clear liquor will be decanted off the digester and returned to the aeration basin. Sludge is wasted from the final clarifier to the aerobic digester. Some sludge from the clarifier is also returned to the aeration basin.

Removal Schedule

Days Between of Sludge Removal	63	84	126	252
--------------------------------	----	----	-----	-----

Assumptions

- (1) Assumed 0.315 pounds of dry sludge produced per pound of BOD₅ removed
- (2) Assumed solids concentration in the tank 1.5%
- (3) Assumed stabilized sludge density = water density 8.34 lb/gal

Attachment: TECHNICAL REPORT

T-6. LINER CERTIFICATION

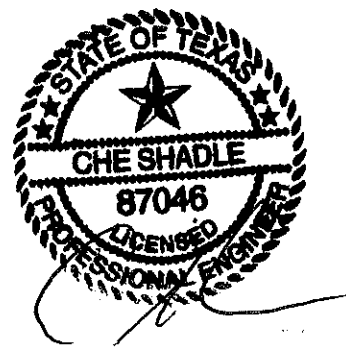
Liner Certification:

Childress Hall Storage Pond

Liner Type: Synthetic (See Attached Product Sheet)

Certification:

The liner is a 60 mil synthetic liner as required by 30 TAC 217.203(d)(4). Has UV resistance to withstand constant sunlight. Due to the fact that the wastewater (9,999 GPD) will be combined with freshwater (500,000 GPD), a leachate collection system is not proposed to be installed due to the dilution of the water in the pond.



1/25/2025

Attachment: TECHNICAL REPORT

T-7. CROPPING PLAN & SOIL ANALYSES



Cropping Plan

A site map for this report is provided as Attachment USGS Map – A-4.

The soils Map is shown in Attachment – T-2.

The cropping plan for Childress Hall, for which effluent is applied to, is solely 250 acres, for an 18-hole golf course, of Bermuda grass. There is no harvest, it is simply grown in, maintained, fertilized and mowed. The golf course requires approximately 750,000 GPD of water. The permit requests effluent of 9,999 GPD to be include in this total application. Due to combining 740,000 of freshwater with the total effluent, nutrient availability from the effluent is minimal. The bermuda will need fertilizer supplementation. Attached to this cropping plan is the soils testing data that was used to determine the nutrient needs. An excerpt of this report is shown below, and it describes the fertilizer requirements:

Suggested Fertility Inputs for Childress Hall Tom Doak fairways

Nitrogen: Incorporate 3 pounds of nitrogen per thousand sq. ft. from a combination of an organic fertilizer, a controlled release nitrogen fertilizer and the starter fertilizer. Apply 1/20 to 1/16 pound of nitrogen per thousand sq. ft. every 7 to 10 days as needed for grow-in and maintenance. Potassium nitrate is suggested for most of the maintenance inputs.

Calcium/Magnesium: Apply and incorporate 1.5 tons of dolomitic lime (10% to 12% Mg content) per acre to raise the bulk soil magnesium level in fairways 1, 2, 3, 8, 9, 14, and 15. Apply and incorporate 1 ton of dolomitic lime (10% to 12% Mg content) per acre to raise the bulk soil magnesium level in fairways 4, 5, 6, 10, 16, and 18.

Potassium: Incorporate 4 pounds of potassium per thousand sq. ft. into fairways 1, 2, 3, 8, 9, 10, 14, and 15 pre-plant. Incorporate 2 pounds of potassium per thousand sq. ft. into fairways 4, 5, 12, 16, and 18 pre-plant. Sul-Po- Mag or K-Mag are suggested for the potassium source.



Phosphorus: Incorporate 2 pounds of P_2O_5 per thousand sq. ft pre-plant. Mon-ammonium phosphate is recommended as the source for this input. Apply 1/20 pound of P_2O_5 per thousand sq. ft. every other week to the fairways for grow-in and when needed to promote root initiation on the turf.

Iron/Micronutrients: Apply a granular product such as Andersons Hi-Mag Trace Elements (STEP HI MAG) at

100 pounds of product per acre. Apply a soluble micronutrient formulation at label rates every other week to monthly for maintenance.

Salt Tolerances (NA) :Tolerance is 24 dsm^{-1} . Testing shows that the existing levels are low, and no amendments are needed.

May 4, 2023

Mr. Eric Greytok
253 Zion Canyon CT
Chico, CA 95973

Dear Eric:

Enclosed are the suggested grow-in fertility inputs for the fairway samples from Childress Hall.

Key Findings Soil Test Results/Fairways: F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18

SOIL pH:	Alkaline	7.7 - 8.1
Calculated CECs	Cation Exchange Capacities	8.79 - 17.72
Exchangeable Calcium, Ca	Very High*	F1, F2, F3, F4, F5, F6, F8, F9, F10, F14, F15, F16, F18
	High*	F12
Exchangeable Magnesium, Mg	Adequate*	F12
	Slightly Low*	F9
	Low*	F1, F2, F3, F4, F5, F6, F8, F10, F14, F15, F16, F18
Exchangeable Potassium, K	Adequate*	F6, F12
	Slightly Low*	F2, F5, F16
	Low*	F1, F3, F4, F8, F9, F10, F14, F15, F18
Exchangeable Sodium, Na	Acceptable Low Level*	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Phosphorus, P205	Adequate	F6
	Slightly Low	F1, F2, F3, F5, F9, F12
	Low	F4, F8, F10, F14, F15, F16, F18
Sulfates, SO4	Very Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Total Soluble Salts (mmhos/cm)	Acceptable Low Level	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Micronutrients: Boron, B	Adequate	F1, F3, F4, F5, F6, F8, F9, F12, F14, F15, F16
	Low	F2, F10, F18
Copper, Cu	Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Zinc, Zn	Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Manganese, Mn	Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Iron, Fe	Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18

*Refers to the base saturation % at the calculated CEC

Key Findings Water Soluble Soil Nutrient Results/Fairways: F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18

Water Extract pH:	Alkaline to Very Alkaline	7.9 - 8.3
Calcium, Ca	Slightly Low Low	F8 F1, F2, F3, F4, F5, F6, F9, F10, F12, F14, F15, F16, F18
Magnesium, Mg	Low Very Low	F2, F3, F5, F6, F8, F9, F12, F15, F16 F1, F4, F10, F14, F18
Potassium, K	Low Very Low	F6 F1, F2, F3, F4, F5, F8, F9, F10, F12, F14, F15, F16, F18
Sodium, Na	Acceptable Low Level	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Ammonium-Nitrogen, NH ₄ -N	Adequate	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Bicarbonates, HCO ₃	High	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Sulfates, SO ₄	Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Chlorides, Cl	Acceptable	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18
Nitrate-Nitrogen, NO ₃ -N	Slightly High Adequate Low	F5, F8 F1, F3 F2, F4, F6, F9, F10, F12, F14, F15, F16, F18
Phosphate-Phosphorus, PO ₄ -P	Low	F1, F2, F3, F4, F5, F6, F8, F9, F10, F12, F14, F15, F16, F18

COMMENTS: Future inputs of Sul-Po- Mag or K-Mag will be used to address the potassium and magnesium inputs if and when needed. Don't be concerned about the dolomitic lime raising pH. It is needed to increase the magnesium level in almost all of the fairways.

Suggested Fertility Inputs for Childress Hall Tom Doak fairways

5/4/23

- Nitrogen:** Incorporate 3 pounds of nitrogen per thousand sq. ft. from a combination of an organic fertilizer, a controlled release nitrogen fertilizer and the starter fertilizer. Apply 1/20 to 1/16 pound of nitrogen per thousand sq. ft. every 7 to 10 days as needed for grow-in and maintenance. Potassium nitrate is suggested for most of the maintenance inputs.
- Calcium/Magnesium:** Apply and incorporate 1.5 tons of dolomitic lime (10% to 12% Mg content) per acre to raise the bulk soil magnesium level in fairways 1, 2, 3, 8, 9, 14, and 15. Apply and incorporate 1 ton of dolomitic lime (10% to 12% Mg content) per acre to raise the bulk soil magnesium level in fairways 4, 5, 6, 10, 16, and 18.
- Potassium:** Incorporate 4 pounds of potassium per thousand sq. ft. into fairways 1, 2, 3, 8, 9, 10, 14, and 15 pre-plant. Incorporate 2 pounds of potassium per thousand sq. ft. into fairways 4, 5, 12, 16, and 18 pre-plant. Sul-Po- Mag or K-Mag are suggested for the potassium source.
- Phosphorus:** Incorporate 2 pounds of P_2O_5 per thousand sq. ft. pre-plant. Mon-ammonium phosphate is recommended as the source for this input. Apply 1/20 pound of P_2O_5 per thousand sq. ft. every other week to the fairways for grow-in and when needed to promote root initiation on the turf.
- Iron/Micronutrients:** Apply a granular product such as Andersons Hi-Mag Trace Elements (STEP HI MAG) at 100 pounds of product per acre. Apply a soluble micronutrient formulation at label rates every other week to monthly for maintenance.

If you have any questions about these results, please feel free to call me at (724) 898-2329.

Sincerely,

David W. York, Ph.D.
Tournament Turf Laboratories, Inc.

Email: dryork@tournamentturf.com
www.tournamentturf.com

Attachment: TECHNICAL REPORT

T-8. WELL LOGS

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-601**

[GWDB Reports and Downloads](#)

Well Basic Details

[Scanned Documents](#)

State Well Number	1230601
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.544167
Latitude (degrees minutes seconds)	34° 32' 39" N
Longitude (decimal degrees)	-100.285834
Longitude (degrees minutes seconds)	100° 17' 09" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1735
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	103
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	4/0/1949
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Stock
Water Level Observation	Historical
Water Quality Available	No
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Windmill
Annular Seal Method	
Surface Completion	
Owner	Howard Head City well
Driller	Layne Texas Co.
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	Texas Water Development Board
Created Date	9/13/2001
Last Update Date	10/9/2001

Remarks City # 13. Yield 138 gpm with 31 ft drawdown when drilled. Water levels taken on 3/30/49 were taken as part of a pump test prior to well completion.

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	40
8	Blank	Steel			40	69
8	Screen	Steel			69	99
8	Blank	Steel			99	103

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

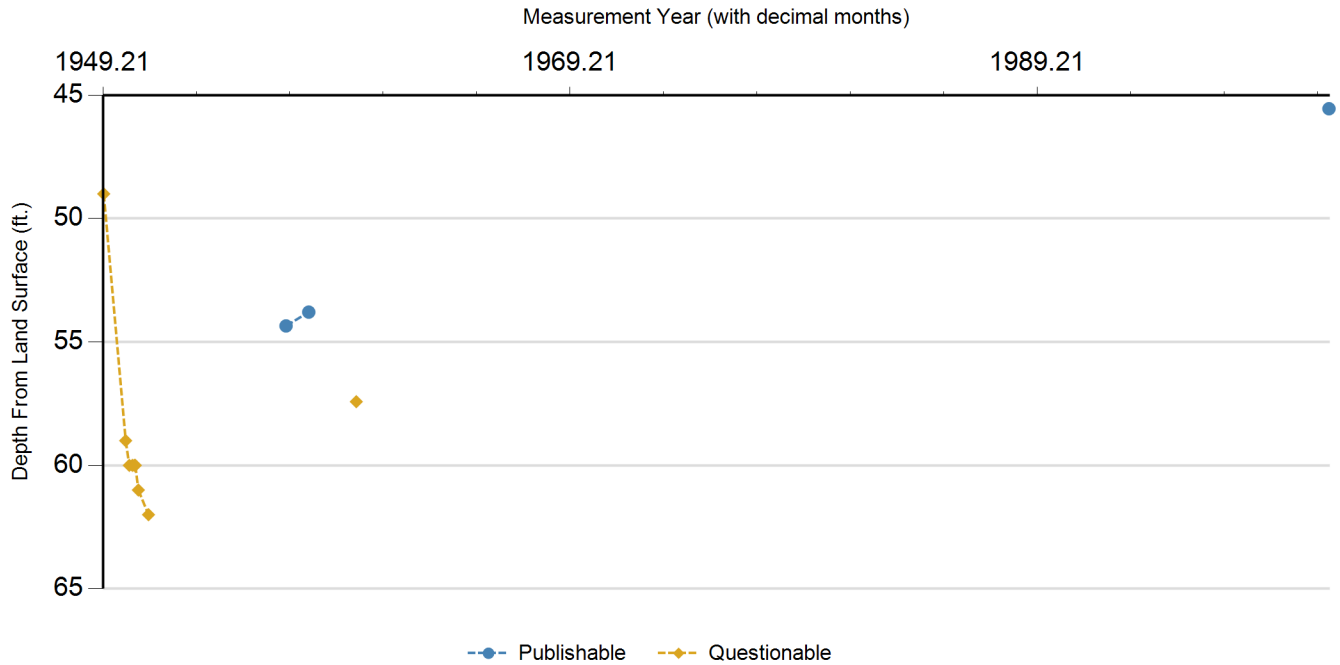
Borehole - No Data

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
Q	3/30/1949		49		1686	1	Registered Water Well Driller	Unknown	17	
Q	3/30/1949		80	31.00	1655	2	Registered Water Well Driller	Unknown	17	
Q	3/30/1949		51	(29.00)	1684	3	Registered Water Well Driller	Unknown	17	
Q	3/8/1950		59	8.00	1676	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/4/1950		60	1.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/23/1950		60	0.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/24/1950		60	0.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		60	0.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		61	1.00	1674	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		62	1.00	1673	1	Other or Source of Measurement Unknown	Unknown	2	
P	1/18/1957		54.35	(7.65)	1680.65	1	Texas Water Development Board	Steel Tape		
P	1/8/1958		53.79	(0.56)	1681.21	1	Texas Water Development Board	Steel Tape		
Q	1/21/1960		57.42	3.63	1677.58	1	Texas Water Development Board	Steel Tape	2	
P	9/13/2001		45.55	(11.87)	1689.45	1	Texas Water Development Board	Steel Tape		

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable

Remark ID	Remark Description
2	Pumping-level measurement
17	Measurement before well completion

Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (<https://www.twdb.texas.gov/groundwater/data/gwdb rpt.asp>) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

WELL SCHEDULE

1. Location: $\frac{1}{4}$, $\frac{1}{4}$, Section _____, Block _____, Survey _____, Longitude 100-17-08, Latitude 34-32-40 (T.M.)

Tenant (other): _____ Address: _____

17. Location or Sketch: MP = TOP OF CASING

W/L Obs. Well _____ W/Q Obs. Well _____
State Well No. **12-30-601**

[GWDB Reports and Downloads](#)
[Well Basic Details](#)
[Scanned Documents](#)

State Well Number	1230901
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.538056
Latitude (degrees minutes seconds)	34° 32' 17" N
Longitude (decimal degrees)	-100.284167
Longitude (degrees minutes seconds)	100° 17' 03" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1740
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	123
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	5/0/1949
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Historical
Water Quality Available	No
Pump	Turbine
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	City of Childress No. 12
Driller	Layne Texas Co.
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	U.S. Geological Survey
Created Date	2/13/1951
Last Update Date	5/20/2003

Remarks City # 12. Yield 112 gpm with 44 ft drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	60
8	Blank	Steel			60	83
8	Screen	Steel			83	113
8	Blank	Steel			113	123

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

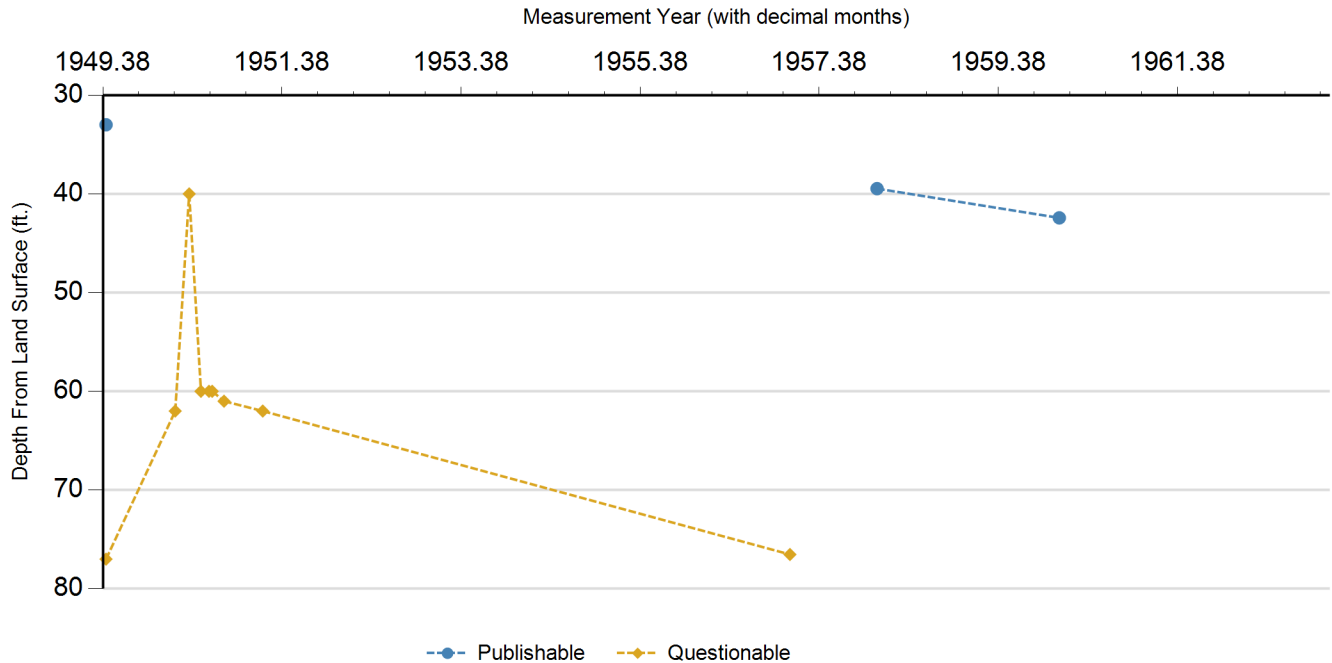
Borehole - No Data

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	5/30/1949		33		1707	1	Other or Source of Measurement Unknown	Unknown	1	
Q	5/30/1949		77	44.00	1663	2	Other or Source of Measurement Unknown	Unknown	2	
Q	3/7/1950		62	(15.00)	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/4/1950		40	(22.00)	1700	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/22/1950		60	20.00	1680	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/25/1950		60	0.00	1680	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		60	0.00	1680	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		61	1.00	1679	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		62	1.00	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/18/1957		76.53	14.53	1663.47	1	Texas Water Development Board	Steel Tape	2	
P	1/8/1958		39.47	(37.06)	1700.53	1	Texas Water Development Board	Steel Tape		
P	1/21/1960		42.43	2.96	1697.57	1	Texas Water Development Board	Steel Tape		
X	1/16/1963					1	Texas Water Development Board		32	

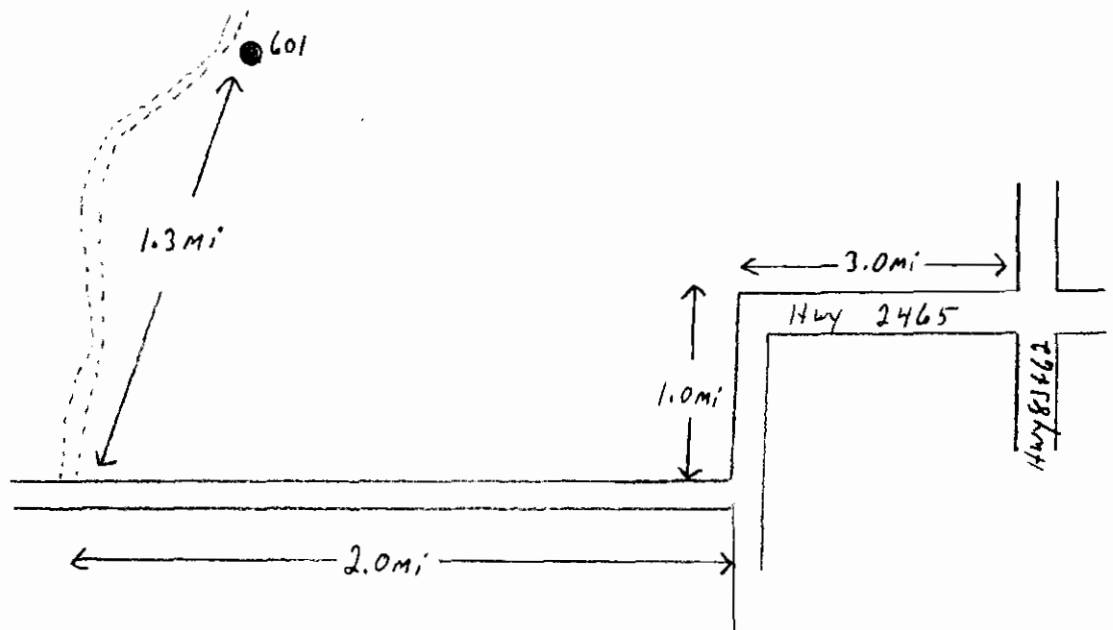
Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
1	Accurately reflects water level conditions
2	Pumping-level measurement
32	Well temporarily inaccessible due to winterization or debris

Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (<https://www.twdb.texas.gov/groundwater/data/gwdb.rpt.asp>) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.



12-30-601

LOC:

0-12 SANDY SOIL
12-22 SANDY RED CLAY
22-42 COARSE SAND & SOME GRAVEL
42-99 SAND & GRAVEL
99-103 RED BEDS

	<u>P.L.</u>	<u>C.P.M.</u>
3-8-50	59	58
5-4-50	60	56
6-23-50	60	58
7-24-50	60	56
8-8-50	60	56
9-26-50	61	54
1--51	62	56

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer Seymour - QsField No. P-13State Well No. 12-30-601Owner's Well No. #13County Childress1. Location: 1/4, 1/4 Sec., Block _____ Survey _____2. Owner: City of Childress Address: _____

Tenant: _____ Address: _____

Driller: Lynn Texas Address: _____3. Elevation of Ground is 1745 ft. above mal, determined by Topo Map4. Drilled: Apr 1949; Dug, Cable Tool, Rotary, _____5. Depth: Rept. 102 ft. Meas. _____ ft.

6. Completion: Open Hole, Straight Wall, Underreamed, Gravel Packed _____

7. Pump: Mfr. _____ Type _____

No. Stages _____, Bowls Diam. _____ in., Setting _____ ft.

Column Diam. _____ in., Length Tailpipe _____ ft.

8. Motor: Fuel _____ Make & Model _____ HP. _____

9. Yield: Flow _____ gpm, Pump _____ gpm, Meas., Rept., Est. _____

10. Performance Test: Date _____ Length of Test _____ Made by _____

Static Level _____ ft. Pumping Level _____ ft. Drawdown _____ ft.

Production _____ gpm Specific Capacity _____ gpm/ft.

11. Water Level: _____ ft. rept. _____ 19 _____ above _____ which is _____ ft. above surface.
 _____ ft. meas. _____ 19 _____ below _____ which is _____ ft. below surface.
 _____ ft. rept. _____ 19 _____ above _____ which is _____ ft. above surface.
 _____ ft. meas. _____ 19 _____ below _____ which is _____ ft. below surface.
 _____ ft. rept. _____ 19 _____ above _____ which is _____ ft. above surface.
 _____ ft. meas. _____ 19 _____ below _____ which is _____ ft. below surface.

12. Use: Dom., Stock, Public Supply, Ind., Irr., Waterflooding, Observation, Not Used, _____

13. Quality: (Remarks on taste, odor, color, etc.) _____

Temp. _____ °F, Date sampled for analysis _____ Laboratory _____

Temp. _____ °F, Date sampled for analysis _____ Laboratory _____

Temp. _____ °F, Date sampled for analysis _____ Laboratory _____

14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log,

Formation Samples, Pumping Test, _____

15. Record by: C. R. Follett Date 2-13 1957Source of Data L-T Workbook back

16. Remarks: _____

Map - Michie at test hole 20c12 sandy soil22 sandy red clay42 ss. sand + some gravel49 sand + gravel103 Red bed174569 991646Obs Well

Lat 34.32-40
Long 100-17-08

(Sketch)

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer Seymour - QsField No. P-12
Owner's Well No. #12State Well No. 12-30-901
County Childress1. Location: 1/4, 1/4 Sec., Block Survey 2. Owner: City of Childress Address: Tenant: Address: Driller: Address: 3. Elevation of 1877 is ft. above msl, determined by 4. Drilled: May 19 49; Dug, Cable Tool, Rotary, 5. Depth: Rept. 123 ft. Meas. ft.6. Completion: Open Hole, Straight Wall, Underreamed, Gravel Packed 7. Pump: Mfr. Type No. Stages , Bowls Diam. in., Setting ft.Column Diam. in., Length Tailpipe ft.8. Motor: Fuel Make & Model HP. 9. Yield: Flow gpm, Pump gpm, Meas., Rept., Est. 10. Performance Test: Date Length of Test Made by Static Level ft. Pumping Level ft. Drawdown ft.Production gpm Specific Capacity gpm/ft.

11. Water Level:	ft. rept.	19	above	which is	ft. above	surface.
	meas.		below		ft. below	surface.
	ft. rept.	19	above	which is	ft. above	surface.
	meas.		below		ft. below	surface.
	ft. rept.	19	above	which is	ft. above	surface.
	meas.		below		ft. below	surface.
	ft. rept.	19	above	which is	ft. above	surface.
	meas.		below		ft. below	surface.

12. Use: Dom., Stock Public Supply Ind., Irr., Waterflooding, Observation, Not Used, 13. Quality: (Remarks on taste, odor, color, etc.) Temp. °F, Date sampled for analysis Laboratory Temp. °F, Date sampled for analysis Laboratory Temp. °F, Date sampled for analysis Laboratory 14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log, Formation Samples, Pumping Test, 15. Record by: C.B.F. Date 2-13 1951Source of Data L-T work over book16. Remarks: At test hole 33 C

CASING & BLANK PIPE			
Cemented From		ft. to	
Diam. (in.)	Type	Setting, ft.	
		from	to
16		0	60
8 5/8		60	83
8 5/8		113	123

WELL SCREEN			
Screen Openings			
Diam. (in.)	Type	Setting, ft.	
		from	to
8 5/8		83	113

WELL SCHEDULE

1. Location: 1, 1, Section 1, Block 1, Survey 1, Longitude 100-17-22 Latitude 34-32-18 (T.O.P.)

Tenant (other): _____ Address: _____

Driller: Layne - Texas Address: _____

3. Land Surface Elevation: 1731 ft. above msl determined by Topo

4. Drilled: May 19 49; Dug, Cable Tool, Rotary, Air, _____

5. Depth: Rept. 115 ft. Meas. _____ ft.

6. Borehole Completion: Open Hole, Straight Wall, Underreamed, Gravel Packed		
--	--	--

7. Pump:	Mfr.	Type	T	(in.)		from	to

No. Stages	Bowls Diam.	in., Setting	ft.
			16 STEEL 0 60

Column Diam.	in., Length Tailpipe	ft.	8 1/8	STEEL	60	83
--------------	----------------------	-----	-------	-------	----	----

8. Motor: Mfr. _____	Fuel _____	HP. _____	8 1/2	SLOTTER	83	113
----------------------	------------	-----------	-------	---------	----	-----

9. Yield: Flow gpm, Pump gpm, Meas., Rept., Est. Date

10. Performance Test: Date 5-30-49 Length of Test 8 HRS Made by LAYNE, TEXAS

Static Level **33** ft. Pumping Level **77** ft. Drawdown **44** ft.

Production	112	gpm	Specific Capacity	2.55	gpm/ft.				
------------	-----	-----	-------------------	------	---------	--	--	--	--

11. Quality: (Remarks on taste, odor, color, etc.)				

Analyses	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Date	Laboratory	TDS	Sp Cond

Date	Laboratory	TDS	Sp Cond

12. Other data available as circled: Pumping test, Power & Yield Test, Drillers

(Logs) Formation Samples, Geophysical Log(s)

13. Water Level(s): 33.00 ft. rept. 5-30 19 49 above LSD which is 0 ft. above Land Surface

ft. ^{rept.} meas. 19 ^{above} below which is ft. ^{above} below Land Surface

14. Use: Dom., Stock, Public Supply Ind., Irr., Observation, Other (Test Hole, Oil Test, etc.)

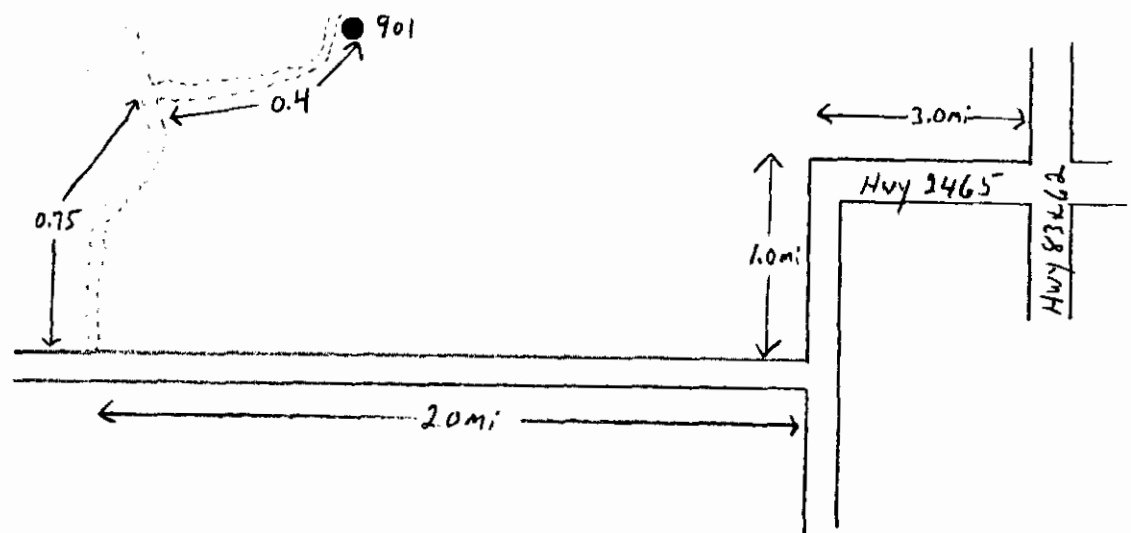
15. Recorded by: C. CORNELIS Source of data: OLD SCHEDULE Date: 5-12-78

16. Remarks: _____

17. Location or Sketch: M/D - T. 11

MP = TOP OF 1" BELLTHER PIPE
+ 1.90

[illegible]



12-30-901

LOG:

0-10 LOOSE SAND
10-18 SANDY CLAY
18-113 VERY LOOSE SAND WITH
FEW GRAVEL LAYERS
113-115 RED BED

	<u>P. L.</u>	<u>GPM</u>
3-7-50	62	72
5-4-50	40	66
6-22-50	60	68
7-25-50	60	66
8-8-50	60	64
9-26-50	61	60
1--51	62	64

12-30-901

Attachment: TECHNICAL REPORT

T-9. GROUNDWATER QUALITY TECHNICAL REPORT



Groundwater Technical Report

A site map for this report is provided as Attachment USGS Map – A4.

A site drawing for this report is provided as Attachment Facility Map – T2.

Childress Hall is located in Childress County, Texas. Groundwater in this area is located within the Seymour and Blaine aquifers. The information presented below regarding the aquifers was obtained by the Mesquite Groundwater Conservation District.:

The **Seymour Aquifer** is a major aquifer in Texas and consists of isolated areas of alluvium that are erosional remnants of a larger area. As defined by TWDB, it is composed of remnants of the Seymour Formation, the Lingos Formation, and younger alluvial deposits, all of Quaternary age. The aquifer is found in parts of many north-central and Panhandle counties of Texas, and in the District is present in four distinct and separate areas referred to as "Pods".

It consists of discontinuous beds of poorly sorted gravel, conglomerate, sand, and silty clay deposited during the Quaternary Period by eastward-flowing streams. Saturated thickness is typically between five and eighty feet. Aquifer thickness may exceed 250 feet in isolated spots in the western portion of Collingsworth County. The thickness in the eastern portion of the county is generally too thin to support irrigation. The aquifer is also generally thinner in Hall County but does support irrigation. This aquifer is under water-table conditions in most of its extent, but artesian conditions may occur where the water-bearing zone is overlain by clay. The lower, more permeable part of the aquifer produces the greatest amount of groundwater.

Water quality is generally fresh to slightly saline, but some high saline problems occur. Nitrate concentrations in excess of drinking water standards are common. The Seymour Aquifer comprises about twenty-three percent of the District area and provides about seventy seven percent of the irrigation water in the District. Yields of wells range from five gallons per minute to as much as 1,000 gallons per minute depending upon saturated thickness, with yields averaging about 300 gallons per minute.



The **Blaine Aquifer** is composed of anhydrite and gypsum with interbedded dolomite and clay and is an important source of groundwater in the District. The Blaine Formation crops out in a band from Wheeler County south through Collingsworth and Childress Counties to Fisher County and extends westward in the subsurface to adjacent counties. In Collingsworth County the Blaine is found along the Salt Fork of Red River north to Wheeler County and east to the Oklahoma state line. The Blaine is also found South and East of Wellington, extending east to the Oklahoma state line and south to the Prairie Dog Town Fork of the Red River. There are also small areas in the northeast and southeast corners of Hall County. Recharge occurs fairly rapidly and travels primarily in the numerous solution channels of the Blaine under water-table conditions.

Overall water quality is poor and salinity may be high, limiting the use of water for human and livestock consumption. Depth to water ranges from a few feet to greater than 200 feet. Well depths range up to 300 feet below ground surface. Well yields vary from a few gallons per minute up to 1,000 gallons per minute. Although water in storage is generally under water-table conditions, larger yields are often associated with those areas of the aquifer that are confined by relatively impervious beds. Dry holes or wells of low yield are commonly found adjacent to wells of moderate to high yields because of the uneven nature in confining beds and the occurrence of the water in solution zones. Groundwater not intercepted by wells tends to discharge naturally in areas of lower topography through seeps and springs. The Blaine Aquifer comprises about twenty four percent of the District area and provides about nineteen percent of the irrigation water pumped in the District.

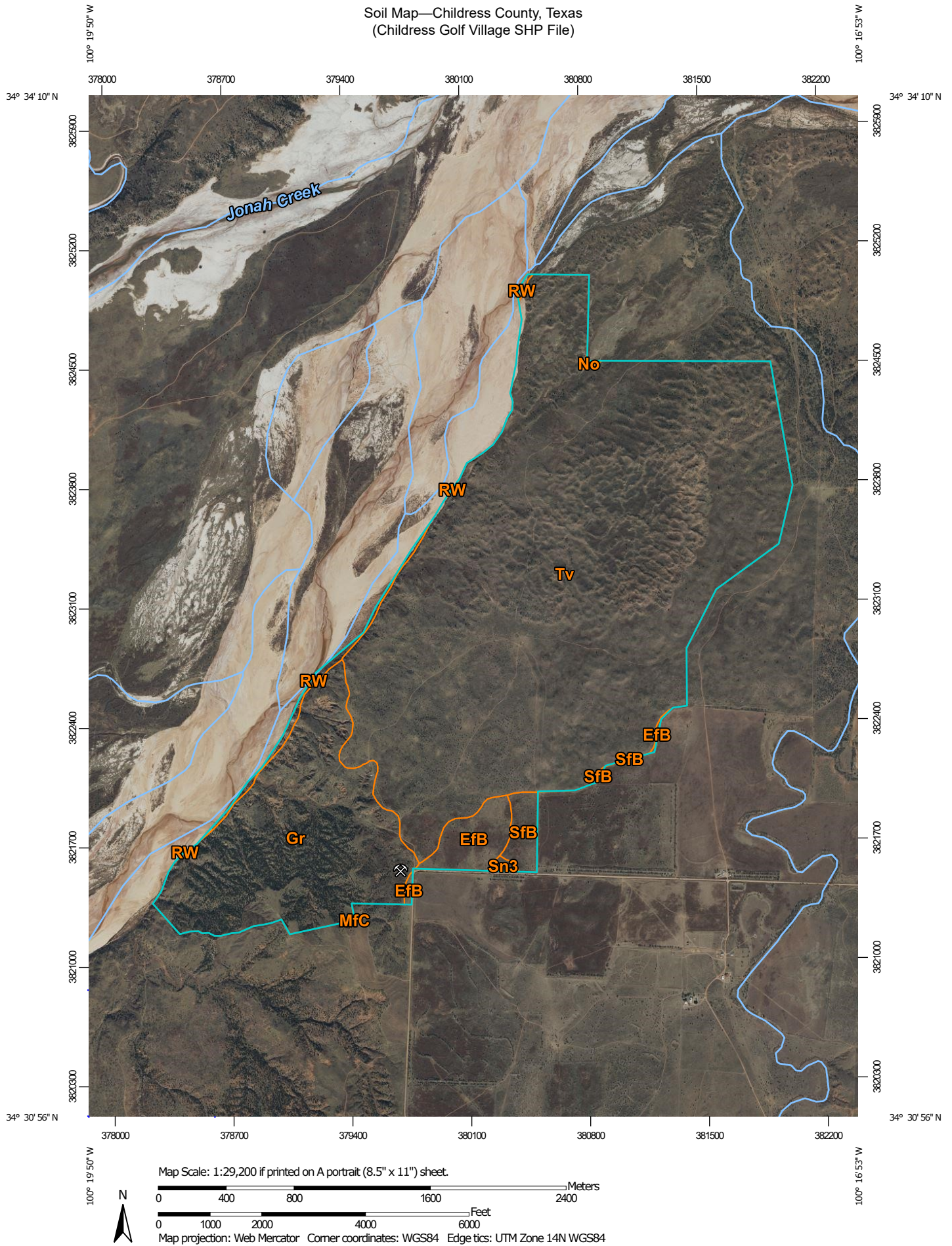
The golf course will be irrigated using 750,000 GPD from the Blaine aquifer combined with the 9,999 GPD of treated wastewater as presented in this permit application. Due to the dilution of the wastewater, nutrients will mostly come from the freshwater within the Blaine Aquifer and supplemental fertilization practices. (See Cropping Plan).

Depth to Static Water levels is greater than 50 feet. At this depth, and the fact that 99% of the irrigation water is, in fact, water from the aquifer, there is no threat of contamination.

Attachment: TECHNICAL REPORT

T-10. SOIL MAP

Soil Map—Childress County, Texas
(Childress Golf Village SHP File)



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/3/2025
Page 1 of 3

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.

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: Childress County, Texas

Survey Area Data: Version 21, 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: Nov 23, 2021—Dec 5, 2021

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
EfB	Hardeman fine sandy loam, dry, 1 to 3 percent slopes	38.2	2.4%
Gr	Hilgrave very gravelly sandy loam, 3 to 30 percent slopes	307.9	19.0%
MfC	Grandfield fine sandy loam, 3 to 5 percent slopes	0.0	0.0%
No	Yomont silt loam	0.9	0.1%
RW	Riverwash	12.9	0.8%
SfB	Devol loamy sand, 0 to 3 percent slopes	19.6	1.2%
Sn3	Devol and Nobscot soils, severely eroded	2.5	0.2%
Tv	Likes fine sand	1,235.4	76.4%
Totals for Area of Interest		1,617.4	100.0%

Attachment: TECHNICAL REPORT

T-11. WATER BALANCE

CHILDRESS HALL WATER BALANCE

(INCHES/ACRE IRRIGATED)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	AVG PRECIP	AVG RUNOFF	AVG INFILT RAIN	EVAPO- TRANS	REQD LEACH	TOTAL WATER NEEDS	EFFL NEEDED ROOT ZONE	EVAP FROM PONDS SURFACE	EFFL TO LAND	CONSUMP FROM PONDS
JAN	0.76	0.42	0.33	2.41	0.30	2.71	2.38	0.03	3	2.67
FEB	0.80	0.41	0.40	2.75	0.34	3.09	2.69	0.03	2.99	3.02
MAR	1.56	0.18	1.38	4.54	0.45	4.99	3.61	0.05	4.01	4.06
APR	1.83	0.12	1.71	5.88	0.60	6.48	4.77	0.05	5.30	5.35
MAY	3.29	0.00	3.29	6.86	0.51	7.37	4.08	0.06	4.53	4.59
JUN	3.27	0.00	3.27	7.65	0.63	8.28	5.00	0.08	5.56	5.63
JUL	1.98	0.09	1.89	8.69	0.97	9.66	7.77	0.09	8.64	8.72
AUG	2.33	0.04	2.29	7.94	0.81	8.75	6.46	0.08	7.17	7.25
SEP	2.18	0.06	2.12	5.96	0.55	6.51	4.39	0.06	4.87	4.94
OCT	2.09	0.07	2.02	4.81	0.40	5.21	3.19	0.05	0.00	0.05
NOV	1.00	0.34	0.67	3.03	0.34	3.37	2.70	0.04	3.00	3.04
DEC	0.89	0.37	0.51	2.39	0.27	2.66	2.14	0.03	2.38	2.41
	21.98	2.10	19.88	62.91	6.15	69.06	49.18	0.65	51.10	51.74

Basis:

Runoff: SCS method CN = 39 (Group A Soil_Grass Cover > 75%)
Watershed Storage (S) in. = 15.64

Leaching: Electrical Conductivity Effluent (Ce) = 2.5 millimhos/cm
Maximum Allowable Conductivity Soil Solution = 4 millimhos/cm

Irrigation efficiency: 0.90
Irrigated acreage: 250
Effluent Supplied: 9999 gal/day

Analysis:

	Year		Monthly Average	
	In/Ac	MG	In/Ac	MG
Effluent required (irrig + evap):	51.7	351.2	4.3	29.3
Effluent supplied MGD	0.54	3.6	0.045	0.3
Effluent deficit:	51.2	347.6	4.3	29.0

- (1) Average Rainfall (Texas Water Development Board, Quad 6 see Attached Data)
- (2) Runoff determined using Soil Conservation Service method.
- (3) Average infiltration (1) - (2)
- (4) Weighted Average Evapotranspiration (See Attached Data)
- (5) Required Leaching represents a weighted average leaching fraction modified from Rhoades (1974) as described by Ayers and Westott (1985).
- (6) Total Water Needs = (4) + (5)
- (7) Effluent Needed at Root Zone = (6)-(3).
- (8) Evaporation from Ponds Surfaces = Net Evaporation (TWDB, Quad 6, 25Yr Avg.)*Pond Surface Area/Irrigated Acreage.
- (9) Effluent to Land = (7)/Irrigation Efficiency
- (10) Consumption from Pond = (8)+(9)

CHILDRESS HALL STORAGE REQUIREMENTS

(INCHES/ACRE IRRIGATED)

	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	REC'D FOR APPL	PRECIP 25 YR WORST	RUNOFF 25 YR WORST	INFILT RAIN	AVAILABLE WATER	EVAP 25 YR WORST	WATER NEEDS	FRESH WTR IRRIGATION ADD TO STORAGE	EFFLUENT APPLIED	STORAGE	ACCUM STORAGE	APPL RATE
JAN	0.04	1.12	0.30	0.83	0.87	0.03	2.71	0.90	0.73	0.19	0.72	.02
FEB	0.04	1.19	0.27	0.92	0.97	0.03	3.09	0.90	0.73	0.19	0.91	.02
MAR	0.04	2.31	0.04	2.27	2.31	0.04	4.99	0.90	0.73	0.17	1.08	.00
APR	0.04	2.71	0.01	2.70	2.75	0.05	6.48	0.90	0.73	0.17	1.25	.00
MAY	0.04	4.89	0.18	4.71	4.75	0.05	7.37	0.90	0.73	0.16	1.41	-.01
JUN	0.04	4.86	0.17	4.69	4.73	0.07	8.28	0.90	0.73	0.15	1.56	-.02
JUL	0.04	2.94	0.00	2.94	2.98	0.08	9.66	0.90	0.73	0.14	1.70	-.03
AUG	0.04	3.46	0.01	3.46	3.50	0.07	8.75	0.90	0.73	0.14	1.84	-.03
SEP	0.04	3.24	0.00	3.24	3.29	0.06	6.51	0.90	0.73	0.16	2.00	-.01
OCT	0.04	3.10	0.00	3.10	3.15	0.05	5.21	0.90	0.73	0.17	0.17	.00
NOV	0.04	1.49	0.19	1.29	1.34	0.04	3.37	0.90	0.73	0.18	0.35	.01
DEC	0.04	1.32	0.24	1.08	1.13	0.03	2.66	0.90	0.73	0.19	0.53	.02
	0.54	32.64	1.41	31.23	31.76	0.57	69.06	10.80	8.76		13.52	0.00
												(ac-ft/ac/yr)

Basis:

Received for application: Average effluent flow to wastewater treatment plant

Acres irrigated: 250
Irrigation efficiency: 0.90

Analysis:

Maximum storage required = 2.00 in/irrig ac 41.7 acre-feet/yr 13,586,152.59 Gallons
Total available storage at full capacity of irrigation pond = 14,000,000 Gallons

- (11) Effluent Received for Applicatoin after passing through the treatment system.
- (12) Max 25 Year Rainfall Distributed throughout the year on a weighted basis. (TWDB, Quad 6, See Attached Data).
- (13) 25 Year Worst Runoff determined using Soil Conservation Service method.
- (14) 25 Year Worst Infiltration (12)-(13).
- (15) Available Water = (11)+(14)
- (16) 25 Year Least Evaporatoin from Ponds Surfaces = Net Evaporation (TWDB, Quad 6,)*Pond Surface Area/Irrigated Acreage.
- (17) See(6)
- (18) Fresh water amount from surrounding wells that is applied to the crops.
- (19) Actual Effluent applied to the crops to control Nitorgen at 420 lbs/acre/year.
- (20) Storage Required = (11)+(18)-(16)-(19).
- (21) Accumulated Storage = Storage + Previous Month Storage.

CHILDRESS HALL CROP WATER BALANCE DATA
EVAPOTRANSPIRATION

CROP	MAY		JUN		JUL		AUG		SEP		OCT	
	AC	IN	AC	IN	AC	IN	AC	IN	AC	IN	AC	IN
Bermuda Grass	250	6.9	250	7.7	250	8.7	250	7.9	250	6.0	250	4.8
AVERAGE		6.9		7.7		8.7		7.9		6.0		4.8

CROP	NOV		DEC		JAN		FEB		MAR		APR	
	AC	IN	AC	IN	AC	IN	AC	IN	AC	IN	AC	IN
Bermuda	250	3.0	250	2.4	250	2.4	250	2.8	250	4.5	250	5.9
AVERAGE		3.0		2.4		2.4		2.8		4.5		5.9

Source: Mean Crop Consumptive Use and Free-Water Evaporation for Texas
 Borrelli, Fedler, and Gregory (Bermuda Grass)

**CHILDRESS HALL WATER BALANCE
RAINFALL DATA**

Quad	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly
307	1998	0.46	2.69	3.39	0.4	1.35	0.37	0.69	0.96	0.43	3.98	1.38	0.14	16.24
307	1999	1.74	0.07	2.3	3.62	5.88	3.05	0.67	1.81	1.85	0.85	0	0.64	22.47
307	2000	0.15	0.37	4.94	3.42	1.19	7.87	0.96	0.09	0.07	3.63	1.56	0.75	25
307	2001	1.34	1.44	1.63	0.11	6.7	0.62	0.41	3.61	2.33	0.02	2.97	0.05	21.23
307	2002	0.91	0.73	0.95	1.8	1.09	3.45	3.77	1.73	1.76	4.86	0.41	1.59	23.06
307	2003	0	0.21	0.78	1.72	1.94	6.61	0.11	1.56	1.5	0.57	0.56	0.01	15.57
307	2004	1.87	2.19	3.25	3.17	0.02	6.9	1.83	2.94	0.98	2.4	6.63	0.46	32.64
307	2005	1.78	0.71	0.86	1.07	2.38	1.4	1.62	2.54	1.49	1.37	0	0.07	15.29
307	2006	0.06	0.19	2.18	1.09	2.8	0.69	1.03	3.89	3.13	4.56	0.4	3.11	23.13
307	2007	1.17	0.29	5.05	1.5	4.68	3.91	2.13	2.58	2.45	0.26	0.01	1.61	25.64
307	2008	0.01	0.74	0.68	1.44	2.9	2.85	1.32	3.87	5.95	4.12	0.08	0	23.96
307	2009	0.06	0.4	0.58	2.97	1.41	3.34	3.32	2.32	3.35	1.54	0.23	0.69	20.2
307	2010	1.44	1.65	0.96	6.4	2.04	3.48	5.27	1.03	2.31	2.47	0.76	0.02	27.82
307	2011	0.08	0.42	0.05	0.03	0.59	0.35	1.2	0.24	1.04	3	1.79	1.43	10.23
307	2012	0.14	0.79	1.92	1.23	1.99	3.65	0.71	2.2	3.35	0.15	0.05	0.46	16.64
307	2013	1.53	2.23	0.14	0.63	0.81	3.9	2.67	2.64	2.7	1.64	0.81	0.98	20.68
307	2014	0	0.36	0.34	0.7	3.72	4.05	3.2	2.27	2.34	0.49	1.3	0.37	19.14
307	2015	1.02	0.47	0.53	4.46	12.06	3.58	4.32	1.98	0.5	3.05	2.43	1.6	36
307	2016	0.43	0.56	0.43	2.18	6.57	3.16	2.51	4.71	2.44	0.57	1.43	1.17	26.16
307	2017	2.02	2.02	2.37	2.46	0.88	2.08	2.28	4.85	4.36	1.64	0.06	0.06	25.08
307	2018	0.01	0.51	0.76	0.36	3.99	3.42	1.36	2.28	4.26	5.68	0.55	0.89	24.07
307	2019	0.19	0.07	1.47	3.98	4.53	2.29	1.95	1.81	3.98	0.56	1.03	0.87	22.73
307	2020	1.25	0.84	2.39	0.44	2.25	2.37	1.63	2.28	1.15	1.39	0.35	0.68	17.02
307	2021	0.92	0.37	2.06	0.69	4.35	4.42	3.35	1.82	0.58	1.47	0.05	0.04	20.12
307	2022	0.26	0.24	0.26	0.21	2.69	3.98	0.72	3.85	0.31	2.18	1.03	0.58	16.31
307	2023	0.8	0.36	0.23	1.41	6.74	3.33	2.43	0.79	2.16	1.91	0.14	4.83	25.13
		0.755	0.805	1.558	1.827	3.29	3.274	1.979	2.333	2.183	2.091	1	0.888	21.98
		0.034	0.037	0.071	0.083	0.15	0.149	0.09	0.106	0.099	0.095	0.046	0.04	
		1.122	1.195	2.313	2.712	4.885	4.861	2.939	3.464	3.242	3.104	1.485	1.319	32.64

**CHILDRESS HALL WATER BALANCE
EVAPORATION DATA**

Quad	Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly
307	1998	2.93	2	5.51	6.16	6.49	10.86	11.12	8.08	7.59	6.27	2.6	2.01	71.62
307	1999	5.39	4.06	3.73	7.36	7.13	8.13	9.38	8.73	6.03	6.2	5.39	4.54	76.31
307	2000	7.1	3.59	3.94	4.47	4.8	5.4	6.78	7.51	7.16	3.6	3.73	2.18	60.28
307	2001	1.13	1.71	2.94	5.45	5.61	8.56	10.97	8.2	6.02	6.11	3.99	2.72	63.41
307	2002	3.18	3.22	5.17	5.13	6.11	8.33	7.92	9.14	6.61	3.87	3.31	3.14	65.13
307	2003	2.77	2.25	4.45	6.06	6.27	6.39	10.22	8.9	5.84	5.16	4.28	2.99	65.58
307	2004	2.06	3.86	4.88	4.9	6.87	7.12	8.01	7.2	6.77	3.81	2.89	3.04	61.41
307	2005	2.65	2.16	4.75	5.87	4.83	7.96	8.8	6.98	7.23	4.69	5.09	4.04	65.05
307	2006	5.88	4.19	5.22	6.47	6.86	9.07	9.98	8.51	6.1	5.64	4.72	2.2	74.84
307	2007	2.37	3.8	3.92	4.5	3.6	5.2	7	8.13	6.1	7	4.21	4.04	59.87
307	2008	1.76	3.49	5.79	5.85	5.94	9.13	9.12	7.57	5.42	5.13	4.54	3.51	67.25
307	2009	2.83	4.62	6.07	6.21	5.82	7.77	8.7	8.67	5.2	3.7	4.93	2.22	66.74
307	2010	1.96	3.08	5.27	6.63	5.87	8.45	6.56	7.81	6.44	5.98	5.95	3.92	67.92
307	2011	2.53	3.35	5.35	7.96	8.09	12.04	11.81	11.53	8.13	6.29	4.82	1.78	83.68
307	2012	3.25	3.27	5.69	5.99	6.79	7.94	9.25	8.4	6.92	5.64	5.16	3.4	72.07
307	2013	3	3.48	6.21	5.77	6.81	8.93	8.64	8.45	7.16	6	4.67	2.63	72.29
307	2014	4.18	2.36	5.65	6.71	7.09	7.27	8.04	8.71	5.88	5.84	3.62	1.99	68.12
307	2015	2.11	2.68	4.12	5.49	4.91	6.64	8.57	8.02	7.73	6.12	4.47	3.25	64.05
307	2016	2.66	4.28	5.72	5.43	5.36	6.45	8.89	7.41	4.95	6.08	4.56	3.23	65.13
307	2017	2.04	4.11	5.93	5.28	6.42	7.4	8.42	5.88	5.76	5.23	4.98	3.4	65.21
307	2018	4.33	4.57	4.9	5.66	7.94	9.02	9	7.98	4.57	3.31	3.52	2.93	68.99
307	2019	2.64	3.59	3.43	3.56	3.81	6.96	8.64	9.2	6.88	5.94	3.55	3.75	61.66
307	2020	2.98	2.77	4.52	3.42	6.32	8.98	9.32	9.32	5.41	5.61	4.52	2.74	66.32
307	2021	1.92	2.26	5.3	5.08	4.91	6.62	6.61	7.47	8.12	6.91	5.08	6.04	65.75
307	2022	2.88	2.47	7.37	6.08	5.38	9.24	10.92	9.03	7.73	6.26	4.19	3.61	75.16
307	2023	3.11	2.77	4.37	4.82	4.54	6.2	8.85	9.82	7.34	5.69	3.4	2.77	63.68
		3.063	3.23	5.008	5.627	5.945	7.925	8.905	8.333	6.503	5.465	4.314	3.157	67.48
		0.045	0.048	0.074	0.083	0.088	0.117	0.132	0.123	0.096	0.081	0.064	0.047	
		2.718	2.866	4.443	4.993	5.275	7.032	7.901	7.394	5.77	4.849	3.828	2.801	59.87



Compliance History Report

Compliance History Report for CN606309342, RN112130869, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN606309342, Childress Hall, LLC	Classification:	NOT APPLICABLE	Rating:	N/A
Regulated Entity:	RN112130869, CHILDRESS HALL	Classification:	NOT APPLICABLE	Rating:	N/A
Complexity Points:	N/A	Repeat Violator:	N/A		
CH Group:	08 - Sewage Treatment Facilities				
Location:	APPROXIMATELY 1.6 MILES W OF CHILDRESS ON US HIGHWAY 287 AND APPROXIMATELY 5.6 MILES N ON US HIGHWAY 287 ON CR 10 AND TRAVEL 2.5 MILES W ON CR P TO THE ENTRANCE OF CHILDRESS GOLF VILLAGE CHILDRESS, TX, CHILDRESS COUNTY				
TCEQ Region:	REGION 01 - AMARILLO				
ID Number(s):					
WASTEWATER PERMIT	WQ0016717001				

Compliance History Period: September 01, 2019 to August 31, 2024 **Rating Year:** 2024 **Rating Date:** 09/01/2024

Date Compliance History Report Prepared: March 03, 2025

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: January 30, 2020 to March 03, 2025

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: PT **Phone:** (512) 239-3581

Site and Owner/Operator History:

- | | |
|--|----|
| 1) Has the site been in existence and/or operation for the full five year compliance period? | NO |
| 2) Has there been a (known) change in ownership/operator of the site during the compliance period? | NO |

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:
N/A

B. Criminal convictions:
N/A

C. Chronic excessive emissions events:
N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):
N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):
A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.
N/A

F. Environmental audits:
N/A

Customer was not affiliated to Regulated Entity at time of Compliance History Rating.

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A



Compliance History Report

Compliance History Report for CN606347763, RN112130869, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN606347763, CHTX Club, LLC	Classification:	NOT APPLICABLE	Rating:	N/A
Regulated Entity:	RN112130869, CHILDRESS HALL	Classification:	NOT APPLICABLE	Rating:	N/A
Complexity Points:	N/A	Repeat Violator:	N/A		
CH Group:	08 - Sewage Treatment Facilities				
Location:	APPROXIMATELY 1.6 MILES W OF CHILDRESS ON US HIGHWAY 287 AND APPROXIMATELY 5.6 MILES N ON US HIGHWAY 287 ON CR 10 AND TRAVEL 2.5 MILES W ON CR P TO THE ENTRANCE OF CHILDRESS GOLF VILLAGE CHILDRESS, TX, CHILDRESS COUNTY				
TCEQ Region:	REGION 01 - AMARILLO				
ID Number(s):					
WASTEWATER PERMIT	WQ0016717001				
Compliance History Period:	September 01, 2019 to August 31, 2024	Rating Year:	2024	Rating Date:	09/01/2024
Date Compliance History Report Prepared:	March 03, 2025				
Agency Decision Requiring Compliance History:	Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.				
Component Period Selected:	January 30, 2020 to March 03, 2025				
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.					
Name:	PT		Phone:	(512) 239-3581	

Site and Owner/Operator History:

- | | |
|--|----|
| 1) Has the site been in existence and/or operation for the full five year compliance period? | NO |
| 2) Has there been a (known) change in ownership/operator of the site during the compliance period? | NO |

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:

N/A

Customer was not affiliated to Regulated Entity at time of Compliance History Rating.

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

Senate Bill 709 (84th Legislative Session, 2015) amended the Texas Water Code by adding new Section 5.5553, which requires the Texas Commission on Environmental Quality (TCEQ) to provide written notice to you at least thirty (30) days prior to the TCEQ's issuance of draft permits for applications that are located in your district.

CHTX Club, LLC and Childress Hall, LLC, P.O. Box 298, Childress, Texas 79201, have applied to the TCEQ for proposed Texas Land Application Permit No. WQ0016717001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 9,999 gallons per day via irrigation of 250 acres of public access land. The domestic wastewater treatment facility and disposal area will be located at 15641 County Road P, near the city of Childress, in Childress County, Texas 79201. TCEQ received this application on January 30, 2025. The permit application will be available for viewing and copying at Childress City Hall, 315 Commerce Street, Childress, in Childress County, Texas. 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 is not part of the application or notice. For the exact location, refer to the application. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-100.3041,34.531751&level=18>

TCEQ is preparing the initial draft permit. At the time the draft permit is issued, the applicant will be required to publish notice in a newspaper of general circulation, and the TCEQ will provide a copy of the notice of draft permit to persons who have requested to be on a mailing list.

Questions regarding this application may be directed to Mr. Deba Dutta, P.E., by calling 512-239-4608.

Issuance Date: _____



CHTX Club, LLC., Permit No. WQ0016717001 Application for a New Permit

From Che Shadle <Che.Shadle@ojdengineering.com>
Date Wed 3/5/2025 8:30 AM
To Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Andrew

I am requesting an extension to get you the information requested in our email shown below. We are waiting on soils samples, and have had some bad weather up here that has slowed us down. Let me know.

Thanks

Che Shadle, P.E.

President

OJD Engineering, LLC



2420 Lakeview Drive
Amarillo, TX 79109
ph: 806.352.7117 fax: 806.352.7188
cell: 806.681.0108
che.shadle@ojdengineering.com

www.ojdengineering.com

Engineering: F-4393 Surveying: F-10090900

From: Andrew Gorton <Andrew.Gorton@tceq.texas.gov>
Date: February 19, 2025 at 11:32:01 AM CST
To: egreytok@childresshall.com
Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>
Subject: CHTX Club, LLC., Permit No. WQ0016717001 Application for a New Permit

Good afternoon Mr. Greytok,

The Water Quality Assessment (WQA) Team of the Texas Commission on Environmental Quality has completed a preliminary review of the permit application information and identified deficiencies (attached) that must be addressed before the WQA Team can continue with the technical review. The deficient item(s) will require your response in a timely, complete, and accurate manner.

An accurate and complete revised permit application is essential for making recommendations to the commission regarding whether this permit should be issued. Based on the information provided in the application, the executive director does not have sufficient information to make a recommendation. Please send updated technically complete and accurate information within **14 days** (March 5th) of the date of this email.

Any revisions can be sent electronically to myself or Sara Holmes (cc'd on this email). Please let me know if you have any questions.

Thank you,

-Andy

Andrew Gorton, P.G.
Texas Commission on Environmental Quality
MC-150
PO Box 13087
Austin, TX 78711-3087
512.239.4585
Andrew.Gorton@tceq.texas.gov



RE: CHTX, LLC, WQ0016717001

From Che Shadle <Che.Shadle@ojdengineering.com>

Date Wed 3/5/2025 4:06 PM

To Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Cc Sara Holmes <Sara.Holmes@tceq.texas.gov>; Clint Green <Clint.Green@ojdengineering.com>

Andrew

Received. Thank you.

Che Shadle, P.E.

President

OJD Engineering, LLC



2420 Lakeview Drive
Amarillo, TX 79109
ph: 806.352.7117 fax: 806.352.7188
cell: 806.681.0108
che.shadle@ojdengineering.com

www.ojdengineering.com

Engineering: F-4393 Surveying: F-10090900

From: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Sent: Wednesday, March 5, 2025 4:05 PM

To: Che Shadle <Che.Shadle@ojdengineering.com>

Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>

Subject: CHTX, LLC, WQ0016717001

Good afternoon Che,

The Water Quality Assessment (WQA) Team of the Texas Commission on Environmental Quality has completed a review of the permit application information and identified deficiencies (attached) that must be addressed before the WQA Team can continue with the technical review. The deficient item(s) will require your response in a timely, complete, and accurate manner.

An accurate and complete revised permit application is essential for making recommendations to the commission regarding whether this permit should be issued. Based on the information provided in the application, the executive director does not have sufficient information to make a recommendation. Therefore, you must send updated technically complete and accurate information by **March 19, 2025**.

Please let us know if you have any questions.

Thank you,

-Andy

Andrew Gorton, P.G.

Texas Commission on Environmental Quality

MC-150

PO Box 13087

Austin, TX 78711-3087

512.239.4585

Andrew.Gorton@tceq.texas.gov



March 12, 2025

Andrew Gorton, P.G.
TCEQ – MC148
P.O. Box 13087
Austin, Texas 78711-3087

Re: CHTX Club, LLC – Permit No. WQ00167170021

Mr. Gorton:

Below are the responses to the items that you requested in the Technical Completeness Review that you sent on Thursday, February 27, 2025

GEOLOGY and GROUNDWATER

1. This reviewer identified approximately 20 water wells within one mile of the proposed facility, including the irrigation areas, using the Texas Water Development Board Water Data Interactive website. These wells include several additional wells in the “123900”-series, and also 65344, 241006, 630794, 665199, 665200, 665201, 687993, 687992, and 688000. Please include these wells on the USGDS topographic map in the application, and for each well within one-half mile of the proposed facility, including the irrigation areas, please complete Table 3.0(3) in Worksheet 3.0 and provide well logs for these wells.

Please see the attached revised Table 3.0(3) in Worksheet 3.0 and the well log (Attachment 1) for each listed well. A revised USGS topographic map (Attachment 2) with each well within one-half mile of the proposed facility, including irrigation areas is provided.

2. Attachment T-6, Liner Certification: Note that a wastewater pond with a synthetic liner is required to include an underdrain with a leachate detection and collection system per 30 TAC §217.203. Please contact the Water Quality Division Plans and Specs Team at (512) 239-4444 to discuss the proposal to exclude the underdrain and leachate detection and collection system presented in the application.

A variance is being requested for the use of synthetic liner without a leak detection/collection system. (Attachment 3, Summary Transmittal Letter)

3. Attachment T-9, Groundwater Quality Technical Report: Please include information on the wastewater pond liner in the Report.

Groundwater Quality Technical Report (Attachment 4) has been revised to include information on the wastewater pond liner.

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AGRONOMY and SOILS

1. Domestic Technical Report 1.0, Sections 1 and 2. Treatment Process – The proposed flow in the application lists 9,999 GPD, but the treatment process description lists 150 GPD. Please clarify what the correct proposed flow rate is (this comment also applies to Technical Report 1.1).

Domestic Technical Report 1.0, Sections 1 and 2. Treatment Process have been revised to remove the treatment process description lists 150 GPD and state 9,999 GPD of treated effluent and 750,000 GPD freshwater applied to 250 acres of golf course. Please see attached revised TCEQ-10054 Page 2 of 66 and Page 19 of 66 (Attachment 5).

2. Domestic Worksheet 3.0, Section 2. Land Application Site(s) – Please include a cool season crop if year-round irrigation is anticipated.

Bermuda Grass is the cool season crop for this permit. As shown in (Attachment 6), Bermuda has ET taken place during cool seasons. Irrigation, weather permitting, is applied daily year round with the effluent being mixed with 750,000 gpd nutrient uptake from the effluent is negligible.

3. Domestic Worksheet 3.0, Section 5. Annual Cropping Plan – Please include a cool season crop if year-round irrigation is anticipated.

Bermuda Grass is the cool season crop for this permit. As shown in (Attachment 6), Bermuda has ET taken place during cool seasons. Irrigation, weather permitting, is applied daily year round with the effluent being mixed with 750,000 gpd nutrient uptake from the effluent is negligible.

4. Domestic Worksheet 3.0, Section 8. Soil Map and Soil Analyses - Please submit Soil Analyses for the land application areas.

Provide analyses of the soil in the land application site(s) for pH [2:1 (v/v) water/soil mixture]; electrical conductivity [2:1 (v/v) water/soil mixture]; sodium adsorption ratio (SAR) from a water saturated paste and its constituent parameters (water-soluble Na, Ca and Mg reported in mg/L); total Kjeldahl nitrogen (TKN); total nitrogen (organic-nitrogen + nitrate-nitrogen + ammonium-nitrogen); nitrate-nitrogen (from a 1 N KCl soil extract); potassium, phosphorous; calcium; magnesium; sulfur; and sodium. The nutrient parameters should be analyzed on a plant-available basis. Phosphorus shall be analyzed according to the Mehlich III procedure with inductively coupled plasma and potassium, calcium, magnesium, sodium, and sulfur may also be analyzed in the Mehlich III soil extract. Plant-available phosphorus, potassium, calcium, magnesium, sodium and sulfur shall be reported on a dry weight basis in mg/kg; electrical conductivity, in mmho/cm [same as deciSiemens/meter (dS/m)]; and pH, in standard units. When reporting the results, include all information concerning fertilizer recommendations. Provide a copy of this plan to the analytical laboratory prior to sample analysis.

Composite or benchmark sampling techniques should be used when sampling the soils of the wastewater application area. Individual soil types, as defined by the USDA Soil Conservation Service Soil Survey, should be sampled individually at zones 0-6, 6-18, and 18-

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The Benchmark

30 inches. Each composite sample must represent no more than 80 acres with no less than 15 subsamples representing each composite sample. Each benchmark sample must represent no more than 80 acres with at least 7 subsamples for each benchmark composite sample. Subsamples must be composited by individual site, zone, and soil type for analysis and reporting.

Attached are the soil analyses (Attachment 7) results of the sampled areas.

5. Domestic Worksheet 3.1, Surface Land Disposal of Effluent - Please fill out Section 1 in its entirety, including design application rate and method of application. Please also fill out Section 2 of the worksheet.

Please see attached Domestic Worksheet 3.1 with completed Sections 1 and 2 (Attachment 8).

Thank you,

Che Shadle, P.E.
President
OJD Engineering, LLC
F-4393

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ph: 806 352.7117

2420 Lakeview Dr. Amarillo, TX. 79109

fax: 806 352.7188

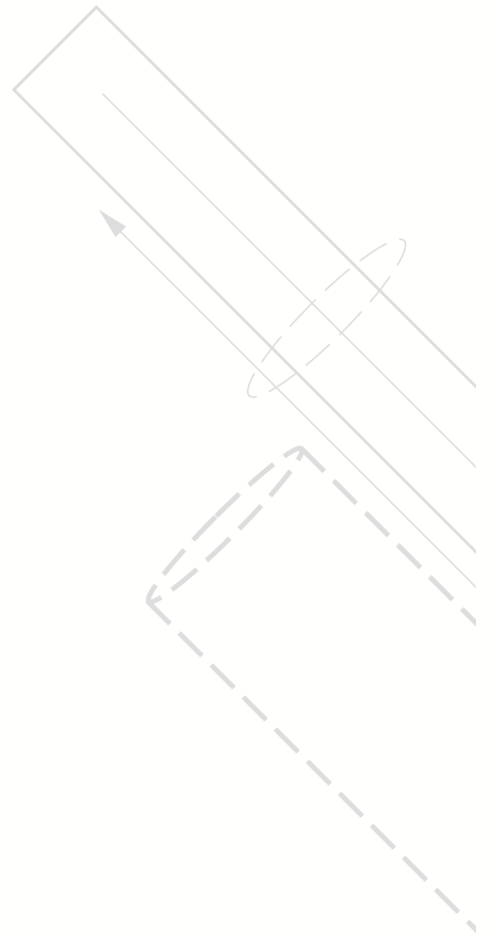
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The Benchmark

ATTACHMENT 1



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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:** T-7

- 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:** A-4

- 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
1230601	Stock	Unknown	Cased	
1230602	Unused	N	Cased	
1230901	Unused	N	Cased	
65344	Irrigation	Unknown	Cased	
See Attachment	For Additional			

Table 3.0(3) - Water Well Data

Well ID	Well Use	Producing?Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
241006	Stock	Y	Cased	
630794	Irrigation	Y	Cased	
665199	Test Well	N	Plugged	
665200	Test Well	N	Plugged	
665201	Test Well	N	Plugged	
687992	Domestic	Y	Cased	
687993	Domestic	Y	Cased	
688000	Domestic	Y	Cased	
1230902	Unused	N	Cased	
1230903	Unused	N	Cased	
1230905	Unused	N	Cased	
1230906	Stock	Y	No Data	
1230907	Unused	N	Cased	
1230920	Domestic	Y	Cased	
630794	Irrigation	Y	Cased	

[GWDB Reports and Downloads](#)
[Well Basic Details](#)
[Scanned Documents](#)

State Well Number	1230601
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.544167
Latitude (degrees minutes seconds)	34° 32' 39" N
Longitude (decimal degrees)	-100.285834
Longitude (degrees minutes seconds)	100° 17' 09" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1735
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	103
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	4/0/1949
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Stock
Water Level Observation	Historical
Water Quality Available	No
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Windmill
Annular Seal Method	
Surface Completion	
Owner	Howard Head City well
Driller	Layne Texas Co.
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	Texas Water Development Board
Created Date	9/13/2001
Last Update Date	10/9/2001

Remarks	City # 13. Yield 138 gpm with 31 ft drawdown when drilled. Water levels taken on 3/30/49 were taken as part of a pump test prior to well completion.
---------	--

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	40
8	Blank	Steel			40	69
8	Screen	Steel			69	99
8	Blank	Steel			99	103

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

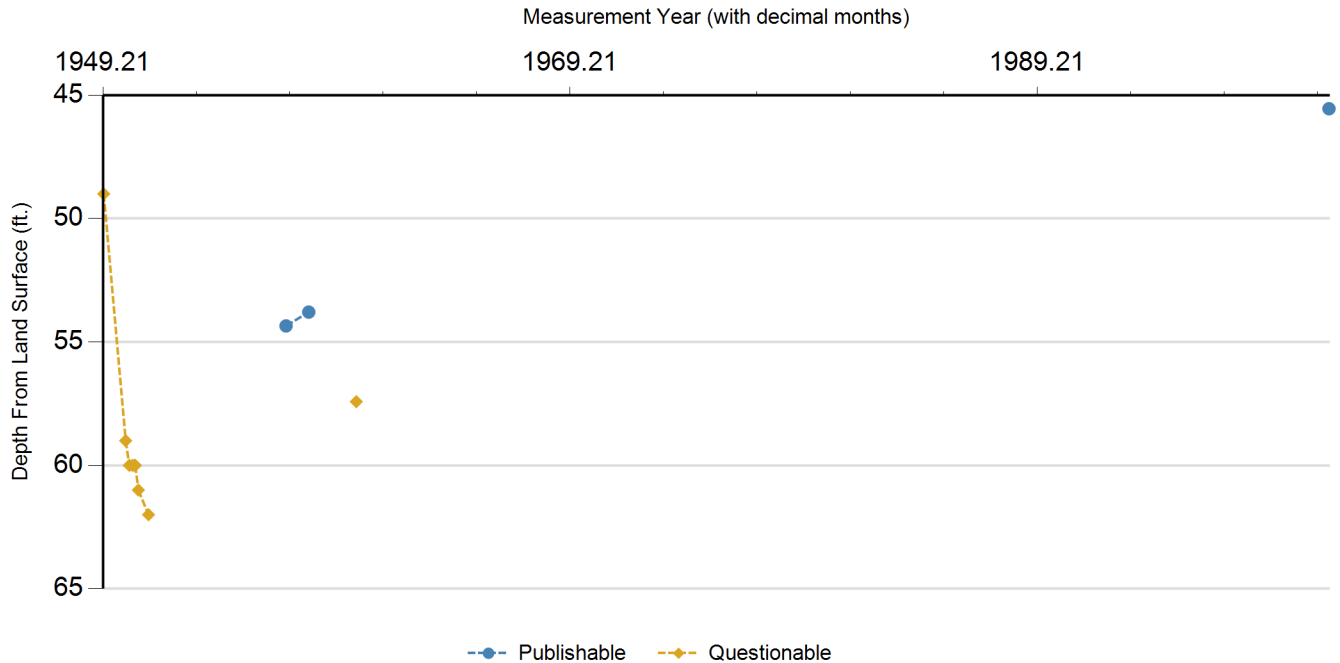
Borehole - No Data

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
Q	3/30/1949		49		1686	1	Registered Water Well Driller	Unknown	17	
Q	3/30/1949		80	31.00	1655	2	Registered Water Well Driller	Unknown	17	
Q	3/30/1949		51	(29.00)	1684	3	Registered Water Well Driller	Unknown	17	
Q	3/8/1950		59	8.00	1676	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/4/1950		60	1.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/23/1950		60	0.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/24/1950		60	0.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		60	0.00	1675	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		61	1.00	1674	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		62	1.00	1673	1	Other or Source of Measurement Unknown	Unknown	2	
P	1/18/1957		54.35	(7.65)	1680.65	1	Texas Water Development Board	Steel Tape		
P	1/8/1958		53.79	(0.56)	1681.21	1	Texas Water Development Board	Steel Tape		
Q	1/21/1960		57.42	3.63	1677.58	1	Texas Water Development Board	Steel Tape	2	
P	9/13/2001		45.55	(11.87)	1689.45	1	Texas Water Development Board	Steel Tape		

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable

Remark ID	Remark Description
2	Pumping-level measurement
17	Measurement before well completion

Water Quality Analysis - No Data Available

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State Well Number	1230602
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.543334
Latitude (degrees minutes seconds)	34° 32' 36" N
Longitude (decimal degrees)	-100.277222
Longitude (degrees minutes seconds)	100° 16' 38" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1722
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	110
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	4/0/1949
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Historical
Water Quality Available	No
Pump	Turbine
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	City of Childress No. 14
Driller	Layne Texas Co.
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	U.S. Geological Survey
Created Date	2/13/1951
Last Update Date	

Remarks City # 14. Yield 310 gpm with 27 ft drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	40
8	Blank	Steel			40	56
8	Screen	Steel			56	86
8	Blank	Steel			86	96

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

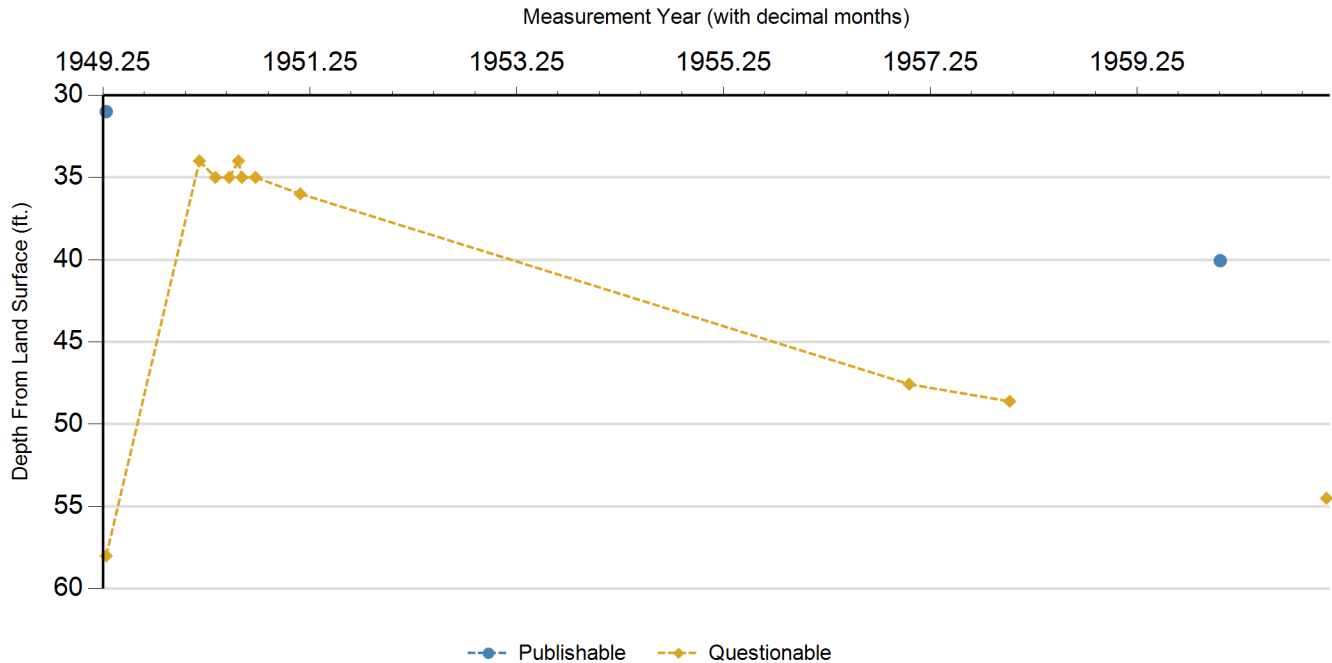
Borehole - No Data

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	4/14/1949		31		1691	1	Other or Source of Measurement Unknown	Unknown	1	
Q	4/14/1949		58	27.00	1664	2	Other or Source of Measurement Unknown	Unknown	2	
Q	3/8/1950		34	(24.00)	1688	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/4/1950		35	1.00	1687	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/23/1950		35	0.00	1687	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/26/1950		34	(1.00)	1688	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		35	1.00	1687	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		35	0.00	1687	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		36	1.00	1686	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/18/1957		47.57	11.57	1674.43	1	Texas Water Development Board	Steel Tape	2	
Q	1/8/1958		48.61	1.04	1673.39	1	Texas Water Development Board	Steel Tape	2	
P	1/21/1960		40.06	(8.55)	1681.94	1	Texas Water Development Board	Steel Tape		
Q	2/1/1961		54.5	14.44	1667.5	1	Texas Water Development Board	Steel Tape	2	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable

Remark ID	Remark Description
1	Accurately reflects water level conditions
2	Pumping-level measurement

Water Quality Analysis - No Data Available

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State Well Number	1230901
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.538056
Latitude (degrees minutes seconds)	34° 32' 17" N
Longitude (decimal degrees)	-100.284167
Longitude (degrees minutes seconds)	100° 17' 03" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1740
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	123
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	5/0/1949
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Historical
Water Quality Available	No
Pump	Turbine
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	City of Childress No. 12
Driller	Layne Texas Co.
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	U.S. Geological Survey
Created Date	2/13/1951
Last Update Date	5/20/2003

Remarks City # 12. Yield 112 gpm with 44 ft drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	60
8	Blank	Steel			60	83
8	Screen	Steel			83	113
8	Blank	Steel			113	123

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

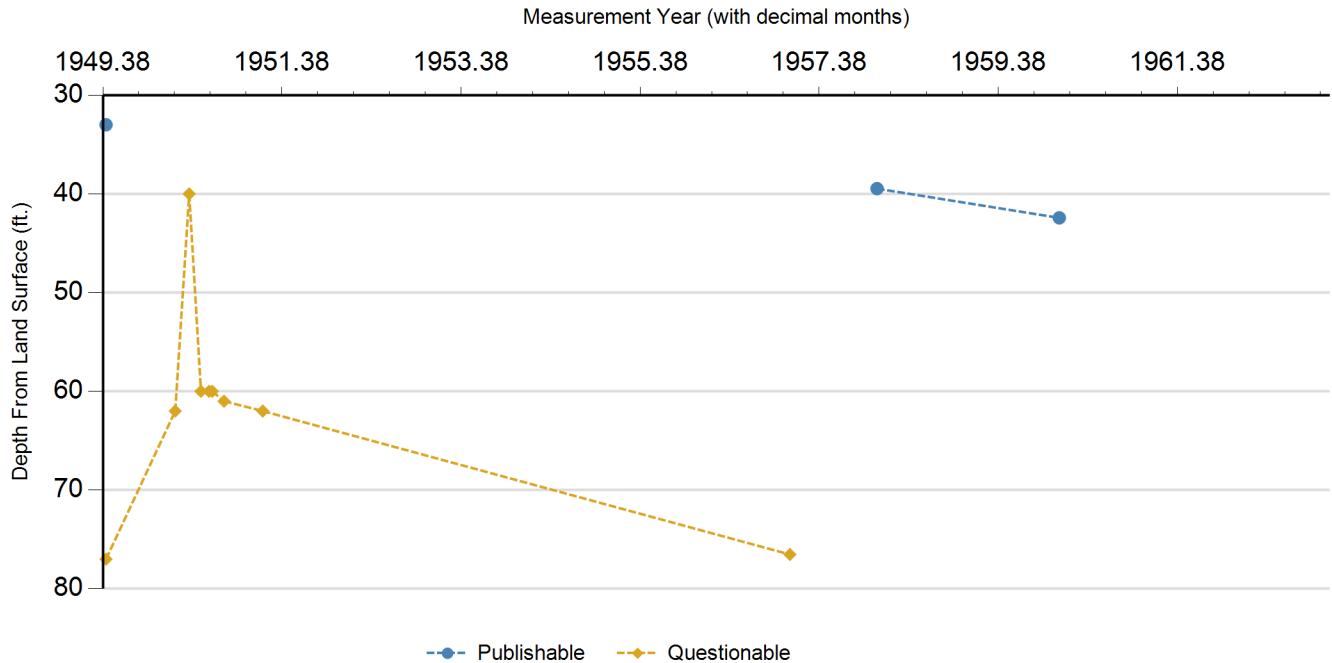
Borehole - No Data

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	5/30/1949		33		1707	1	Other or Source of Measurement Unknown	Unknown	1	
Q	5/30/1949		77	44.00	1663	2	Other or Source of Measurement Unknown	Unknown	2	
Q	3/7/1950		62	(15.00)	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/4/1950		40	(22.00)	1700	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/22/1950		60	20.00	1680	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/25/1950		60	0.00	1680	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		60	0.00	1680	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		61	1.00	1679	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		62	1.00	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/18/1957		76.53	14.53	1663.47	1	Texas Water Development Board	Steel Tape	2	
P	1/8/1958		39.47	(37.06)	1700.53	1	Texas Water Development Board	Steel Tape		
P	1/21/1960		42.43	2.96	1697.57	1	Texas Water Development Board	Steel Tape		
X	1/16/1963					1	Texas Water Development Board		32	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
1	Accurately reflects water level conditions
2	Pumping-level measurement
32	Well temporarily inaccessible due to winterization or debris

Water Quality Analysis - No Data Available

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STATE OF TEXAS WELL REPORT for Tracking #65344

Owner: **Rick Husband**
Address: **16100 CR S
Childress, TX 79201**
Well Location: **No Data**
Well County: **Hall**

Owner Well #: **No Data**
Grid #: **12-30-5**
Latitude: **34° 33' 26" N**
Longitude: **100° 19' 09" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **7/11/2005**

Drilling End Date: **7/12/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	20	0	105

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	10	105	Gravel	5/8

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	10

Seal Method: **water**

Distance to Property Line (ft.): **No Data**

Sealed By: **Pete Neufeld**

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: **Surface Slab Installed**

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: **Unknown**

Did the driller knowingly penetrate any strata which
contained injurious constituents?: **Unknown**

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: **Monte Moore Drilling**
1313 N. Hwy. 137
Lamesa, TX 79331

Driller Name: **Monte Moore**

License Number: **3289**

Apprentice Name: **Pete Neufeld**

Apprentice Number: **0000393**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	7	topsoil
7	21	sandy clay
21	70	sand
70	87	sand/gravel
87	93	clay
93	102	sand
102	105	red clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
12 3/4"	New	Steel Blank	(0-45) Screen(45-105) .125

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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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 #241006

Owner:	Howard Head	Owner Well #:	1
Address:	1547 CR 8 Childress, TX 79201	Grid #:	12-30-9
Well Location:	CR 10 & CR P Childress, TX 79201	Latitude:	34° 31' 39" N
Well County:	Childress	Longitude:	100° 16' 44" W
		Elevation:	1758 ft. above sea level
Type of Work:	New Well	Proposed Use:	Stock

Drilling Start Date: 12/9/2010 Drilling End Date: 12/9/2010

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8.5	0	100

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
Filter Pack Intervals:	10	100	Gravel	1/4"

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	10	6

Seal Method: Slurry Mix

Distance to Property Line (ft.): 100+

Sealed By: Driller

Distance to Septic Field or other
concentrated contamination (ft.): 100+

Distance to Septic Tank (ft.): No Data

Method of Verification: Sight

Surface Completion: Surface Sleeve Installed

Water Level: 50 ft. below land surface on 2010-12-09 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 80

Well Tests: Pump Yield: 10 GPM with 0 ft. drawdown after 1 hours

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
No Data	No Data

Chemical Analysis Made: **Unknown**

Did the driller knowingly penetrate any strata which
contained injurious constituents?: **Unknown**

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: **WP Drilling**
PO Box 29
Quanah, TX 79252

Driller Name: **Gary Walther**

License Number: **58106**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	63	Sand
63	66	Gravel
66	75	Sand
75	90	Gravel
90	100	Sand

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
5" New Plastic 0/100 0.035			

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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 #630794

Owner:	HOWARD HEAD	Owner Well #:	APWR-1
Address:	1547 COUNT ROAD 9 CHILDRESS, TX 79201	Grid #:	12-30-9
Well Location:	1547 COUNT ROAD 9 CHILDRESS, TX 79201	Latitude:	34° 31' 12.71" N
Well County:	Childress	Longitude:	100° 17' 28.46" W
		Elevation:	1783 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 7/19/2022 Drilling End Date: 12/15/2022

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	18.75	0	175
	13.5	175	258

Drilling Method: Air Rotary; Mud (Hydraulic) Rotary

Borehole Completion: FROM -165 TO 258 WITH 3/8

Annular Seal Data: No Data

Seal Method: PUMPED WITH TRIMMIE

Sealed By: Driller

Distance to Property Line (ft.): MILES

Distance to Septic Field or other
concentrated contamination (ft.): NONE

Distance to Septic Tank (ft.): No Data

Method of Verification: GPS

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level: 79.7 ft. below land surface on 2022-12-19

Packers: No Data

Type of Pump: Submersible

Pump Depth (ft.): 275

Well Tests: Jetted Yield: 500 GPM with 130 ft. drawdown after 12 hours

Water Quality:

Strata Depth (ft.)	Water Type
180 - 258	FRESH

Chemical Analysis Made: **Yes**

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: **WEST TEXAS WATER WELL SERVICE**
3410 MANKINS AVE
ODESSA, TX 79764

Driller Name: **RUSSELL SOUTHERLAND** License Number: **2713**

Comments: **DRILLED 300FT AND THERE IS SLOUGH IN BOREHOLE FROM 258' TO 300 FT**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	30	SANDY RED TOP, SOIL W/ STREAKS OF SMALL GRAVEL
30	62	FINE TAN SAND
62	107	SAND GRAVEL
107	132	RED CLAY
132	137	YELLOW SHALE
137	140	BLUE SHALE
140	180	RED, BLUE SHALE
180	258	SANDSTONE W/ SAND TAN

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
14.5	HSLA	New Steel	0.25	2	175
10.75	Blank	New Stainless Steel	0.25	3	198
10.75	Screen	New Stainless Steel	0.050	198	258

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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 #665199

Owner:	CHTX Club LLC	Owner Well #:	No Data
Address:	1599 CR7 Childress, TX 79201	Grid #:	12-30-8
Well Location:	.25 Miles North of Road P and Road 7 In Country, TX	Latitude:	34° 32' 00.89" N
Well County:	Childress	Longitude:	100° 18' 26.06" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Test Well

Drilling Start Date: 4/18/2024 Drilling End Date: 4/18/2024

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.5	0	100

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Plugged

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	15	Concrete 3 Bags/Sacks
	15	100	Bentonite 18 Bags/Sacks

Seal Method: Poured

Sealed By: Driller

Distance to Property Line (ft.): >500

Distance to Septic Field or other
concentrated contamination (ft.): >1000

Distance to Septic Tank (ft.): >1000

Method of Verification: GPS

Surface Completion: Plugged Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	Cement	0	15
	Bentonite	15	100

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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: **Carter Drilling Co., Inc**
3301 56th St
Lubbock, TX 79413

Driller Name: **Bruce Carter**

License Number: **2320**

Apprentice Name: **Mark Rhoads**

Apprentice Number: **60646**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	Top Soil
3	17	Sand
17	30	Sandy Clay
30	96	Sand & Gravel
96	100	Red Bed

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
No Data			

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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 #665200

Owner:	CHTX Club LLC	Owner Well #:	No Data
Address:	1599 CR7 Childress, TX 79201	Grid #:	12-30-8
Well Location:	.25 Miles North of Road P and Road 7 In Country, TX	Latitude:	34° 31' 55.74" N
Well County:	Childress	Longitude:	100° 18' 19.12" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Test Well

Drilling Start Date: 4/18/2024 Drilling End Date: 4/18/2024

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.5	0	130

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Plugged

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	15	Concrete 3 Bags/Sacks
	15	130	Bentonite 22 Bags/Sacks

Seal Method: Poured

Sealed By: Driller

Distance to Property Line (ft.): >500

Distance to Septic Field or other
concentrated contamination (ft.): >1000

Distance to Septic Tank (ft.): >1000

Method of Verification: GPS

Surface Completion: Plugged Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	Cement	0	15
	Bentonite	15	130

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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: **Carter Drilling Co., Inc**
3301 56th St
Lubbock, TX 79413

Driller Name: **Bruce Carter**

License Number: **2320**

Apprentice Name: **Mark Rhoads**

Apprentice Number: **60646**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	Top Soil
3	12	Sand
12	34	Sandy Clay
34	125	Sand & Gravel
125	130	Red Bed

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
No Data			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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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 #665201

Owner:	CHTX Club LLC	Owner Well #:	No Data
Address:	1599 CR7 Childress, TX 79201	Grid #:	12-30-8
Well Location:	.25 Miles North of Road P and Road 7 In Country, TX	Latitude:	34° 31' 49.55" N
Well County:	Childress	Longitude:	100° 18' 08.6" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Test Well

Drilling Start Date: 4/18/2024 Drilling End Date: 4/18/2024

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.5	0	130

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Plugged

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	15	Concrete 3 Bags/Sacks
	15	135	Bentonite 22 Bags/Sacks

Seal Method: Poured

Sealed By: Driller

Distance to Property Line (ft.): >500

Distance to Septic Field or other
concentrated contamination (ft.): >1000

Distance to Septic Tank (ft.): >1000

Method of Verification: GPS

Surface Completion: Plugged Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	Cement	0	15
	Bentonite	15	135

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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: **Carter Drilling Co., Inc**
3301 56th St
Lubbock, TX 79413

Driller Name: **Bruce Carter**

License Number: **2320**

Apprentice Name: **Mark Rhoads**

Apprentice Number: **60646**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	Top Soil
3	18	Sand
18	48	Sandy Clay
48	133	Sand & Gravel
133	135	Red Bed

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
No Data			

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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 #687992

Owner:	CHTX Club LLC	Owner Well #:	No Data
Address:	1599 CR7 Childress, TX 79201	Grid #:	12-30-8
Well Location:	.25 Miles North of Road P and Road 7 In Country, TX	Latitude:	34° 31' 49.55" N
Well County:	Childress	Longitude:	100° 18' 08.6" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 12/16/2024 Drilling End Date: 12/17/2024

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	21	0	151

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Perforated or Slotted

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	31	Cement 73 Bags/Sacks

Seal Method: Positive Displacement

Sealed By: Driller

Distance to Property Line (ft.): >500

Distance to Septic Field or other
concentrated contamination (ft.): >1000

Distance to Septic Tank (ft.): >1000

Method of Verification: GPS

Surface Completion: Pitless Adapter Used

Surface Completion by Driller

Water Level: 80 ft. below land surface on 2024-12-17 Measurement Method: Electric Line

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 148

Well Tests: Pump Yield: 34 GPM with 50 ft. drawdown after 36 hours

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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: **Carter Drilling Co., Inc**
3301 56th St
Lubbock, TX 79413

Driller Name: **Bruce Carter**

License Number: **2320**

Apprentice Name: **Mark Rhoads**

Apprentice Number: **60646**

Comments: **No Data**

Report Amended on 2/3/2025 by Request #44292

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	Top Soil
3	18	Sand
18	30	Sandy Clay
30	147	Sand & Gravel
147	151	Red Bed

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
12.25	Blank	New Plastic (PVC)	SDR 21	0	31
12.25	Perforated or Slotted	New Plastic (PVC)	SDR 21 0.035	31	151

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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 #687993

Owner:	CHTX Club LLC	Owner Well #:	No Data
Address:	1599 CR7 Childress, TX 79201	Grid #:	12-30-8
Well Location:	.25 Miles North of Road P and Road 7 In Country, TX	Latitude:	34° 31' 55.74" N
Well County:	Childress	Longitude:	100° 18' 19.12" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 12/17/2024 Drilling End Date: 12/18/2024

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	21	0	143

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Perforated or Slotted

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	23	Cement 54 Bags/Sacks

Seal Method: Positive Displacement

Sealed By: Driller

Distance to Property Line (ft.): >500

Distance to Septic Field or other
concentrated contamination (ft.): >1000

Distance to Septic Tank (ft.): >1000

Method of Verification: GPS

Surface Completion: Pitless Adapter Used

Surface Completion by Driller

Water Level: 67 ft. below land surface on 2024-12-19 Measurement Method: Electric Line

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 142

Well Tests: Pump Yield: 52 GPM with 55 ft. drawdown after 36 hours

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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: **Carter Drilling Co., Inc**
3301 56th St
Lubbock, TX 79413

Driller Name: **Bruce Carter**

License Number: **2320**

Apprentice Name: **Mark Rhoads**

Apprentice Number: **60646**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	Top Soil
3	12	Sand
12	34	Sandy Clay
34	140	Sand & Gravel
140	143	Red Bed

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
12.25	Blank	New Plastic (PVC)	SDR 21	0	23
12.25	Perforated or Slotted	New Plastic (PVC)	SDR 21 0.035	23	143

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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 #688000

Owner:	CHTX Club LLC	Owner Well #:	No Data
Address:	1599 CR7 Childress, TX 79201	Grid #:	12-30-8
Well Location:	.25 Miles North of Road P and Road 7 In Country, TX	Latitude:	34° 31' 49.55" N
Well County:	Childress	Longitude:	100° 18' 08.6" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 12/19/2024 Drilling End Date: 12/20/2024

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	21	0	175

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Perforated or Slotted

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	90	Cement 77 Bags/Sacks

Seal Method: Positive Displacement

Sealed By: Driller

Distance to Property Line (ft.): >500

Distance to Septic Field or other
concentrated contamination (ft.): >1000

Distance to Septic Tank (ft.): >1000

Method of Verification: GPS

Surface Completion: Pitless Adapter Used

Surface Completion by Driller

Water Level: 99 ft. below land surface on 2024-12-23 Measurement Method: Electric Line

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 174

Well Tests: Pump Yield: 260 GPM with 78 ft. drawdown after 36 hours

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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: **Carter Drilling Co., Inc**
3301 56th St
Lubbock, TX 79413

Driller Name: **Bruce Carter**

License Number: **2320**

Apprentice Name: **Mark Rhoads**

Apprentice Number: **60646**

Comments: **No Data**

Report Amended on 2/19/2025 by Request #44424

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	Top Soil
3	18	Sand
18	48	Sandy Clay
48	133	Sand & Gravel
133	135	Red Bed
135	170	Sand
170	175	Red Bed

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
12.25	Blank	New Plastic (PVC)	SDR 21	0	95
12.25	Perforated or Slotted	New Plastic (PVC)	SDR 21 0.035	95	175

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-902**

[GWDB Reports and Downloads](#)
[Well Basic Details](#)
[Scanned Documents](#)

State Well Number	1230902
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.537222
Latitude (degrees minutes seconds)	34° 32' 14" N
Longitude (decimal degrees)	-100.276389
Longitude (degrees minutes seconds)	100° 16' 35" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1745
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	87
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	1/0/1947
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

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	City of Childress No. 9
Driller	Layne Texas Co.
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	U.S. Geological Survey
Created Date	2/13/1951
Last Update Date	

Remarks City # 9. Yield 350 gpm with 20 ft drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	42
8	Blank	Steel			42	58
8	Screen	Steel			58	87

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

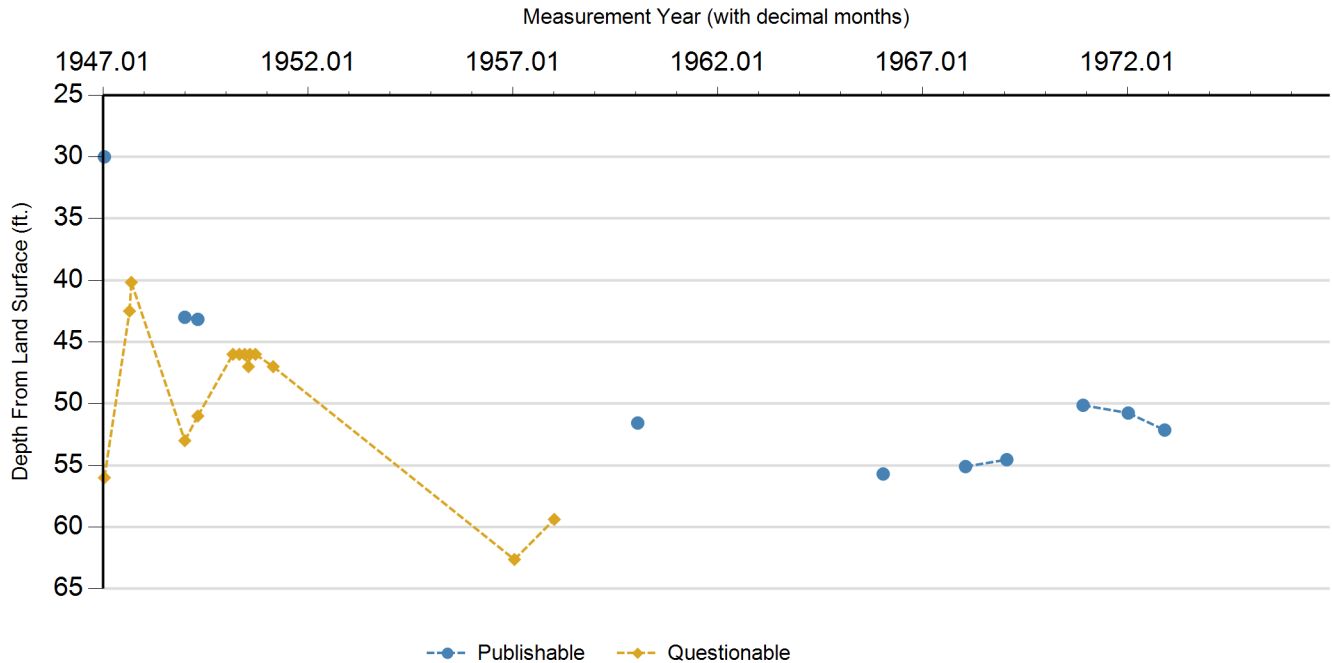
Borehole - No Data

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	1/16/1947		30		1715	1	Other or Source of Measurement Unknown	Unknown	1	
Q	1/16/1947		56	26.00	1689	2	Other or Source of Measurement Unknown	Unknown	2	
Q	8/30/1947		42.5	(13.50)	1702.5	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/16/1947		40.17	(2.33)	1704.83	1	Other or Source of Measurement Unknown	Unknown	2	
P	1/2/1949		43	2.83	1702	1	Other or Source of Measurement Unknown	Unknown	1	
Q	1/2/1949		53	10.00	1692	2	Other or Source of Measurement Unknown	Unknown	2	
P	4/28/1949		43.17	(9.83)	1701.83	1	Other or Source of Measurement Unknown	Unknown	1	
Q	4/28/1949		51	7.83	1694	2	Other or Source of Measurement Unknown	Unknown	2	
Q	3/6/1950		46	(5.00)	1699	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/3/1950		46	0.00	1699	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/21/1950		46	0.00	1699	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/24/1950		47	1.00	1698	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		46	(1.00)	1699	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		46	0.00	1699	1	Other or Source of Measurement Unknown	Unknown	2	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-902**

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
Q	1/0/1951		47	1.00	1698	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/18/1957		62.63	15.63	1682.37	1	Texas Water Development Board	Steel Tape	2	
Q	1/8/1958		59.38	(3.25)	1685.62	1	Texas Water Development Board	Steel Tape	2	
P	1/21/1960		51.57	(7.81)	1693.43	1	Texas Water Development Board	Steel Tape		
X	1/16/1963					1	Texas Water Development Board		19	
X	1/14/1964					1	Texas Water Development Board		19	
X	1/13/1965					1	Texas Water Development Board		19	
P	1/17/1966		55.7		1689.3	1	Texas Water Development Board	Steel Tape		
X	1/23/1967					1	Texas Water Development Board		19	
P	1/21/1968		55.1		1689.9	1	Texas Water Development Board	Steel Tape		
P	1/23/1969		54.54	(0.56)	1690.46	1	Texas Water Development Board	Steel Tape		
X	1/15/1970					1	Texas Water Development Board		30	
P	12/8/1970		50.13		1694.87	1	Texas Water Development Board	Steel Tape		
P	1/10/1972		50.76	0.63	1694.24	1	Texas Water Development Board	Steel Tape		
P	12/5/1972		52.14	1.38	1692.86	1	Texas Water Development Board	Steel Tape		
X	12/2/1974					1	Texas Water Development Board		30	
X	12/9/1975					1	Texas Water Development Board		30	
X	12/2/1976					1	Texas Water Development Board		30	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
1	Accurately reflects water level conditions
2	Pumping-level measurement
19	Well pumping
30	Well temporarily inaccessible due to impassable roads, locked gate, etc.

Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (<https://www.twdb.texas.gov/groundwater/data/gwdb rpt.asp>) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

[GWDB Reports and Downloads](#)
[Well Basic Details](#)
[Scanned Documents](#)

State Well Number	1230903
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.539445
Latitude (degrees minutes seconds)	34° 32' 22" N
Longitude (decimal degrees)	-100.271944
Longitude (degrees minutes seconds)	100° 16' 19" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1758
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	132
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	3/12/1947
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	City of Childress No. 10
Driller	Layne Texas Co.
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	U.S. Geological Survey
Created Date	2/13/1951
Last Update Date	

Remarks City # 10. Yield 180 gpm with 28 ft drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank				0	44
8	Blank				44	74
8	Screen				74	115

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

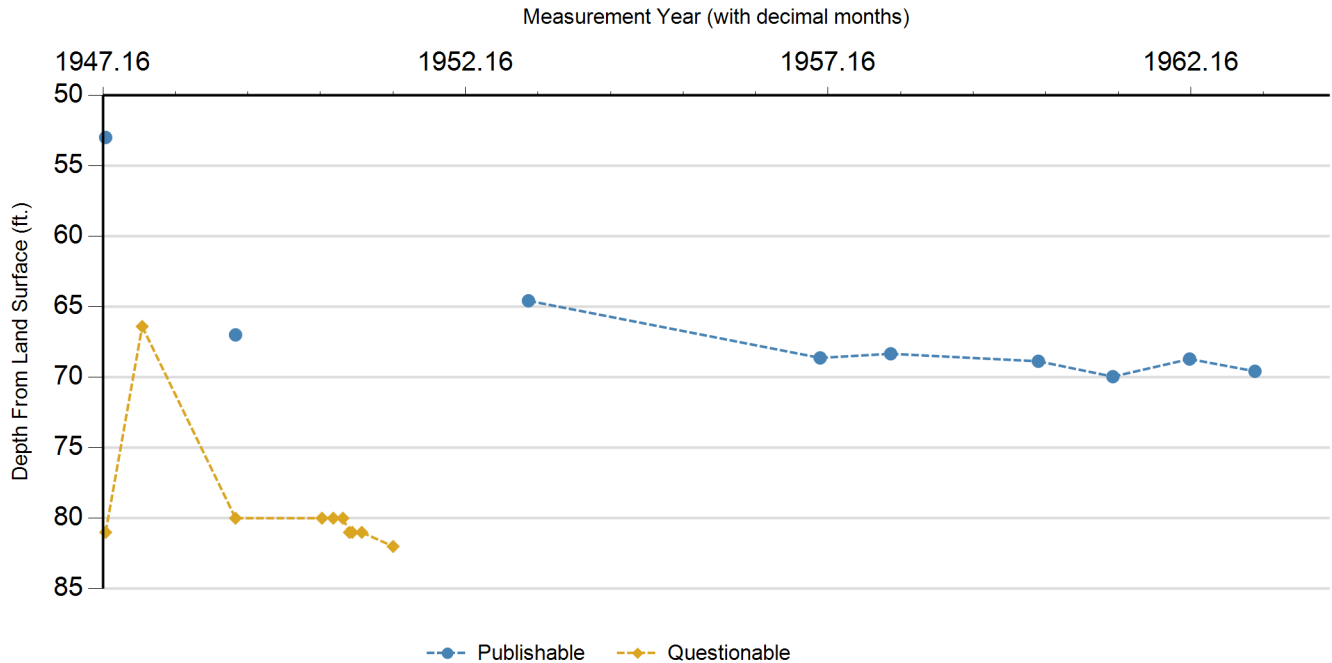
Borehole - No Data

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	3/12/1947		53		1705	1	Other or Source of Measurement Unknown	Unknown	1	
Q	3/12/1947		81	28.00	1677	2	Other or Source of Measurement Unknown	Unknown	2	
Q	9/16/1947		66.4	(14.60)	1691.6	1	Other or Source of Measurement Unknown	Unknown	2	
Q	12/31/1948		80	13.60	1678	1	Other or Source of Measurement Unknown	Unknown	2	
P	12/31/1948		67	(13.00)	1691	2	Other or Source of Measurement Unknown	Unknown	1	
Q	3/6/1950		80	13.00	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/3/1950		80	0.00	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/21/1950		80	0.00	1678	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/24/1950		81	1.00	1677	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		81	0.00	1677	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		81	0.00	1677	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		82	1.00	1676	1	Other or Source of Measurement Unknown	Unknown	2	
P	1/10/1953		64.58	(17.42)	1693.42	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/18/1957		68.63	4.05	1689.37	1	Texas Water Development Board	Steel Tape		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-903**

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	1/8/1958		68.34	(0.29)	1689.66	1	Texas Water Development Board	Steel Tape		
P	1/21/1960		68.87	0.53	1689.13	1	Texas Water Development Board	Steel Tape		
P	2/1/1961		69.96	1.09	1688.04	1	Texas Water Development Board	Steel Tape		
P	2/22/1962		68.71	(1.25)	1689.29	1	Texas Water Development Board	Steel Tape		
P	1/16/1963		69.58	0.87	1688.42	1	Texas Water Development Board	Steel Tape		
X	1/14/1964					1	Texas Water Development Board		32	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
1	Accurately reflects water level conditions
2	Pumping-level measurement
32	Well temporarily inaccessible due to winterization or debris

Water Quality Analysis - No Data Available

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State Well Number	1230905
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.535
Latitude (degrees minutes seconds)	34° 32' 06" N
Longitude (decimal degrees)	-100.280555
Longitude (degrees minutes seconds)	100° 16' 50" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1742
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	45
Well Depth Source	Another Government Agency
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	Mrs. R. Greer
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	U.S. Geological Survey
Created Date	
Last Update Date	

Remarks	Unused stock well.
---------	--------------------

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank				0	

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

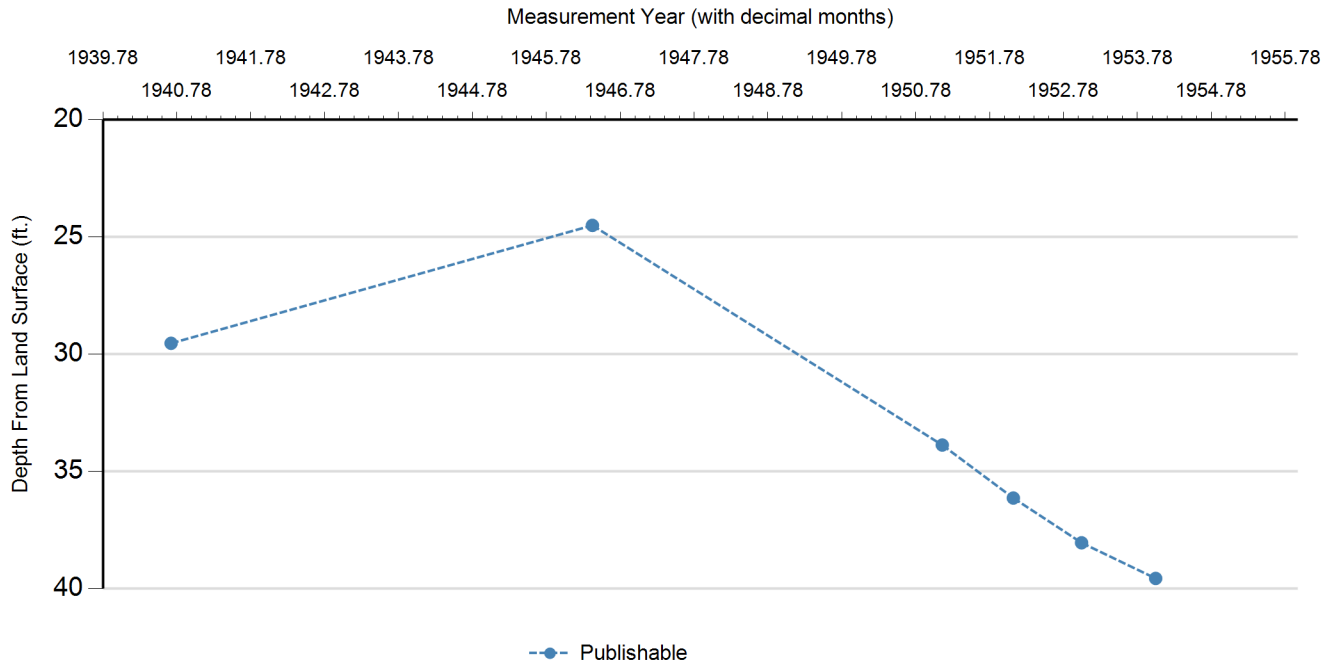
Borehole - No Data

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	9/18/1940		29.53		1712.47	1	Other or Source of Measurement Unknown	Unknown	1	
P	4/0/1946		24.5	(5.03)	1717.5	1	Other or Source of Measurement Unknown	Unknown	1	
P	2/22/1951		33.87	9.37	1708.13	1	Other or Source of Measurement Unknown	Unknown	1	
P	2/8/1952		36.13	2.26	1705.87	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/10/1953		38.04	1.91	1703.96	1	Other or Source of Measurement Unknown	Unknown	1	
P	1/11/1954		39.56	1.52	1702.44	1	Other or Source of Measurement Unknown	Unknown	1	
X	1/10/1955					1	Texas Water Development Board	Steel Tape	24	

Code Descriptions

Status Code	Status Description
P	Publishable
X	No Measurement

Remark ID	Remark Description
1	Accurately reflects water level conditions
24	Well apparently dry, well depth reached without water level

Water Quality Analysis - No Data Available

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State Well Number	1230906
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.533334
Latitude (degrees minutes seconds)	34° 32' 00" N
Longitude (decimal degrees)	-100.280833
Longitude (degrees minutes seconds)	100° 16' 51" W
Coordinate Source	+/- 10 Seconds
Aquifer Code	UNKNOWN - Aquifer Not Able to be Determined
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1745
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	Stock
Water Level Observation	Historical
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Windmill
Annular Seal Method	
Surface Completion	
Owner	Howard Head
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	Texas Water Development Board
Created Date	3/15/1994
Last Update Date	

Remarks City # T-5.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

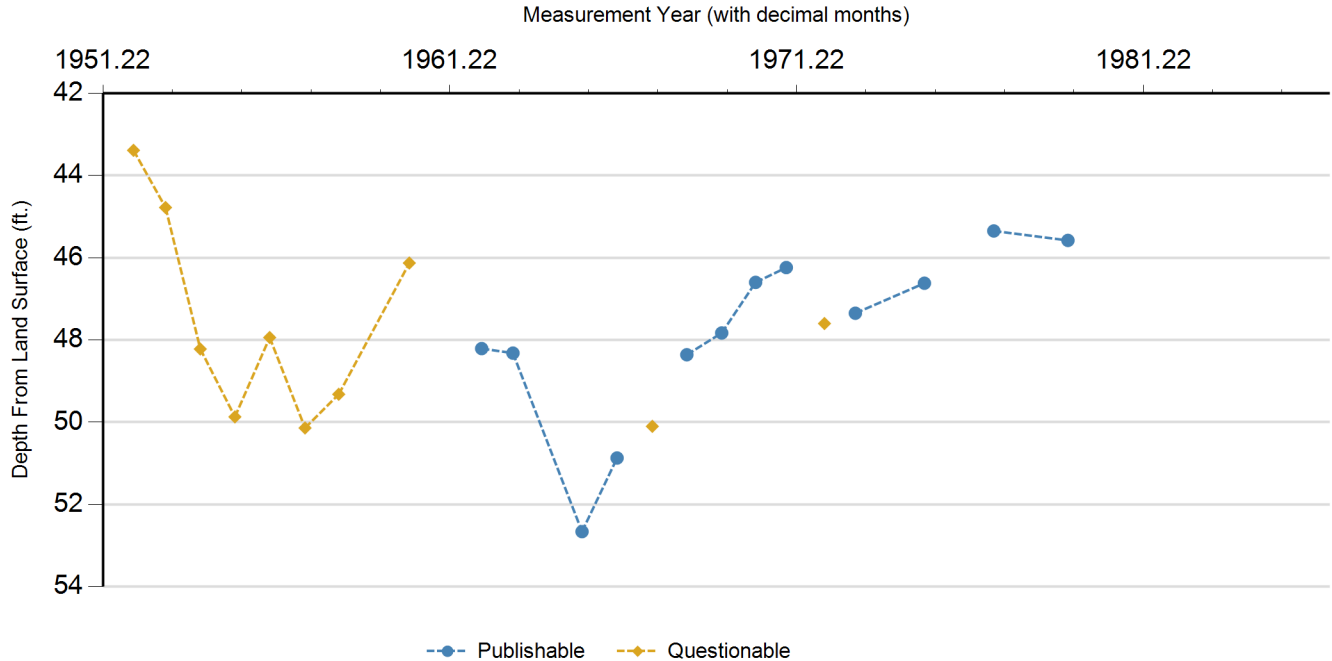
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



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
Q	2/8/1952		43.39		1701.61	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/10/1953		44.78	1.39	1700.22	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/11/1954		48.22	3.44	1696.78	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/10/1955		49.87	1.65	1695.13	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/11/1956		47.94	(1.93)	1697.06	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/18/1957		50.14	2.20	1694.86	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/8/1958		49.32	(0.82)	1695.68	1	Other or Source of Measurement Unknown	Unknown	3	
Q	1/21/1960		46.13	(3.19)	1698.87	1	Other or Source of Measurement Unknown	Unknown	3	
P	2/22/1962		48.21	2.08	1696.79	1	Texas Water Development Board	Steel Tape		
P	1/16/1963		48.32	0.11	1696.68	1	Texas Water Development Board	Steel Tape		
P	1/13/1965		52.66	4.34	1692.34	1	Texas Water Development Board	Steel Tape		
P	1/17/1966		50.87	(1.79)	1694.13	1	Texas Water Development Board	Steel Tape		
Q	1/23/1967		50.1	(0.77)	1694.9	1	Texas Water Development Board	Steel Tape	3	
P	1/21/1968		48.36	(1.74)	1696.64	1	Texas Water Development Board	Steel Tape		
P	1/23/1969		47.83	(0.53)	1697.17	1	Texas Water Development Board	Steel Tape		
P	1/15/1970		46.6	(1.23)	1698.4	1	Texas Water Development Board	Steel Tape		
P	12/8/1970		46.24	(0.36)	1698.76	1	Texas Water Development Board	Steel Tape		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-906**

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
Q	1/10/1972		47.6	1.36	1697.4	1	Texas Water Development Board	Steel Tape	12	
P	12/5/1972		47.35	(0.25)	1697.65	1	Texas Water Development Board	Steel Tape		
P	12/2/1974		46.62	(0.73)	1698.38	1	Texas Water Development Board	Steel Tape		
X	12/9/1975					1	Texas Water Development Board		30	
P	12/2/1976		45.35		1699.65	1	Texas Water Development Board	Steel Tape		
P	1/17/1979		45.58	0.23	1699.42	1	Texas Water Development Board	Steel Tape		
X	10/17/1981					1	Texas Water Development Board		30	
X	10/7/1982					1	Texas Water Development Board		30	
X	10/3/1984					1	Texas Water Development Board		30	
X	9/21/1985					1	Texas Water Development Board		30	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
3	Well or wells pumping nearby
12	Uncertain of reason for questionable measurement
30	Well temporarily inaccessible due to impassable roads, locked gate, etc.

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-906**

Water Quality Analysis

Sample Date: 3/15/1994 **Sample Time:** 1000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Aquifer Not Able to be Determined

Analyzed Lab: Texas Department of Health

Reliability: Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO ₃		214.2	mg/L as CaCO ₃	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		224	mg/L as CaCO ₃	
01503	ALPHA, DISSOLVED (PC/L)		3	PC/L	2.2
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	20	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		63.2	ug/L	
03503	BETA, DISSOLVED (PC/L)	<	5	PC/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		273.36	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	2	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		86	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		22	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	10	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	10	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.36	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		326	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)		18.1	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	5	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		27	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	2	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.13	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	20	ug/L	
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)		10.8	mg/L as N	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		47.81	mg/L as NO ₃	
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)		0.01	mg/L as N	
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.01	mg/L as N	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-906**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		0.2	mg/L as N	
00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		37.1	MV	
00400	PH (STANDARD UNITS), FIELD		7.5	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		3.4	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		18	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	10	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.18		
00932	SODIUM, CALCULATED, PERCENT		24	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		49	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		640	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		530	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		91	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		18.8	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		479	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	20	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		47.6	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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[Well Basic Details](#)
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State Well Number	1230907
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.533334
Latitude (degrees minutes seconds)	34° 32' 00" N
Longitude (decimal degrees)	-100.28
Longitude (degrees minutes seconds)	100° 16' 48" W
Coordinate Source	+/- 1 Second
Aquifer Code	110ALVM - Quaternary Alluvium
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1745
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	92
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	11/8/1946
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Gravel Pack w/Perforations

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Historical
Water Quality Available	No
Pump	Turbine
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	City of Childress No. 7
Driller	Layne Texas Co.
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	U.S. Geological Survey
Created Date	2/13/1951
Last Update Date	

Remarks City # 7. Yield 214 gpm with 35 ft drawdown when drilled.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	45
8	Blank	Steel			45	53
8	Screen	Steel			53	92

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

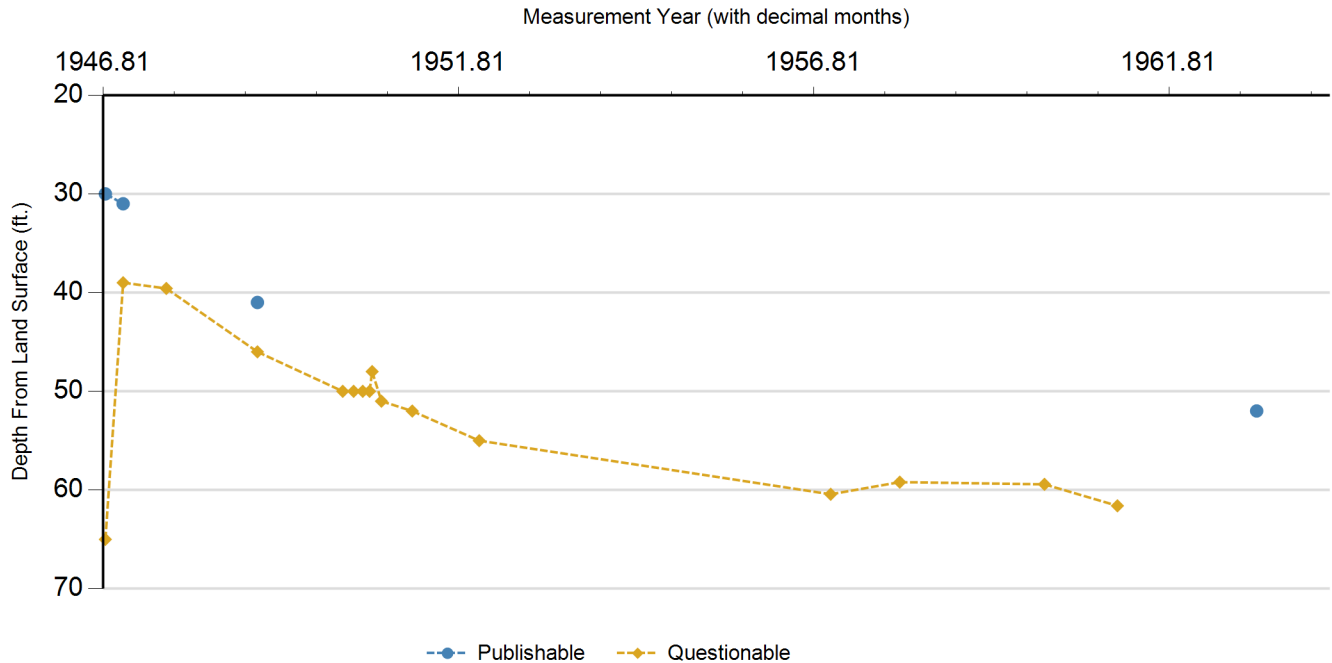
Borehole - No Data

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	11/8/1946		30		1715	1	Other or Source of Measurement Unknown	Unknown	1	
Q	11/8/1946		65	35.00	1680	2	Other or Source of Measurement Unknown	Unknown	2	
P	2/4/1947		31	(34.00)	1714	1	Other or Source of Measurement Unknown	Unknown	1	
Q	2/4/1947		39	8.00	1706	2	Other or Source of Measurement Unknown	Unknown	2	
Q	9/16/1947		39.58	0.58	1705.42	1	Other or Source of Measurement Unknown	Unknown	2	
Q	12/29/1948		46	6.42	1699	1	Other or Source of Measurement Unknown	Unknown	2	
P	12/29/1948		41	(5.00)	1704	2	Other or Source of Measurement Unknown	Unknown	1	
Q	3/7/1950		50	9.00	1695	1	Other or Source of Measurement Unknown	Unknown	2	
Q	5/3/1950		50	0.00	1695	1	Other or Source of Measurement Unknown	Unknown	2	
Q	6/20/1950		50	0.00	1695	1	Other or Source of Measurement Unknown	Unknown	2	
Q	7/25/1950		50	0.00	1695	1	Other or Source of Measurement Unknown	Unknown	2	
Q	8/8/1950		48	(2.00)	1697	1	Other or Source of Measurement Unknown	Unknown	2	
Q	9/26/1950		51	3.00	1694	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/0/1951		52	1.00	1693	1	Other or Source of Measurement Unknown	Unknown	2	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-907**

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
Q	2/8/1952		55	3.00	1690	1	Other or Source of Measurement Unknown	Unknown	2	
Q	1/18/1957		60.43	5.43	1684.57	1	Texas Water Development Board	Steel Tape	2	
Q	1/8/1958		59.2	(1.23)	1685.8	1	Texas Water Development Board	Steel Tape	2	
Q	1/21/1960		59.42	0.22	1685.58	1	Texas Water Development Board	Steel Tape	2	
Q	2/1/1961		61.6	2.18	1683.4	1	Texas Water Development Board	Steel Tape	2	
P	1/16/1963		51.99	(9.61)	1693.01	1	Texas Water Development Board	Steel Tape		
X	1/14/1964					1	Texas Water Development Board		36	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
1	Accurately reflects water level conditions
2	Pumping-level measurement
36	Well removed from Water Level Program

Water Quality Analysis - No Data Available

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**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-920**

[GWDB Reports and Downloads](#)
[Well Basic Details](#)
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State Well Number	1230920
County	Childress
River Basin	Red
Groundwater Management Area	6
Regional Water Planning Area	A - Panhandle
Groundwater Conservation District	Gateway GCD
Latitude (decimal degrees)	34.522222
Latitude (degrees minutes seconds)	34° 31' 20" N
Longitude (decimal degrees)	-100.288889
Longitude (degrees minutes seconds)	100° 17' 20" W
Coordinate Source	+/- 1 Second
Aquifer Code	UNKNOWN - Aquifer Not Able to be Determined
Aquifer	Seymour
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1755
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	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Howard Head House well
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	Texas Water Development Board
Created Date	9/13/2001
Last Update Date	10/8/2001

Remarks	
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Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
18	Blank	Steel				

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

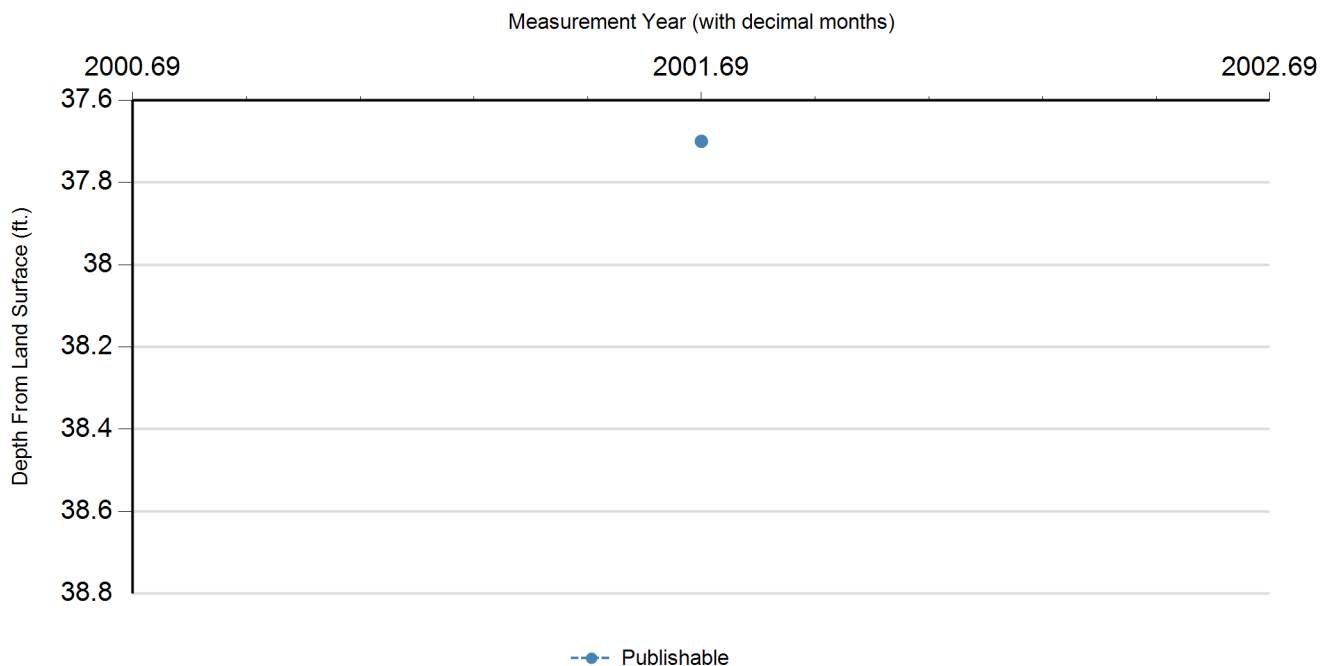
Borehole - No Data

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	9/13/2001		37.7		1717.3	1	Texas Water Development Board	Steel Tape		

Code Descriptions

Status Code	Status Description
P	Publishable

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-920

Water Quality Analysis

Sample Date: 9/13/2001 **Sample Time:** 0930 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Aquifer Not Able to be Determined

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 CaCO ₃		268	mg/L as CaCO ₃	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		261	mg/L as CaCO ₃	
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)		2.17	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		27.4	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		318.51	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		112	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.102	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		111	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		50.5	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)		2.23	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.07	mg/L	
04241	GROSS ALPHA RADIATION,TOTAL, PRODUCED WATER(pCi/L)		5.7	pCi/L	2.2
04242	GROSS BETA RADIATION, TOTAL, PRODUCED WATER(pCi/L)		8.5	pCi/L	2.2
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		434	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)	<	51	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		11.3	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		38.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		1.28	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)		2.37	ug/L	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
12-30-920**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		2.97	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.67	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.34	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		4.58	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		24.5	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.08		
00932	SODIUM, CALCULATED, PERCENT		20	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		51.7	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		1140	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		764	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		264	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		23.2	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		704	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		4.99	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		9.19	ug/L	

Water Quality Analysis

Sample Date: 9/13/2001 **Sample Time:** **Sample Number:** 1 **Collection Entity:** Texas Commission on Environmental Quality

Sampled Aquifer: Aquifer Not Able to be Determined

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	<	0.05	ug/L	
82612	METOLACHLOR, WHOLE WATER, TOTAL RECOVERABLE, UG/L	<	0.05	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (<https://www.twdb.texas.gov/groundwater/data/gwdb rpt.asp>) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

STATE OF TEXAS WELL REPORT for Tracking #630794

Owner:	HOWARD HEAD	Owner Well #:	APWR-1
Address:	1547 COUNT ROAD 9 CHILDRESS, TX 79201	Grid #:	12-30-9
Well Location:	1547 COUNT ROAD 9 CHILDRESS, TX 79201	Latitude:	34° 31' 12.71" N
Well County:	Childress	Longitude:	100° 17' 28.46" W
		Elevation:	1783 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **7/19/2022** Drilling End Date: **12/15/2022**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	18.75	0	175
	13.5	175	258

Drilling Method: **Air Rotary; Mud (Hydraulic) Rotary**

Borehole Completion: **FROM -165 TO 258 WITH 3/8**

Annular Seal Data: **No Data**

Seal Method: **PUMPED WITH TRIMMIE**

Sealed By: **Driller**

Distance to Property Line (ft.): **MILES**

Distance to Septic Field or other
concentrated contamination (ft.): **NONE**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **GPS**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **79.7 ft. below land surface on 2022-12-19**

Packers: **No Data**

Type of Pump: **Submersible**

Pump Depth (ft.): **275**

Well Tests: **Jetted** **Yield: 500 GPM with 130 ft. drawdown after 12 hours**

Water Quality:

Strata Depth (ft.)	Water Type
180 - 258	FRESH

Chemical Analysis Made: **Yes**

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: **WEST TEXAS WATER WELL SERVICE**
3410 MANKINS AVE
ODESSA, TX 79764

Driller Name: **RUSSELL SOUTHERLAND** License Number: **2713**

Comments: **DRILLED 300FT AND THERE IS SLOUGH IN BOREHOLE FROM 258' TO 300 FT**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	30	SANDY RED TOP, SOIL W/ STREAKS OF SMALL GRAVEL
30	62	FINE TAN SAND
62	107	SAND GRAVEL
107	132	RED CLAY
132	137	YELLOW SHALE
137	140	BLUE SHALE
140	180	RED, BLUE SHALE
180	258	SANDSTONE W/ SAND TAN

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
14.5	HSLA	New Steel	0.25	2	175
10.75	Blank	New Stainless Steel	0.25	3	198
10.75	Screen	New Stainless Steel	0.050	198	258

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.

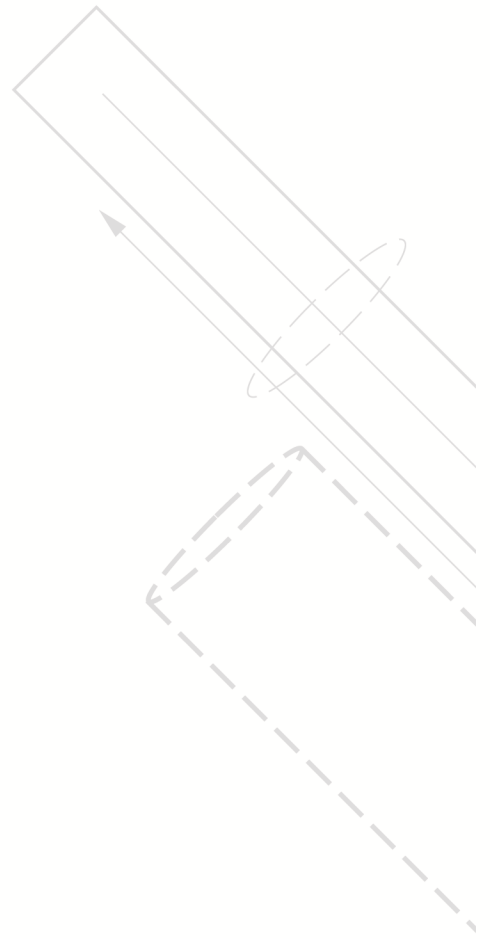
Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540



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ATTACHMENT 2



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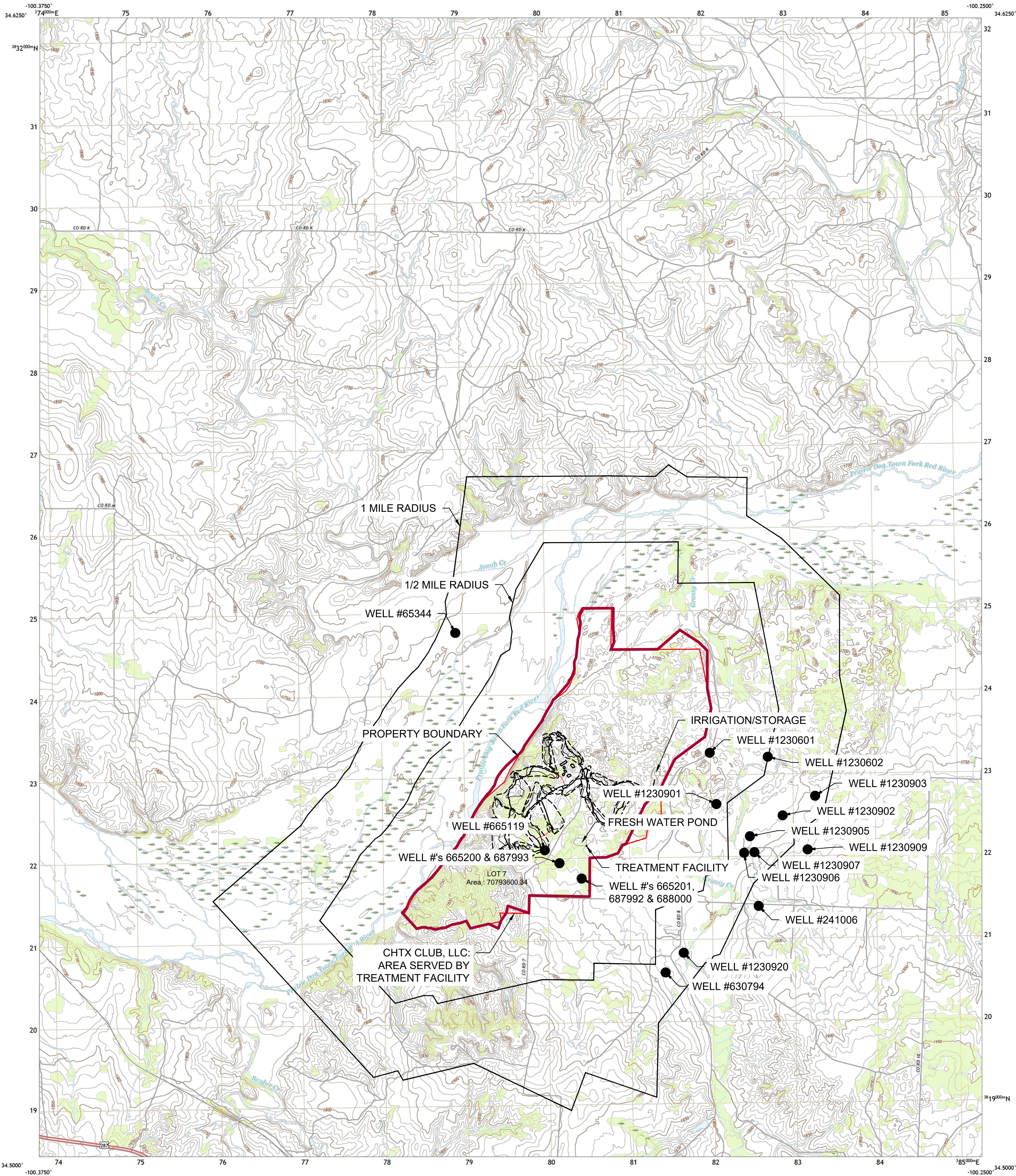
Engineering Firm # 4393 - Surveying Firm # 10090900



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



ESTELLINE SE QUADRANGLE
TEXAS - CHILDRESS COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 14S.
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery:.....:NAIP, September 2016 - November 2016
Roads:.....:U.S. Census Bureau, 2015 - 2018
Names:.....:GHS, Not Available
Hydrography:.....:National Hydrography Dataset, 2002 - 2018
Contours:.....:National Elevation Dataset, 2019
Boundaries:.....:Multiple sources; see metadata file 2019 - 2021
Wetlands:.....:FWS National Wetlands Inventory Not Available

UTM GRID AND 2011 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
LD
Grid Zone Designation
14S

SCALE 1:24 000

1 000 0 500 0 1000 2000
KILOMETERS
1 000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
METERS
1 000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard.



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

Expressway
Secondary Hwy
Ramp

Local Connector
Local Road
4WD
US Route
State Route

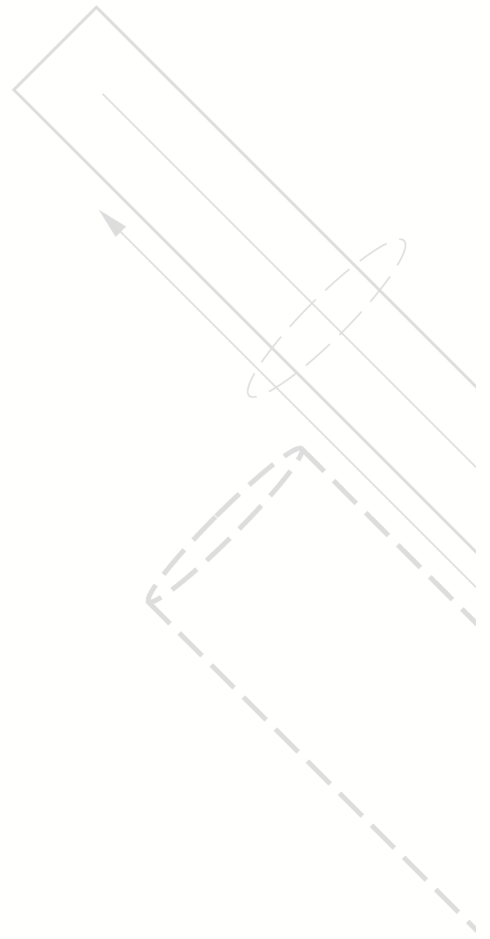
ESTELLINE SE, TX
2022





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ATTACHMENT 3



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March 12, 2025

Tong Li
TCEQ – MC148
P.O. Box 13087
Austin, Texas 78711-3087

Re: Chapter 217.6 Summary Transmittal Letter

Permittee: CHTX Club, LLC

Permit Number: WQ00167170021

Project Name: Childress Hall

County: Childress

Ms. Li:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the requirements of 217.6(d) of the TCEQ's rules entitled "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS." The necessary information includes:

1. OJD Engineering, LLC F-4393
2. Che Shadle 806.352.7117 806.352.7188 che.shadle@ojdengineering.com
3. Childress County
4. CHTX Club, LLC Wastewater Treatment
5. CHTX Club, LLC and Childress Hall, LLC
6. OJD Engineering, LLC certifies that the plans and specifications are in substantial compliance with all the requirements of Chapter 217, with the exception of the variance being requested for the use of a synthetic liner without a leak detection/collection system.
7. OJD Engineering, LLC certifies that the requested variance will not threaten public

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health or the environment, based on my judgement.

8. a. CHTX Club, LLC is a glove facility that is proposing a WWTP to be designed as an activated sludge package plant that operates in the extended aeration mode with nitrification, with the ability to treat a design flow of 9,999 gpd average daily flow and an unattenuated peak flow rate of 28 gpm; an influent flow equalization basin will provide sufficient retention time to reduce the peak factor to 2Q, or a peak flow rate for hydraulic

b.

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Aeration	1	12'-0" x 12'-0" x 10.50'
Digester	1	4'-0" x 12'-0" x 10.67'
Clarifier	1	9'-0" x 5'-0" x 6.75'
Disinfection	1	5'-0" x 3'-0" x 4'
EQ Basin	1	6'-0" x 12'-0" x 10.67'

c. See attached map.

d. A variance is being requested for the use of synthetic liner without a leak detection/collection system.

e. The pond is existing and is lined per TCEQ Rules 30 TAC §217.203. 9,999 gpd effluent entering the pond is mixed with 750,000 gpd of fresh water. Due to the dilution rate we request this variance in accordance with 217.4.

9.

Che Shadle, P.E.
President
OJD Engineering, LLC
F-4393

Cc: Amarillo TCEQ Region Office – Gregory Nagel



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ph: 806 352.7117

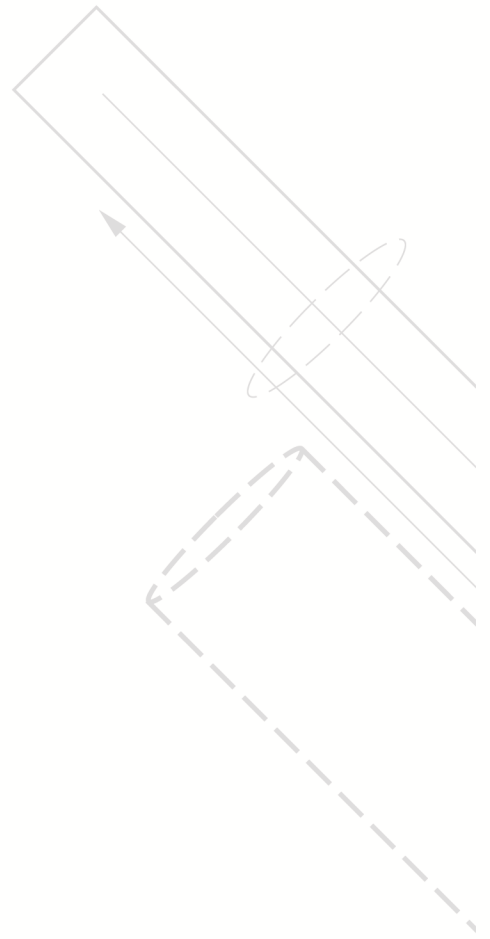
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ATTACHMENT 4



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Groundwater Technical Report

A site map for this report is provided as Attachment USGS Map – A4.

A site drawing for this report is provided as Attachment Facility Map – T2.

Childress Hall is located in Childress County, Texas. Groundwater in this area is located within the Seymour and Blaine aquifers. The information presented below regarding the aquifers was obtained by the Mesquite Groundwater Conservation District.:

The **Seymour Aquifer** is a major aquifer in Texas and consists of isolated areas of alluvium that are erosional remnants of a larger area. As defined by TWDB, it is composed of remnants of the Seymour Formation, the Lingos Formation, and younger alluvial deposits, all of Quaternary age. The aquifer is found in parts of many north-central and Panhandle counties of Texas, and in the District is present in four distinct and separate areas referred to as “Pods”.

It consists of discontinuous beds of poorly sorted gravel, conglomerate, sand, and silty clay deposited during the Quaternary Period by eastward-flowing streams. Saturated thickness is typically between five and eighty feet. Aquifer thickness may exceed 250 feet in isolated spots in the western portion of Collingsworth County. The thickness in the eastern portion of the county is generally too thin to support irrigation. The aquifer is also generally thinner in Hall County but does support irrigation. This aquifer is under water-table conditions in most of its extent, but artesian conditions may occur where the water-bearing zone is overlain by clay. The lower, more permeable part of the aquifer produces the greatest amount of groundwater.

Water quality is generally fresh to slightly saline, but some high saline problems occur. Nitrate concentrations in excess of drinking water standards are common. The Seymour Aquifer comprises about twenty-three percent of the District area and provides about seventy seven percent of the irrigation water in the District. Yields of wells range from five gallons per minute to as much as 1,000 gallons per minute depending upon saturated thickness, with yields averaging about 300 gallons per minute.



The **Blaine Aquifer** is composed of anhydrite and gypsum with interbedded dolomite and clay and is an important source of groundwater in the District. The Blaine Formation crops out in a band from Wheeler County south through Collingsworth and Childress Counties to Fisher County and extends westward in the subsurface to adjacent counties. In Collingsworth County the Blaine is found along the Salt Fork of Red River north to Wheeler County and east to the Oklahoma state line. The Blaine is also found South and East of Wellington, extending east to the Oklahoma state line and south to the Prairie Dog Town Fork of the Red River. There are also small areas in the northeast and southeast corners of Hall County. Recharge occurs fairly rapidly and travels primarily in the numerous solution channels of the Blaine under water-table conditions.

Overall water quality is poor and salinity may be high, limiting the use of water for human and livestock consumption. Depth to water ranges from a few feet to greater than 200 feet. Well depths range up to 300 feet below ground surface. Well yields vary from a few gallons per minute up to 1,000 gallons per minute. Although water in storage is generally under water-table conditions, larger yields are often associated with those areas of the aquifer that are confined by relatively impervious beds. Dry holes or wells of low yield are commonly found adjacent to wells of moderate to high yields because of the uneven nature in confining beds and the occurrence of the water in solution zones. Groundwater not intercepted by wells tends to discharge naturally in areas of lower topography through seeps and springs. The Blaine Aquifer comprises about twenty four percent of the District area and provides about nineteen percent of the irrigation water pumped in the District.

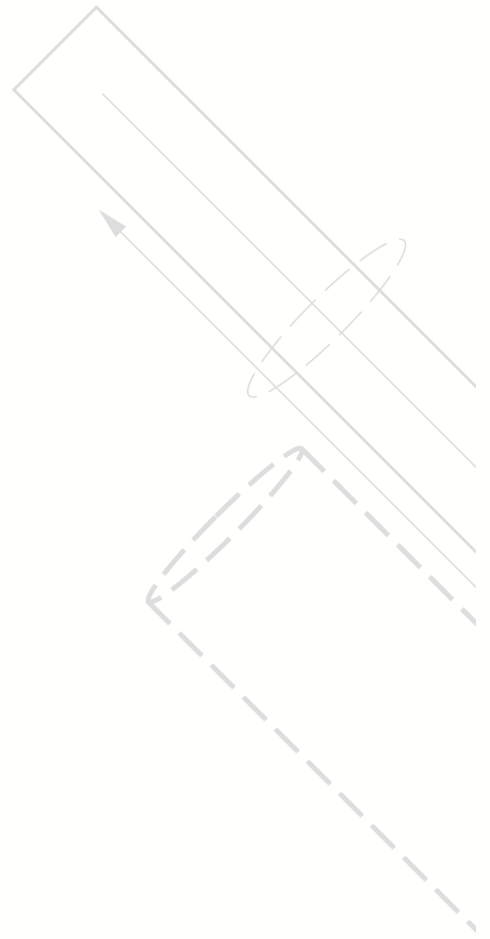
The golf course will be irrigated using 750,000 GPD from the Blaine aquifer combined with the 9,999 GPD of treated wastewater as presented in this permit application. Due to the dilution of the wastewater, nutrients will mostly come from the freshwater within the Blaine Aquifer and supplemental fertilization practices. (See Cropping Plan).

Depth to Static Water levels is greater than 50 feet. At this depth, and the fact that 99% of the irrigation water is, in fact, water from the aquifer, there is no threat of contamination.

The liner is a 60 mil synthetic liner as required by 30 TAC 217.203(d)(4). Has UV resistance to withstand constant sunlight. Due to the fact that the wastewater (9,999 GPD) will be combined with freshwater (500,000 GPD), a leachate collection system is not proposed to be installed due to the dilution of the water in the pond.



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ATTACHMENT 5

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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 proposed WWTP will be designed as an activated sludge package plant that operates in the extended aeration mode with nitrification, with the ability to treat a design flow of 9,999 gpd average daily flow and an unattenuated peak flow rate of 28 gpm; an influent flow equalization basin will provide sufficient retention time to reduce the peak factor to 2Q, or a peak flow of 14 gpm and which will serve as the peak flow rate for hydraulically-sensitive processes and piping. The package plant process units will include preliminary screening, (1) flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester. A chlorine feed system will be provided for chemical disinfection. The flow equalization basin will be sized to provide 8 hours of hydraulic retention time at the average daily flow rate. The aeration basins and digesters will be sized to provide the treatment volume required to treat the organic loadings at the design flow. The secondary clarifier and the chlorine contact basin will be designed to handle the peak flow rate. 9,999 GPD of treated effluent and 750,000 GPD freshwater applied to 250 acres of golf course.

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)
Aeration	1	12'-0" x 12'-0" x 10.50'
Digester	1	4'-0" x 12'-0" x 10.67'
Clarifier	1	9'-0" x 5'-0" x 6.75'
Disinfection	1	5'-0" x 3'-0" x 4'
EQ Basin	1	6'-0" x 12'-0" x 10.67'

C. Process Flow Diagram

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

Attachment: [T-1](#)

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

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

- Latitude: [Click to enter text.](#)
- Longitude: [Click to enter text.](#)

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

- Latitude: [34.531751°](#)
- Longitude: [-100.304113°](#)

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;

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.

CHTX Club, LLC is a golf facility that is proposing a WWTP to be designed as an activated sludge package plant that operates in the extended aeration mode with nitrification, with the ability to treat a design flow of 9,999 gpd average daily flow and an unattenuated peak flow rate of 28 gpm; an influent flow equalization basin will provide sufficient retention time to reduce the peak factor to 2Q, or a peak flow of 14 gpm and which will serve as the peak flow rate for hydraulically-sensitive processes and piping. The package plant process units will include preliminary screening, (1) flow equalization, (1) aeration basin, (1) secondary clarifier, (1) chlorine contact basin, (1) aerobic digester. A chlorine feed system will be provided for chemical disinfection. The flow equalization basin will be sized to provide 8 hours of hydraulic retention time at the average daily flow rate. The aeration basins and digesters will be sized to provide the treatment volume required to treat the organic loadings at the design flow. The secondary clarifier and the chlorine contact basin will be designed to handle the peak flow rate. 9,999 GPD of treated effluent and 750,000 GPD freshwater applied to 250 acres of golf course.

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.

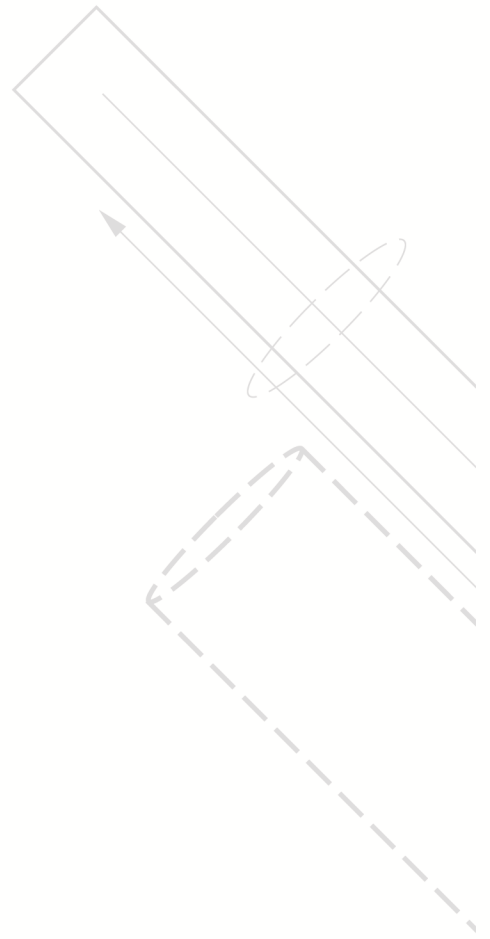
Attachment: [Click to enter text.](#)

¹ <https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater>



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ATTACHMENT 6



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NITROGEN APPLICATION RATE

$$L = N/2.7C$$

where

L = Maximum annual liquid loading (ac-ft/ac/yr) based on nitrogen uptake

C = Effluent nitrogen concentration

N = Annual crop nitrogen requirement + 20% volatilization (lb/acre)

Irrigation from Storage Pond:

C = 5.7 mg/l (Assuming 20 mg/l wastewater @ 9,999 gpd mixed with 5.5 mg/l fresh water @ 750,000 gpd)

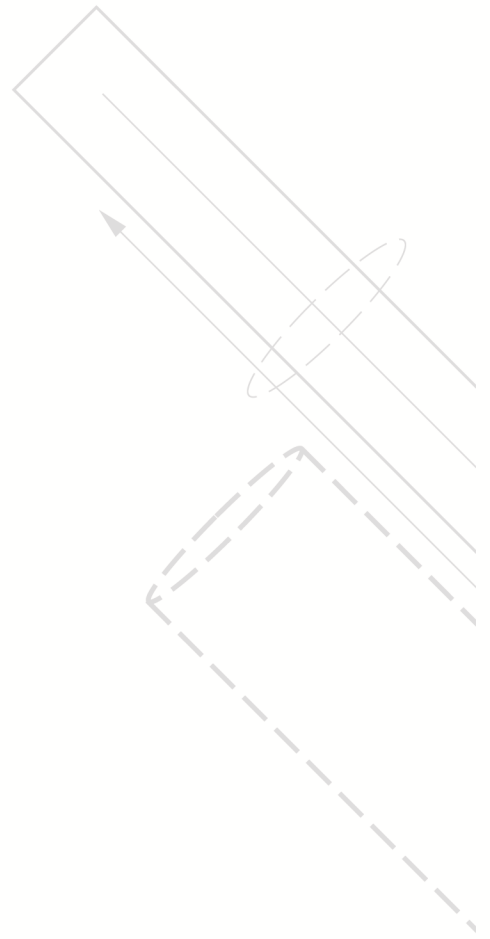
N = 130 lb/acre x 1.2 = 156 lb/acre (bermuda)

L = Allowable application rate = 10.1 ac-ft/ac/yr

Actual Application Rate (wastewater and fresh water mix) = 3.4 ac-ft/ac/yr



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ATTACHMENT 7

ATTACHMENT 8

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SOIL ANALYSIS REPORT

CLIENT:	OJD ENGINEERING 2420 LAKEVIEW DR AMARILLO, TX 79109
58588	



6921 S. Bell Amarillo, TX 79109 800.557.7509 806.677.0093 Fax 806.677.0329	LAB NO: 42201 - 42203 INVOICE NO: 174853 DATE RECEIVED: 02/28/2025 DATE REPORTED: 03/06/2025
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SOIL ANALYSIS RESULTS FOR:														FIELD ID: LOC 1									
METHOD USED:						Mehlich 3 ICP																	
Lab Number	Sample ID	Sample Depth	1:2 Soil-Water pH	1:2 Soil-Water	Buffer pH	1:2 Soil-Water mmho/cm	XSL(f)	LOI(f)	Cd Reduction		Phosphorus ppm P	Potassium ppm K	Sulfur		Calcium ppm Ca	Magnesium ppm Mg	Sodium ppm Na	Zinc ppm Zn	Iron ppm Fe	Manganese ppm Mn	Copper ppm Cu	Boron ppm B	
							Excess Lime	% Organic Matter	Nitrate-Nitrogen ppm	lb. N/A			ppm	lb. S/A									
42201		0 - 6	6.8			0.07	No	0.2	1.4	3	28	149	9	16	2550	177	4						
42202		6 - 18	7.8			0.07	Lo	0.8	3.0	11	46	208	7	25	1980	237	5						
42203		18 - 30	7.9			0.09	Lo	1.1	3.5	13	51	251	11	40	2310	266	5						

METHOD USED:														Sat. Paste			
KCl Extr.														TKN			
Lab Number	Sample ID	Sample Depth	Ammonium Nitrogen ppm	lb./A	Total N ppm	Calculated	TKN	Saturation % Sat	Electrical Conductivity mmho/cm	Calcium mg/L Ca	Magnesium mg/L Mg	Sodium mg/L Na	Sodium Adsorption Ratio				
42201		0 - 6	<1	2	465		464	27	0.27	50	9	7	0.2				
42202		6 - 18	<1	4	669		666	29	0.42	64	13	14	0.4				
42203		18 - 30	1	4	948		944	32	0.47	85	16	7	0.2				

FERTILIZER RECOMMENDATIONS:										POUNDS ACTUAL NUTRIENT PER ACRE													
Lab Number	Sample ID	Crop To Be Grown	Yield Goal	Lime, ECC Tons/A to raise pH to:			N	P ₂ O ₅	K ₂ O	Zn	S	Mn	Cu	MgO	B	Ca	Cl						
				6.0	6.5	7.0																	
42201																							
42202																							
42203																							

Cation Exchange Capacity									
CEC	%H	%K	%Ca	%Mg	%Na				
15	0	3	87	10	0				
12	0	4	80	16	0				
14	0	4	80	15	0				

SPECIAL COMMENTS AND SUGGESTIONS:														Cation Exchange Capacity									
														CEC	%H	%K	%Ca	%Mg	%Na				
														15	0	3	87	10	0				
														12	0	4	80	16	0				
														14	0	4	80	15	0				

Lab Number(s): 42201
Servi-Tech Laboratory fertilizer recommendations were not requested.
Lab Number(s): 42201, 42202, 42203
Nutrient analyses determined using the Mehlich 3 extraction.

SOIL ANALYSIS REPORT

CLIENT:
58588
OJD ENGINEERING
2420 LAKEVIEW DR
AMARILLO, TX 79109



www.servitech.com

6921 S. Bell
Amarillo, TX 79109
800.557.7509
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Fax 806.677.0329

LAB NO: 42204 - 42206
INVOICE NO: 174853
DATE RECEIVED: 02/28/2025
DATE REPORTED: 03/06/2025

SOIL ANALYSIS RESULTS FOR:

FIELD ID: LOC 2

METHOD USED:				Mehlich 3 IOP																
Lab Number	Sample ID	1:2 Soil-Water pH	1:2 Soil-Water pH	Buffer pH	1:2 Soil Salts mmho/cm	XSL(I)	LO(I)	Cd Reduction		Phosphorus ppm P	Potassium ppm K	Sulfur ppm	Calcium ppm Ca	Magnesium ppm Mg	Sodium ppm Na	Zinc ppm Zn	Iron ppm Fe	Manganese ppm Mn	Copper ppm Cu	Boron ppm B
42204		0 - 6	8.3		0.07	Lo	0.2	1.4	3	29	198	9	16	2550	176	3				
42205		6 - 18	7.7		0.07	Lo	0.6	2.4	9	49	215	7	25	2130	225	3				
42206		18 - 30	7.8		0.07	Lo	0.8	2.8	10	51	207	7	25	2120	230	3				

METHOD USED:

METHOD USED:				KCl Extr.		Calculated	TKN	Sat. Paste											
Lab Number	Sample ID	Sample Depth	Ammonium Nitrogen ppm	Nitrogen lb./A	Total N ppm	TKN ppm	Saturation % Sat	Electrical Conductivity mmho/cm	Calcium mg/L Ca	Magnesium mg/L Mg	Sodium mg/L Na	Sodium Adsorption Ratio							
42204		0 - 6	<1	2	400	399	25	0.33	46	8	10	0.4							
42205		6 - 18	<1	4	582	580	27	0.37	55	10	8	0.3							
42206		18 - 30	<1	4	662	659	27	0.39	61	11	6	0.2							

FERTILIZER RECOMMENDATIONS:

POUNDS ACTUAL NUTRIENT PER ACRE

Lab Number	Sample ID	Crop To Be Grown	Yield Goal	Lime, ECC Tons/A to raise pH to:			N	P ₂ O ₅	K ₂ O	Zn	S	Mn	Cu	MgO	B	Ca	Cl	Capacity					
				6.0	6.5	7.0												CEC	%H	%K	%Ca	%Mg	%Na
42204																		15	0	3	87	10	0
42205																		13	0	4	81	14	0
42206																		13	0	4	81	15	0

SPECIAL COMMENTS AND SUGGESTIONS:

Lab Number(s): 42204
Servi-Tech Laboratory fertilizer recommendations were not requested.
Lab Number(s): 42204, 42205, 42206
Nutrient analyses determined using the Mehlich 3 extraction.

Analyses are representative of the samples submitted

Samples are retained 30 days after report of analysis

Explanations of soil analysis terms are available upon request

Reviewed and

Amy Meier

Data Review Coordinator

Page 1 of 1

03/06/2025 2:13 pm

The reported analytical results apply only to the sample as it was supplied. The report may not be reproduced, except in full, without permission of ServiTech.

Your opinion is valuable to us. Please let us know what you think about our services! Send an email to feedback@servitech.com.

SOIL ANALYSIS REPORT

CLIENT: 58588	OJD ENGINEERING 2420 LAKEVIEW DR AMARILLO, TX 79109	6921 S. Bell Amarillo, TX 79109 800.557.7509 806.677.0093 Fax 806.677.0329	LAB NO: 42207 - 42209 INVOICE NO: 174853 DATE RECEIVED: 02/28/2025 DATE REPORTED: 03/06/2025
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www.servitech.com

SOIL ANALYSIS RESULTS FOR:																				
FIELD ID: LOC 3																				
METHOD USED:					Mehlich 3 ICP															
Lab Number	Sample ID	Sample Depth	1:2 Soil-Water	Buffer pH	1:2 Soil-Water	XSL(i)	LOI(r)	Cd Reduction		Phosphorus ppm P	Potassium ppm K	Sulfur ppm	Calcium ppm Ca	Magnesium ppm Mg	Sodium ppm Na	Zinc ppm Zn	Iron ppm Fe	Manganese ppm Mn	Copper ppm Cu	Boron ppm B
42207		0 - 6	8.1		0.07	Hi	0.3	1.6	3	25	161	9	16	2820	162	3				
42208		6 - 18	7.6		0.07	Lo	0.7	1.9	7	45	155	7	25	1990	203	3				
42209		18 - 30	7.8		0.09	Lo	1.2	3.8	14	51	278	10	36	1970	267	4				

METHOD USED:				KCl Extr.		Calculated	TKN	Sat. Paste							
Lab Number	Sample ID	Sample Depth	Ammonium Nitrogen ppm	Total N ppm	TKN ppm	Saturation % Sat	Electrical Conductivity umho/cm	Calcium mg/L Ca	Magnesium mg/L Mg	Sodium mg/L Na	Sodium Adsorption Ratio				
42207		0 - 6	<1	396	394	26	0.34	51	8	8	0.3				
42208		6 - 18	<1	675	673	27	0.34	61	10	7	0.2				
42209		18 - 30	2	1052	1048	33	0.57	91	19	8	0.2				

FERTILIZER RECOMMENDATIONS:																	
POUNDS ACTUAL NUTRIENT PER ACRE																	
Lab Number	Sample ID	Crop To Be Grown	Yield Goal	Lime, ECC Tons/A to raise pH to:			N	P ₂ O ₅	K ₂ O	Zn	S	Mn	Cu	MgO	B	Ca	Cl
				6.0	6.5	7.0											
42207																	
42208																	
42209																	

Cation Exchange Capacity										
CEC	%H	%K	%Ca	%Mg	%Na					
16	0	3	89	9	0					
12	0	3	83	14	0					
13	0	6	77	17	0					

SPECIAL COMMENTS AND SUGGESTIONS:														
Lab Number(s): 42207														
Servi-Tech Laboratory fertilizer recommendations were not requested.														
Lab Number(s): 42207														
The CEC value calculated by cation summation has been adjusted to compensate for the presence of excess lime (reactive carbonates).														
Lab Number(s): 42207, 42208, 42209														
Nutrient analyses determined using the Mehlich 3 extraction.														

the Dog Town Fork Red River

Location #2

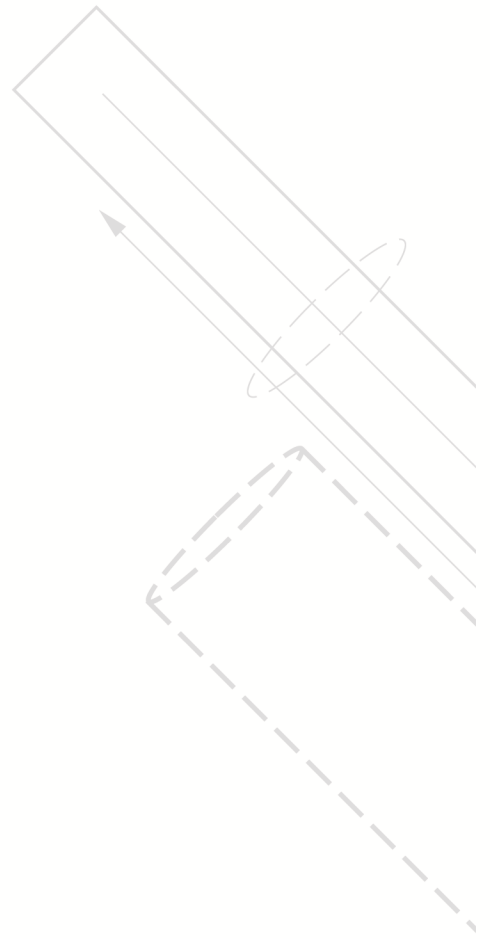
Location #1

Location #3





OJD Engineering
The Benchmark



ATTACHMENT 8

Wolfforth | Amarillo

ph: 806 352.7117

2420 Lakeview Dr. Amarillo, TX. 79109

fax: 806 352.7188

www.OJDEngineering.com

Engineering Firm # 4393 - Surveying Firm # 10090900

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: 250

Design application frequency:

hours/day 5 **And** days/week 7

Land grade (slope):

average percent (%): 1%

maximum percent (%): 10%

Design application rate in acre-feet/acre/year: 0.04

Design total nitrogen loading rate, in lbs N/acre/year: 52.74

Soil conductivity (mmhos/cm): 0.4

Method of application: Golf course irrigation sprinkler

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

Attachment: T-11

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 BOD₅ loading rate, in lbs BOD₅/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.](#)




Re: WQ0016717001

From Clint Green <Clint.Green@ojdengineering.com>

Date Mon 3/17/2025 9:54 AM

To Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Cc Sara Holmes <Sara.Holmes@tceq.texas.gov>; Che Shadle <Che.Shadle@ojdengineering.com>

 2 attachments (67 KB)

10054_Land Disposal of Effluent - Revised_3-13-25.pdf; Table 3 - Additional Wells - Revised_3-13-25.pdf;

Hello Andy,

Attached are the responses to the items that you requested.

Please let me know if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer

OJD Engineering, LLC

2420 Lakeview Drive
Amarillo, Texas 79109
806.352.7117. ext. 105
806.352.7188 Fax
806.433.1138 Cell

From: Andrew Gorton

Sent: Thursday, March 13, 2025 1:34 PM

To: Clint Green

Cc: Sara Holmes; Che Shadle

Subject: Re: WQ0016717001

Thanks Clint - just one more thing I need for the Geology items - please include the Proposed Best Management

Practices in Table 3.o(3) Water Well Data - for the 9 wells withing 1/2 mile of the proposed facility based on your topographic well map (wells 665119, 665200, 687993, 1230901, 665201, 687992, 688000, 1230601, and 1230602). Best management practices would be to either plug the well, maintain 150-foot buffer distance for domestic wells, or 500-foot buffer distance for public supply wells.

Thank you,

-Andy

Andrew Gorton, P.G.

Texas Commission on Environmental Quality
MC-150
PO Box 13087
Austin, TX 78711-3087
512.239.4585
Andrew.Gorton@tceq.texas.gov

From: Clint Green <Clint.Green@ojdengineering.com>
Sent: Wednesday, March 12, 2025 4:54 PM
To: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>; Louis Herrin <louis.herrin@tceq.texas.gov>
Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>; Che Shadle <Che.Shadle@ojdengineering.com>
Subject: Re: WQ0016717001

Good afternoon Andy,

Attached are the responses to the items that you requested for the Technical Completeness Review.

Please feel free to contact me if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer
OJD Engineering, LLC

2420 Lakeview Drive
Amarillo, Texas 79109
806.352.7117. ext. 105
806.352.7188 Fax
806.433.1138 Cell

From: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
Sent: Thursday, February 27, 2025 1:49 PM
To: Clint Green <Clint.Green@ojdengineering.com>; Louis Herrin <louis.herrin@tceq.texas.gov>
Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>
Subject: Re: WQ0016717001

Thank you for taking my call Clint. Sorry I wasted your time b/c after I re-read my comment, I see that I just asked for pond liner information in the Groundwater Tech Report. The rest of the Report "checked all the boxes" that needed to be "checked." I must have confused your application with another. BUT, please reach out to our Plans and Specs engineers ASAP (specifically Louis Herrin at 512-239-4552) about your proposal to use a synthetic liner without a leak detection/collection system. We just got the application for a full review yesterday, and I cannot complete the processing without either an approval or denial of your proposal from Louis. I have 'cc'd' Louis on this email.

Thank you,

-Andy

Andrew Gorton, P.G.
Texas Commission on Environmental Quality
MC-150
PO Box 13087
Austin, TX 78711-3087
512.239.4585

Andrew.Gorton@tceq.texas.gov

From: Clint Green <Clint.Green@ojdengineering.com>
Sent: Wednesday, February 26, 2025 4:58 PM
To: Sara Holmes <Sara.Holmes@tceq.texas.gov>
Cc: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
Subject: WQ0016717001

Good afternoon Sara,

We are currently working on the responses requested in the attached Technical Completeness Review. I will have all of the answers to the questions to you by the requested date of March 5, 2025, with exception of the soil analyses for the land application areas. The samples are to be taken this week, but we will have to wait until the lab provides the results before we are able to provide them to you.

Please let me know if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer
OJD Engineering, LLC
2420 Lakeview Drive
Amarillo, Texas 79109
806.352.7117. ext. 105
806.352.7188 Fax
806.433.1138 Cell

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:** T-7

- 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:** A-4

- 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
1230601	Stock	Unknown	Cased	150-foot buffer
1230602	Unused	N	Cased	500-foot buffer
1230901	Unused	N	Cased	500-foot buffer
65344	Irrigation	Unknown	Cased	
See Attachment	For Additional			

Table 3.0(3) - Water Well Data

Well ID	Well Use	Producing?Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
241006	Stock	Y	Cased	
630794	Irrigation	Y	Cased	
665199	Test Well	N	Plugged	Plugged
665200	Test Well	N	Plugged	Plugged
665201	Test Well	N	Plugged	Plugged
687992	Domestic	Y	Cased	150-foot buffer
687993	Domestic	Y	Cased	150-foot buffer
688000	Domestic	Y	Cased	150-foot buffer
1230902	Unused	N	Cased	
1230903	Unused	N	Cased	
1230905	Unused	N	Cased	
1230906	Stock	Y	No Data	
1230907	Unused	N	Cased	
1230920	Domestic	Y	Cased	
630794	Irrigation	Y	Cased	

TCEQ Interoffice Memorandum

To: Deba Dutta, Team Leader, Municipal Permits Team

From: Andrew Gorton, P.G., Water Quality Assessment (WQA) Team

Date: March 4, 2025

Subject: **Geology Recommendations, CHTX Club, LLC., Wastewater Treatment Facility, Application for a New Permit, Permit No. WQ0016717-001, Childress County**

Based upon the review of the permit application and an evaluation of geology and groundwater information, the WQA Team reviewing geologist recommends the following as special provisions (this document does not include Agronomy recommendations).

Recommendations:

The WQA Team geologist recommends the inclusion of current standard special provisions for municipal TLAP facilities using spray irrigation.

1. A wastewater treatment plant unit may not be located in wetlands per 30 TAC §309.13(b).
2. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.
3. The permittee shall comply with the buffer zone requirements of 30 TAC §309.13(c), specifically regarding water wells and waters in the state. The permittee must locate the wastewater irrigation fields a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water; 150 feet from private water wells; and 100 feet from surface waters in the state.
4. Any new or modified wastewater pond shall be adequately lined to control seepage in accordance with 30 TAC §217.203. New or modified wastewater ponds shall not be put into service until the permittee demonstrates that the pond liners meet the requirements of 30 TAC §217.203. The permittee shall demonstrate that the number, location, and test results of samples collected for geotechnical testing are in accordance with 30 TAC §217.203(d) and (e), and that the liner has a minimum thickness of 3 feet in accordance with 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer. The report providing this demonstration shall be submitted to the Water Quality Assessment Team (MC-150) and the TCEQ Regional Office (MC-Region 1) for review and approval prior to use of the wastewater ponds. If a synthetic liner is to be used, the liner thickness shall be a minimum of 40 mils and be constructed with an underground leak detection system with appropriate sampling points.
5. The permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 1), and the TCEQ Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203.

TCEQ Interoffice Memorandum

6. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the permittee shall inspect the sides and bottom (if visible) of the wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed.
7. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.

Special Note to the Permit Writer: The Applicant submitted an alternate liner request for the wastewater pond as part of this application. The proposal is to use a wastewater pond with a synthetic liner but without the required underdrain/leak detection/collection system (30 TAC §217.203). This reviewer referred the Applicant to the Plans and Specs Team on February 27, 2025 for approval or denial of this request.

This reviewer is recommending the standard wastewater pond liner language to the draft permit unless directed otherwise by the Plans and Specs Team.

CHTX CLUB, LLC
PERMIT NO. WQ0016717001
APPLICATION FOR A NEW PERMIT
Technical Completeness Review

Please address the following items:

GEOLOGY and GROUNDWATER

1. This reviewer identified approximately 20 water wells within one mile of the proposed facility, including the irrigation areas, using the Texas Water Development Board Water Data Interactive website. These wells include several additional wells in the "123900"-series, and also 65344, 241006, 630794, 665199, 665200, 665201, 687993, 687992, and 688000. Please include these wells on the USGDS topographic map in the application, and for each well within one-half mile of the proposed facility, including the irrigation areas, please complete Table 3.0(3) in Worksheet 3.0 and provide well logs for these wells.
2. Attachment T-6, Liner Certification: Note that a wastewater pond with a synthetic liner is required to include an underdrain with a leachate detection and collection system per 30 TAC §217.203. Please contact the Water Quality Division Plans and Specs Team at (512) 239-4444 to discuss the proposal to exclude the underdrain and leachate detection and collection system presented in the application.
3. Attachment T-9, Groundwater Quality Technical Report: Please include information on the wastewater pond liner in the Report.

AGRONOMY and SOILS

1. Domestic Technical Report 1.0, Sections 1 and 2. Treatment Process – The proposed flow in the application lists 9,999 GPD, but the treatment process description lists 150 GPD. Please clarify what the correct proposed flow rate is (this comment also applies to Technical Report 1.1).
2. Domestic Worksheet 3.0, Section 2. Land Application Site(s) – Please include a cool season crop if year-round irrigation is anticipated.
3. Domestic Worksheet 3.0, Section 5. Annual Cropping Plan – Please include a cool season crop if year-round irrigation is anticipated.
4. Domestic Worksheet 3.0, Section 8. Soil Map and Soil Analyses - Please submit Soil Analyses for the land application areas.

Provide analyses of the soil in the land application site(s) for pH [2:1 (v/v) water/soil mixture]; electrical conductivity [2:1 (v/v) water/soil mixture]; sodium adsorption ratio (SAR) from a water saturated paste and its constituent parameters (water-soluble Na, Ca and Mg reported in mg/L); total Kjeldahl nitrogen (TKN); total nitrogen (organic-nitrogen + nitrate-nitrogen + ammonium-nitrogen); nitrate-nitrogen (from a 1 N KCl soil extract); potassium, phosphorous; calcium; magnesium; sulfur; and sodium. The nutrient parameters should be analyzed on a plant-available basis. Phosphorus shall be analyzed according to the Mehlich III procedure with inductively coupled plasma and potassium, calcium, magnesium, sodium, and sulfur may also be analyzed in the Mehlich III soil extract. Plant-available phosphorus, potassium, calcium, magnesium, sodium and sulfur shall be reported on a dry weight basis in mg/kg; electrical conductivity, in mmho/cm [same as deciSiemens/meter (dS/m)]; and pH, in standard units. When reporting the results, include all information concerning fertilizer recommendations. Provide a copy of this plan to the analytical laboratory prior to sample analysis.

Composite or benchmark sampling techniques should be used when sampling the soils of the wastewater application area. Individual soil types, as defined by the USDA Soil Conservation Service Soil Survey, should be sampled individually at zones 0-6, 6-18, and 18-30 inches. Each composite sample must represent no more than 80 acres with no less than 15 subsamples representing each composite sample. Each benchmark sample must represent no more than 80 acres with at least 7 subsamples for each benchmark composite sample. Subsamples must be composited by individual site, zone, and soil type for analysis and reporting.

5. Domestic Worksheet 3.1, Surface Land Disposal of Effluent - Please fill out Section 1 in its entirety, including design application rate and method of application. Please also fill out Section 2 of the worksheet.

Please feel free to contact Andrew Gorton, P.G. for geology/groundwater questions via email at Andrew.Gorton@tceq.texas.gov (preferred), or at (512) 239-4585. For agronomy questions, please feel free to contact Sara Holmes via email at Sara.Holmes@tceq.texas.gov (preferred), or at 512-239-4534.

TCEQ Interoffice Memorandum

To: Deba Dutta, P.E., Team Leader
Municipal Permits Team
From: Sara Holmes, Agronomist
Water Quality Assessment Team
Date: April 3, 2025
Subject: Agronomy Recommendations, CHTX Club, LLC, New Permit, No. WQ0016717001, Childress County

Based upon review of the permit application and an evaluation of soils and agronomy information, the WQA Team reviewing agronomist recommends the following:

1. The irrigated crops include Bermuda grass (warm season and cool season). Application rates to the irrigated land shall not exceed 0.04 acre-feet/acre/year. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. The records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
2. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least once during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.
3. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
4. Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. Crops or other ground cover shall be established and well maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
5. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
6. The permittee shall construct and maintain earthen berms to prevent runoff from leaving the irrigation site.
7. The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.

8. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
9. Irrigation to treated effluent on land with a slope of 10% or greater is prohibited. Irrigation of treated shall be limited to those tracts designated on Attachment A of this permit only after proper grading has been accomplished.
10. The permittee shall obtain representative soil samples from the root zones of the land application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no less than 10 to 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

Samples shall be analyzed annually according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K)	May be determined in the same Mehlich	5 (K)	mg/kg (dry weight basis)

	III extract with inductively coupled plasma		
Amendment addition, e.g., gypsum			Report in short tons/acre in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 1), the Water Quality Assessment Team (MC 150), and the Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

From: [Che Shadle](#)
To: [Sara Holmes](#); [Clint Green](#)
Cc: [Andrew Gorton](#)
Subject: RE: WQ0016717001
Date: Tuesday, March 25, 2025 3:58:45 PM

Sara

The golf course has already been built, and the areas of irrigation are located in the fairways, greens and tees. These areas are built for walking, and excessive slopes are not permitted.

Che Shadle, P.E.

President

OJD Engineering, LLC



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Amarillo, TX 79109
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che.shadle@ojdengineering.com

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Engineering: F-4393 Surveying: F-10090900

From: Sara Holmes <Sara.Holmes@tceq.texas.gov>
Sent: Tuesday, March 25, 2025 3:11 PM
To: Clint Green <Clint.Green@ojdengineering.com>
Cc: Che Shadle <Che.Shadle@ojdengineering.com>; Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>
Subject: RE: WQ0016717001

Hi Clint,

I am wrapping up my review, but I just have a couple follow-up questions about the site. I noticed this site has pretty significant slopes. Slopes greater than 10% are prohibited due to high potential for runoff and erosion. Can you provide some additional details on what management practices will be used to minimize the risk of runoff and erosion? Will there be grading on the site anywhere? When looking at the site map, I see that the property is outlined in red and has black polygons in the middle. Are those the areas where the golf course will be located?

Thank you,
Sara Holmes

From: Sara Holmes
Sent: Friday, March 21, 2025 11:23 AM
To: Clint Green <Clint.Green@ojdengineering.com>
Cc: Che Shadle <Che.Shadle@ojdengineering.com>; Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>; Louis Herrin <Louis.Herrin@tceq.texas.gov>
Subject: RE: WQ0016717001

Thank you for the call earlier. Looks like I did miss this the first time, so I will review this and let you know if I need additional info.

Thank you and have a good weekend,
Sara Holmes

From: Sara Holmes
Sent: Friday, March 21, 2025 8:39 AM
To: Clint Green <Clint.Green@ojdengineering.com>
Cc: Che Shadle <Che.Shadle@ojdengineering.com>; Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>; Louis Herrin <Louis.Herrin@tceq.texas.gov>
Subject: RE: WQ0016717001

Good morning, Clint,

I have a follow-up comment regarding the agronomy side of things. Worksheet 3.1 requires an engineering report with a water balance and storage calculations for new applications. If you could get this back to me by sometime next week, that would be great. Please let me know if you have any questions.

Sincerely,

Sara Holmes
Natural Resource Specialist II
Water Quality Assessment Team
12100 Park 35 Circle
Austin, TX 78753
512-239-4534

From: Clint Green <Clint.Green@ojdengineering.com>

Sent: Wednesday, March 12, 2025 4:55 PM

To: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>; Louis Herrin <louis.herrin@tceq.texas.gov>

Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>; Che Shadle <Che.Shadle@ojdengineering.com>

Subject: Re: WQ0016717001

Good afternoon Andy,

Attached are the responses to the items that you requested for the Technical Completeness Review.

Please feel free to contact me if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer

OJD Engineering, LLC

2420 Lakeview Drive

Amarillo, Texas 79109

806.352.7117. ext. 105

806.352.7188 Fax

806.433.1138 Cell

From: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Sent: Thursday, February 27, 2025 1:49 PM

To: Clint Green <Clint.Green@ojdengineering.com>; Louis Herrin <louis.herrin@tceq.texas.gov>

Cc: Sara Holmes <Sara.Holmes@tceq.texas.gov>

Subject: Re: WQ0016717001

Thank you for taking my call Clint. Sorry I wasted your time b/c after I re-read my comment, I see that I just asked for pond liner information in the Groundwater Tech Report. The rest of the Report "checked all the boxes" that needed to be "checked." I must have confused your application with another. BUT, please reach out to our Plans and Specs engineers ASAP (specifically Louis Herrin at 512-239-4552) about your proposal to use a synthetic liner without a leak detection/collection system. We just got the application for a full review yesterday, and I cannot complete the processing without either an approval or denial of your proposal from Louis. I have 'cc'd' Louis on this email.

Thank you,

-Andy

Andrew Gorton, P.G.

Texas Commission on Environmental Quality

MC-150

PO Box 13087

Austin, TX 78711-3087

512.239.4585

Andrew.Gorton@tceq.texas.gov

From: Clint Green <Clint.Green@ojdengineering.com>

Sent: Wednesday, February 26, 2025 4:58 PM

To: Sara Holmes <Sara.Holmes@tceq.texas.gov>

Cc: Andrew Gorton <Andrew.Gorton@Tceq.Texas.Gov>

Subject: WQ0016717001

Good afternoon Sara,

We are currently working on the responses requested in the attached Technical Completeness Review. I will have all of the answers to the questions to you by the requested date of March 5, 2025, with exception of the soil analyses for the land application areas. The samples are to be taken this week, but we will have to wait until the lab provides the results before we are able to provide them to you.

Please let me know if you have any questions.

Thank you,

Clint Green, Engineering Technician/Designer

OJD Engineering, LLC

2420 Lakeview Drive

Amarillo, Texas 79109

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